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## SEX AND MARITAL STATUS DIFFERENCES IN DEATH ANXIETY

A Thesis

Presented to

the Faculty of the Department of Psychology

Western Kentucky University

Bowling Green, Kentucky

In Partial Pulfillment
of the Requirements for the Degree
Master of Arts

by Michael A. Cole April 1976

## SEX AND MARITAL STATUS DIFFERENCES IN DEATH ANXIETY

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> "Death is the greatest trip of allthat's why they save it for last"

> > Carlos Castaneda

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#### SEX AND MARITAL STATUS DIFFERENCES IN DEATH ANXIETY

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April 1976

42 pages

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Previous research in death anxiety has suggested that marital roles, and especially the male's role as the family provider, influence the sex differences in death attitudes (Diggory & Rothman, 1961; Tolor & Murphy, 1967). The present study attempted to directly investigate the effect of marital roles by comparing the sex differences in death anxiety scores (as measured by the Templer Death Anxiety Scale) of married persons, with and without children, and single persons. In addition, 20 demographic covariates were investigated to observe their possible effect on death anxiety. The results of the multiple regression analysis indicated that marital status was not significantly related to death anxiety. However, single males were found to have significantly higher death anxiety than single females. Additional multiple regressions revealed that 18% of the variance in death anxiety scores was accounted for by the five covariates of whether a family member or friend had died in the last year, education, race, age, and religious preference. These further analyses indicated that higher death anxiety can be expected if the subject had not experienced a recent death of a family member or friend. Persons

with less education, as well as blacks and younger persons, also have higher death anxiety. Finally, persons who have a religious preference have higher death anxiety than persons who do not have a religious preference.

#### Litorature Review

In the family unit of our culture, certain marital roles have been established for men and women (Spiegler & Liebert, 1970). The male typically has the role of the financial provider for the family. The female typically has the role of taking care of the home and is usually dependent upon the male for financial support. Thus, the consequences of death for the male would entail a lack of financial support for the family, while the death of the female would have less effect upon the financial support of the family. Since the consequences of death of the male would possibly endanger his family, it may be argued that the male would fear death more than the female. Therefore, if males and females have typical marital roles, then the differences between males and females in regard to fear of death or death anxiety may be a function of the roles established in the family unit of our culture. Furthermore, males and females who are not established in a family unit as husband and wife should exhibit more equal levels of death anxiety. It should be noted, however, that due to identification with or anticipation of these roles, it is unlikely that death anxiety would be equal for both sexes.

Even though the research dealing with death has become quite extensive in recent years (Lester, 1967), sex differentiation has rarely been examined. Omission of the sex variable may be attributed to the fact that Middleton found sex differences in death attitudes to be nonexistent as early as 1936. In this study, Middleton analyzed certain thoughts, attitudes, and behavioral reactions concerning death that were found among 825 undergraduates in the Midwest. The questionnaire included such items as "Do you ever wish you were dead?", and "Under what special circumstances, if any, do you most often entertain thoughts of your own death?". Middleton's data showed no significant sex differences, although there were small, suggestive trends for certain items. However, a closer consideration of Middleton's data did reveal differences between the sexes (Lester, 1967). Compared to males, females thought of their own death more often and expressed greater fear of death than males. On the other hand, females avoided thoughts of and contact with death more than males. For example, females read newspaper stories about death less often than males. Furthermore, 63% of the females said that they never wished they were dead while 52% of the males endorsed this item. Of all those who did respond that they wished for death, females wished it more often. In addition, 22% of the females failed to answer this question while only 2% of the males failed to answer. Lester did not

suggest whether this result reflected a general tendency to omit responses or if it was connected specifically to the content of each question.

Lester (1970) later performed another statistical reexamination of Middleton's data which resulted in different interpretations than his previous studies. Previously, Lester (1967) had concluded that females feared death more than males. Subsequent analyses, however, revealed that males were actually found to fear death more than females. Specifically, it was found that males thought of their own death more and pictured themselves dying more often than females while females were more likely to be concerned with the death of others and believe in life after death. Although males were more likely to think about death and dying (5 out of 6 relevant items), they showed less negative affect concerning death and dying (6 out of 6 relevant items).

In 1971 Lester replicated Middleton's study using subjects in the same age range and from the same midwestern university. When compared to the 1935 students, the 1970 students generally appeared to be more preoccupied with thoughts of death. With regard to sex differences, females tended to respond with more negative affect than males. More specifically, females were more likely to be depressed by death stories, to wish they were dead, and think of dying in a specific accident.

Recent studies have not resolved the mixed findings regarding sex differences in attitudes toward death. In the following series of four studies performed for a symposium on attitudes toward death in older persons, no sex differences were found to be significant. Rhudick and Dibner (1961) found no relationship between the type of death attitude (as measured by the Thematic Apperception Test) and sex, age, or occupational status. Swenson (1961), using his own check list of death attitudes, found no significant sex differences. Jeffers, Nichols, and Eisdorfer (1961) also found no relationship between sex and death attitudes, which were assessed by simply asking "Are you afraid to die?". Furthermore, using elderly subjects, Christ (1961) also failed to find evidence of a sex difference. Other studies (Handal, 1969) have found similar results with students using subjective life expectancy as a measure of death attitudes. Female death anxiety was not found to be significantly higher than male death anxiety in a study by Templer and Dotson (1970) using the Templer Death Anxiety Scale (Templer, 1970). Ermalinski (1972) also found no significant sex difference using a death risk questionnaire.

Conversely, Templer and Ruff (1971) found that female students had significantly higher death anxiety than males as measured by the Templer scale. This was corroborated by Selvey (1973) using the Boyar Fear of Death Scale (Boyar, 1964). However, in 1974, Ray and Najman found higher death

anxiety in males than females, as assessed by the Templer scale. In a study using three different scales and students as subjects, Krieger, Epting, and Leitner (1974) found females were less threatened by death (measured by a Threat Index) than males and also showed less fear of death (measured by the Collett-Lester Fear of Death Scale, Collett and Lester, 1969). However, using the Templer scale as the third measure, the same female students exhibited higher death anxiety than males. The aforementioned studies incorporating the variables of sex and death anxiety have yielded widely divergent findings.

As Lester (1967) pointed out, unless additional, relevant variables are incorporated in the sex differentiation research on death attitudes, only contradictory results will be obtained. Diggory and Rothman (1961) tried a new approach by examining the consequences of death with regard to the question "Exactly what is feared about death?". Using a list of "consequences of one's own death," 563 middle-aged subjects gave their responses. A frequency distribution was constructed for each demographic variable. In relation to sex differences, results were found in three categories: dissolution of the body, possible pain of dying, and the purposive activity items (goals, plans, and activities). Females tended to fear the consequence of what would happen to their body after death more than men. This difference was attributed to the greater female concern

for physical attractiveness. Secondly, women feared the possible pain of dying more than men. Finally, men feared the loss of purposive activities more than women. More specifically, the item "I could no longer care for my dependents" elicited the greatest fear, particularly in older, married men. This finding supports the contention that having dependents influences death attitudes of married males. In married females, however, having dependents has not been shown to have such an influence. Diggory and Rothman (1961) stated it this way: "fear that one can no longer care for one's dependents varies systematically with the marital roles defined by sex (p. 209)."

Other efforts to reveal additional factors responsible for sex differences include studies on subjective life expectancy. For example, Handal (1969) found males to consistently overestimate their life expectancy when related to actuarial data. Females, on the other hand, had consistently realistic subjective life expectancies. In addition, men's subjective life expectancy did not correlate with death anxiety while women's consistently did correlate. In Handal's study, death anxiety was measured by a modified version of the Livingston and Zimet Death Anxiety Scale (Livingston & Zimet, 1965). For women, subjective life expectancy was a critical indicator of attitudes toward death, but for men it was a manifestation of defensive attitudes toward death because of their unrealistic life

expectancies. Tolor and Murphy (1967) performed a similar study but included the Edwards Personal Preference Schedule (Edwards, 1959) to measure personality needs. The results were as follows:

Those men that express needs that are considered more "masculine" in our culture, also tended to be less moderate and less realistic in the subjective estimates of life span. Conversely, men whose pattern of needs resembles more closely that of a woman produce more moderate and realistic estimates of their life expectancy. Perhaps this society's stress on the male role of the family provider contributes to the typical male's greater tendency to distort his life expectancy. However, men that emphasize more feminine needs tend to have this cultural influence less pronounced (p 24).

These studies indicate that the death attitudes of males may be related to their typical marital role as family provider. The female's attitudes toward death may also be related to her typical marital role as a dependent rather than a provider. The importance of marital roles can be inferred from another study by Lester (1972) using the Collett-Lester Pear of Death Scale. This scale measures four specific fears: fear of death of self, fear of dying of self, fear of death of others, and fear of dying of others. Lester's study employed 46 undergraduates varying

in ages from 17 to 50 years, the median age being 22% years. He found that the female's fear of death was not consistent across the four subscales. In fact, females specifically feared the death of others and the dying of self. This study supports the contention that females may place themselves in a dependent role and be more concerned with the death of others, such as their husbands, rather than having a greater concern for their own death. The female's greater fear of the death of others was also evident in a study by Means (1935), in which a fear schedule utilizing 349 fear stimuli was presented to 1000 college females. The three most feared items were Snakes, Cancer, and Death of a Loved One, followed by Death by Burning, Death by Drowning, and Slow Death. This female concern for loss of loved ones and the fear of the death of others was supported by Lowry (1965) and Selvey (1973), both of whom found that death stories told by females had significantly more loss of love themes than the male stories. An additional finding in both studies was that in the death stories of both sexes, males are pictured as dying significantly more often than females.

Nogas, Schweitzer, and Grumet (1974) found that fear of death was negatively related to "sense of competence" in females. In other words, females who see themselves as being competent express less fear of death than less competent females. Finally, Templer, Lester, and Ruff (1974) compared femininity (Gough Femininity Scale; Gough, 1952) and fear of death (Collett-Lester Fear of Death Scale) and found that the more feminine females had a greater fear of death of others than less feminine females. Therefore, the findings thus far indicate that females fear death with regard to the death of others, the death of loved ones, and loss of love. Furthermore, these fears may be related to femininity, sense of competence, and marital role.

In summary, the research dealing specifically with sex differences in death anxiety has yielded widely contradictory results. In some studies using a variety of scales, males have been found to exhibit greater death anxiety (Lester, 1970, 1971; Ray & Najman, 1974; Diggory & Rothman, 1961; and Tolor & Murphy, 1967). In other studies, females had higher death anxiety (Lester, 1967; Templer & Ruff, 1971; Templer, Lester, & Ruff, 1974; Selvey, 1973; and Lowry, 1965), while many studies show no sex differentiation (Middleton, 1936; Rhudick & Dibner, 1961; Swenson, 1961; Jeffers, Nichols, & Eisdorfer, 1961; Christ, 1961; Handal, 1969; Templer & Dotson, 1970; and Ermalinski, 1972). Furthermore, these contradictory results do not appear to be contingent upon the scale utilized since both sexes have been found to have greater death anxiety with the same scale. The research on female death attitudes indicates that concerns for the death of others and the loss of loved ones were related to the female's fear of death. Also, a high

degree of femininity and a low personal sense of competence were signficantly ansociated to higher death anxiety in females. As such, the typical marital role of the female as a dependent in the family unit may be related to attitudes toward death. On the other hand, male death attitudes have been found to be related to age, marital status, masculine needs, and the male role as family provider.

#### Statement of Problem

The first difficulty in relating the research findings on death anxiety is that there is no consistent method of measuring death anxiety. The various scales appear to be assessing vastly different aspects of death and therefore make it difficult to compare findings of various studies. Second, the consistency and validity of only one scale, the Templer Death Anxiety Scale has been thoroughly tested (Templer & Ruff, 1971). As Lester (1967) pointed out in a review of the literature, unless validity information is reported, our ability to measure death anxiety will increase very little. Third, the research thus far does not yield any data to support or reject the association of marital role and the differences between men and women in death anxiety. The available research findings suggest an association, but at present no data exists which directly addresses the issue. Therefore, the roles established in the family unit of our culture should be examined to observe what effect they have on sex differentiation in death anxiety.

The present study examined the influence of sex and marital status upon death anxiety. The factors of age, race, income, parental income, education level, religion, occupation, parental occupation, living companions, type of residence, hometown population, frequency of church attendance, frequency of death discussions, family or acquaintance illness or death, and whether the parents are living or the age they died were employed as control variables.

The following were hypothesized: 1) Married males have higher death anxiety than married females; 2) Married males have higher death anxiety than single males; 3) Married males with children have higher death anxiety than married males without children; 4) Single males and females have equable death anxiety; 5) Married males with children will have the highest death anxiety followed in order by married males, married females, and lastly single males and females.

#### Method

#### Subjects

Five hundred and eighty-eight residents of a southeastern community were asked to participate in this study. Of those 588, 170 persons agreed to answer a questionnaire, and 150 forms were actually returned. The subjects were chosen with the aid of two random number tables (Edwards, 1972; Kling & Riggs, 1971) and a community telephone directory, (March, 1975). The first two digits of a random number indicated the page of the telephone book, the third digit indicated the column that was used, and the last two digits indicated the ordinal position in the column. The sample was stratified to enlist a minimum of ten subjects in each of the following six categories: married males with children (N = 44), married females with children (N = 32), married males without children (N = 21), married females without children (N = 13), single males (N = 10), and single females (N = 14). Sixteen divorced, widowed, or separated persons were also part of the subject population. The subjects' ages ranged from 11 to 83, with the modal age being 38.

#### Instrument

The Templer Death Anxiety Scale was utilized to assess death anxiety. The test-retest reliability of this scale has been demonstrated by a product moment correlation coefficient of .83 between two sets of scores from administrations to a student population three weeks apart (Templer, 1970). Also a coefficient of .76 (Kuder-Richardson Formula 20) has been reported (Templer, 1970), and demonstrates reasonable internal consistency. The scale has been validated by comparing high death anxiety psychiatric patients with control subjects matched for diagnosis, sex and age. Patients with high death anxiety were determined by chaplain's records, nursing records, and patients' records. It was concluded that "psychiatric patients who spontaneously verbalize death anxiety concern have higher death anxiety scores than other psychiatric patients," t(20) = 5.79, p < .01 (Templer, 1970, p. 169). The scale has also been validated in terms of a high correlation coefficient of .74 with the Boyar Fear of Death Scale. Discriminate validity was determined by correlations of the Templer scale with the Taylor Manifest Anxiety Scale (Taylor, 1951) of .39 and the Welsh Anxiety Scale (Welsh, 1956) of .36. From these low positive correlations with general anxiety, Templer (1970) purported that the Death Anxiety Scale measured something beyond general anxiety.

#### Design

The dependent variable was death anxiety as measured by the Templer Death Anxiety Scale. Scores range from 0 to 15. The independent variables were sex and marital status. Marital status was classified as follows: single, married, married with children. The control variables or covariates were age, race, income, parental income, educational level, religion, occupation, parental occupation, living companions, type of residence, hometown population, frequency of church attendance, frequency of death discussions, family or acquaintance illness or death in the last year, and whether the parents are living or the age they died.

#### Procedure

The subjects were contacted via telephone interviews (See Appendix A) after their telephone numbers had been randomly chosen as described above. The subjects who agreed to partake in the study were sent the questionnaire containing the Templer Death Anxiety Scale and the various control and demographic questions, as well as a religiousity inventory used by another researcher (See Appendix B). The questionnaire was sent out no more than one day after the telephone interview, and included a self-addressed stamped envelope to return the questionnaire. If the questionnaires were not returned within two weeks after the initial contact, the subjects were contacted by phone and urged to complete and return the form.

#### Scoring and Analysis

Nine of the 15 items that comprise the Templer Death Anxiety Scale are keyed "true" and six are keyed "false" (See Appendix C). Scores were obtained by adding the responses of each subject that were consistent with the scoring key.

Personal and parental incomes were obtained by transforming the subject's occupation into the median income for that occupation. This procedure was accomplished with the aid of the 1970 Census occupation and income tables (US Bureau of the Census).

Pearson product moment correlations and a multiple regression analysis were performed on the data using as the predictor variables sex and marital status, the covariates listed above, and death anxiety as the dependent variable.

#### Results

A mean death anxiety score of 6.04 was found for the 150 subjects (79 males, 71 females). The standard deviation was 3.31. Split-half reliability analysis yielded a coefficient of .77, indicating reasonable internal consistency.

Pearson correlation coefficients were calculated between the dependent and independent variables as well as all 20 covariates and are presented in Table 1. Several independent variables and covariates were related at a high level of significance. Specifically, age and marital status were related in that the older the subjects were, the more likely they were to be married. Married subjects also showed greater frequency of death discussions than did single subjects. When income and sex were examined, males were found to have higher incomes. Marital status was related to whether the subject's mother was living in that single subjects' mothers were less likely to be deceased. The preceeding variables were then taken into account in the following multiple regression because of their possible confounding effect due to multicolinearity<sup>1</sup>.

A multiple regression analysis was performed with death anxiety as the dependent variable. The predictor variables

	Аде	Sex	Race	Status	of Chil- dren	tion Occupa-	tion Father's		ocupa- tion	
Death Anxiety	07	.19	.04	01	.01	17	.15	.08	.06	
Denomin.		09	19	04	.10	.14	14	05	22	
Preference		01			.01	.11	06	09	.10	
Church Att. Religious	**	.02	.17		01	**		.07	.05	
Death Freq. of	.23				23		25	04	26	
Living? Age at his	***	17	.03		**	**	.13		15	
Death Father	.56	.05				.05			**	
Living? Age at her	***	21	.13	.32		21	.15	***	01	
Illness of Fam, Friend Mother	06		08		18		.08	07	11	
Death of Fam, Friend	05		01		17	.10	.13	.01	31	
Freq. of Death Disc.	.17	.09	.03	.33	03	18	.12	.19	.09	
Living Companions	09	10	06	13	.24	08	.25	01	.06	
Type of Residence	.04	.01	01	.17	18		.23	07		
Hometown Population	.34	.17	.11	.07	22		.29	.43		
Parental Income	3.000	03		13		.28	22	**		
Occupation Personal Income	07	53	15	19		.50	63	34		
Occupation Mother's	05				09	49 *** 43	.63	.53		
Occupation Father's	.02					65				
Educational Level				25						
Number of Children	.21		.07	701			•		00	
Marital Status	3		.08	3			Under		es: = .01	
Race	.1	7 .08			Pe	arson	Corr	elat	ion Mat	rix
Sex	- 1	0					т-	h1-		1

	Personal Income	Parental Income	Hometown	Type of Residence	Living	Frequency of Death Discuss.	Family or Friend Death	Family or Friend Illness	Mother Living?	Age at her Death	Father Living?	Age at his Death	Frequency of Church	Religious	Protestant Denomin.	
Death Anxiety	15	.01	.05	.08	.02	.10	.24		03	19	.09	05	19	91;	06	
Denomin.	**		**											***		
Protestant	.26	09	27	10	.01	12	06	09	01	.12	.05	18	0	5 .29	185	
Religious Preference		.12	16	23	01	.01	01	.03	14	11	08	14	0	5		
Freq. of Church Att.		13	.17	.17	.09	.10	10	03	.11	.22	.01	.04				
Age at his Death	.23	21	,05	06	34	02	.08	10	.21	200	ССВС					
Pather Living?	17	.12	.25	.10	03	.11	02	.01	.53							
Age at her Death	.04	.02	.07	.04	21	24	.02	.08	ССВС							
Mother Living?	18	.11	.36	.06	07	.26	04	03								
Tilness of Fam, Friend	-,19	09	.07	01	10	.02	.60									
Death of Fam, Friend		.02	.07	.08	16	.05										
Freq. of Death Disc.	13	14	.14	.12	.04											
Living Companions	18	09	12	12					СВС		p. = ffici		anno	t Be C	omput	ed
Type of Residence	15	.02	.15						ond	**	p. =					
Hometown Population	42								Und	ersco						
Income								Pears			tion	inued Matri				

were sex, marital status, and number of children and the covariates were age, income, frequency of death discussions, and whether the subject's mother was living. The analysis is summarized in Table 2. No significant relationships were found between sex, marital status, and number of children. None of the interactions of these three variables were found to be significant except that of single persons and sex. Single males evidenced higher death anxiety than single females (single males:  $\bar{x} = 7.44$  vs. single females:  $\bar{x} = 5.92$ ). The four covariates accounted for a small insignificant amount of the death anxiety variance.

The findings did not support any of the five hypotheses. First, married males did not have higher death anxiety than married females as had been predicted. Married females were actually found to have higher death anxiety, although not at a significant level. Second, married males did not have higher death anxiety than single males. Once again the results indicated a trend in the opposite direction in that single males had higher death anxiety than married males. Third, married males with children were not found to be more anxious about death when compared to married males without children. In fact, married males with children were slightly less anxious. Fourth, as previously mentioned, single members of both sexes did not have equal death anxiety, but rather single males exhibited significantly greater death anxiety than single females. Finally, the

Table 2 MULTIPLE REGRESSION

	SUM	MARY TABLE DEPENDENT	********	
VARIABLE	CUMULATIVE PERCENTAGE OF VARIANCE	PERCENTAGE OF ADDITIONAL VARIANCE	VARIABLE: DEATH	
Age	1.361	1.361	<u>F</u>	df
Income	2.673	1.312	2.04	1/148
Treq. of Death Discussions		1.312	1.98	1/147
사이 이 없는 것이 없는 것 같아 하다.	3.016	.344	.52	1/146
fother Living?	3.020	.004	.01	1/145
ingle	3.054	.034	.05	1/144
arried	3.086	.032	.04	
ex	4.945	1.859	2.77	1/143
umber of Children	5.994	1.049	2.11	1/142
ingle X Sex	8.640	2.646		1/141
arried X Sex	8.700	.059	4.05 (P < .05)	
ingle X Children	8.700	0.0	.08	1/139
arried X Children	9.404		0.0	1/138
x X Children	11.053	.705	1.07	1/137
otal	11.053	1.649	2.54	1/136
	11.053		1.30	1/136

hypothesis that married males with children would have the highest death anxiety followed in order by married males, married females, and lastly single males and females was also reversed. It is interesting to note, however, that the order predicted for the male death anxieties was actually found in female death anxieties. Married females with children had the highest death anxiety, followed by married females without children, and lastly single females.

Additional multiple regressions on all 25 independent variables were conducted to determine their relevance to death anxiety. As seen in Table 3, the variables of whether a family member or friend had died in the last year, education, race, age, and religious preference significantly accounted for 18% of the variance in death anxiety scores. These further analyses indicated that higher levels death anxiety can be expected if the subject has not experienced a recent death of a family member or friend. Persons with less education, as well as blacks and younger persons, also have higher death anxiety. Finally, persons who have a religious preference have a higher death anxiety than persons who do not have a religious preference.

Table 3
ALL VARIABLE
MULTIPLE REGRESSION

VARIABLE	CUMULATIVE PERCENTAGE OF VARIANCE	PERCENTAGE	VARIABLE: DEATH	ANXIETY
Recent Death of Family or Friend		OF ADDITIONAL VARIANCE	_ <u>F</u> _	_df
Education	6.528	6.528	10 2245	
Race	9.667	3.140	10.33(P < .01)	
ge	12.326	2.658	5.11(P < .05)	-,,
	15.194	2.869	4.42(P < .05)	1/146
eligion	18.028		4.90(P < .05)	1/145
req. of Church		2.834	4.98 (P < .05)	1/144
otal	19.524	1.496	2.66 (NS)	
	19.524			1/143
			6.33(P < .01)	5/144

#### Discussion

The results indicate that the presence of a spouse or children does not raise the male's death anxiety. Therefore, having dependents does not seem to increase death anxiety in males. Thus the male role as the financial provider of the family did not seem to affect the death anxiety of married males as predicted. Furthermore, when compared to single males, the results indicated a decrease in death anxiety in males having dependents. This trend may be influenced by the common belief that having children gives men a sense of immortality. Even though the mare may be fearful about the survival of his family after his death, his dependents will carry on into time his name, as well as many of his ideals. Consideration must also be given to personality traits and such practical factors as health, life savings, and life insurance which may influence to an unknown extent the death anxiety of males with dependents.

The finding that single males had higher death anxiety than single females further supports the sense of immortality hypothesis previously discussed. Single males may be anxious about fulfilling their life goals and establishing a family. Since there were only 24 single subjects, generalizations concerning this finding may be inappropriate.

It is interesting to note that the female death anxiety trends matched the predicted trends for the male death anxiety. Married females with children had the highest death anxiety, followed by married females without children, and lastly single females. Even though these trends were not significant, the influence of dependents may be evidenced in the female death anxiety. Since females are typically other-oriented in relation to death anxiety (Lowry, 1965; Selvey, 1973), it seems plausible that a woman would be most concerned about the members of her family when considering her own death. Therefore, when children are present in the family unit, it is the female who may show greater death anxiety than males because of her concern for the well-being of the children and her spouse.

The additional variables that were found to be related to death anxiety were recent death of friends or family, education, race, age, and religion. If the subjects had experienced the death of a family member or friend in the last year, they had lower death anxiety. Such a relationship may be due to possible desensitization effects associated with the ordeal of experiencing the death of a loved one. However, this finding contradicts Selvey's (1973) results, in which deaths of acquaintances resulted in increased fear of death in females. Educational level was negatively correlated with death anxiety, possibly due to

the increased awareness typically associated with higher levels of education and the fact that fear of death is largely a fear of the unknown. This finding concerning the effect of educational level supports the results of both Diggory and Rothman (1961) and Swenson (1961). It was also found that blacks have higher death anxiety in comparison with whites, but since the number of blacks sampled in this study was low (6), the meaningfulness of this finding is questionable. The age finding corroborates the findings of Diggory and Rothman (1961). Older persons generally evidenced lower death anxiety, possibly because as a person gets older and the probability of a long life ahead diminishes, the inevitability of death becomes more real to them. Thus they may acquire a greater ability to face death. Finally, having no religious preference was related to lower death anxiety, as found by Ray and Najman (1974). Religious persons may be more preoccupied with death and they may be concerned with what will happen to them in their afterlife, whereas nonreligious persons do not have such a concern, and thus may be less fearful of death. The above variables should be taken into consideration in future death anxiety research because of the significant relationship to death anxiety evidenced in this study. The researcher must avoid trying to cover too much ground, thereby becoming too superficial. He must also avoid focusing too

closely on one specific aspect of the material, thereby ruling out the possible effect of other factors.

Another factor in the consideration of death attitude research is that most studies are performed with student populations. This situation makes comparisons with normal population studies difficult, if not meaningless. Also with regard to prior research, at least 10 methods of measurement have been utilized in assessing death attitudes, and very few of these have been stabilized or validated. As such, even fruitless attempts to follow up on the implications of some studies with better assessment methods can only improve the state of the arts in death attitude research.

In conclusion, further research in death attitudes should concentrate on developing assessment methods that measure a wide range of death experiences, and that are normed on normal populations as well as student populations. Furthermore, better validity and more reliability studies are needed on all death attitude scales. Research studies that incorporate numerous variables directly related to death concerns will be the most beneficial in clarifying death attitudes. Examination of these issues should yield a more enlightened perspective into death anxiety.

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#### **Pootnotes**

Multicolinearity, the situation where independent variables are highly intercorrelated, confounds the results of a multiple regression analysis. As a result, only one variable of the highly correlated set can be used to represent the common underlying dimension. Furthermore, the variance due to these covariates must be statistically removed before the predictor variables can be entered into the regression equation (Nie, Hull, Jenkins, Steinbrenner, & Bent, 1975; Kerlinger & Pedhazur, 1973).

Appendices

### Appendix A

# Telephone Interview

Hello, is this (their name)? This is Mike Cole. I am a graduate student at Western Kentucky University. I am doing research for my master's thesis and I need your help. I'd like to send you a short questionnaire dealing with some of your attitudes toward life. Your identity and your answers will be kept completely secret. The envelopes will be marked so we know who has returned the questionnaires, but after they're returned no connection will be made between you and your answers. Now, the address I have for you is (address in phone book). Is that correct? The form will arrive either tomorrow or the next day. Do you have any questions?

on the form that we'll be sending you we will have our names and phone numbers. Feel free to call us if you have any questions. (If the subject has questions during the phone interview, the following form will be used.)

More specifically, we are studying people's reactions to emotional subjects and what makes some people react differently than others. With this information, we can more accurately understand situations from different points of view and thus be in a better position to help people.

(If the subject is still not satisfied.)

At this point in our research, we simply don't know. However, we would be glad to discuss it further when we have finished our study. Please feel free to call us at the numbers on the questionnaire.

(Other possible questions: How did we get their phone number?) Your number was picked randomly out of the phone book. (What department are you connect with?) Behavioral Science.

#### Appendix B

#### Ouestionnaire

Thank you for helping us with our graduate research we really appreciate your cooperation. Here is the form we mentioned the other evening in our telephone conversation. It has questions dealing with your attitudes toward life. Your identity and your answers will be kept completely secret. Please do not write your name on these pages. envelopes will be marked so that we know who has returned the questionnaires but after they are returned, no connection will be made between you and your answers. Please answer all the questions and answer them as honestly as possible - if there is any doubt, mark the answer that seems most nearly correct.

When you have finished the form, simply put it in the stamped envelope we have enclosed, seal it, and drop it in the mail. If you have any questions, feel free to call us at 781-3928 (Mike Cole) or 843-9788 (Dennis Wagner).

Thanks again.

Please supply the following information - circle answer where appropriate.

- 1) Age:
- 2) Sex: M/F 3) Race:
- 4) Marital Status:
- A) Single
  - B) Married C) Divorced
  - D) Separated
- E) Widowed
- 5) Number of children: Last grade completed in school:
- 7) Your occupation:
- 8) Occupation of your father:
  9) Occupation of your mother:
  10) Population of the city where you grew up:
  - A) over 100,000.
  - B) 50,000 to 100,000.
  - C) 10,000 to 50,000.
  - D) under 10.000.

11)	Type of residence where you presently live:
	A) Apartment
	B) House
	C) Dormitory
	D) Other:
12)	Do you presently live:
	A) Alone
	B) With parents
	C) With friend
	D) With spouse
	E) With others:
13)	How often is death talked about in your home?
	A) Never
	B) Sometimes
	C) Frequently
14)	Has a family member or a friend died in the past year?
	Yes/No
15)	Has a family member or a friend been seriously ill in
	the last year? Yes/No
16)	Is your mother living? Yes/No
17)	If no, how old were you when she died?
18)	Is your father living? Yes/No
19)	If no, how old were you when he died?
20)	Prequency of church attendance:
	A) Never attend
	B) Seldom attend
	C) Occasionally attend D) Attend weekly
	D) Attend weekly
	E) Attend more than weekly
21)	What is your religious preference?
	A) Protestant
	B) Catholic
	C) Jewish
	D) Other:
	E) None
22)	If Protestant: What denomination?
	A) Baptist
	B) Methodist
	B) Methodist C) Presbyterian
	D) Church of Christ E) Episcopal
	E) Episcopal
	P) Other:
23)	In what religious faith did you grow up? (Until you
25.76	were 12)
	A) Protestant
	B) Catholic
	C) Jewish
	D) Other:
	E) None
	B. 2. Think H.

- 24) If Protestant when growing up: What denomination?
  - Baptist A) B) Methodist
  - C) Presbyterian
  - D) Church of Christ
  - Episcopal E) F) Other:

Indicate whether these statements are true or false for you by circling your choice for each.

- 25) T or F I am very much afraid to die.
- 26) T or F The thought of death seldom enters my mind.
- 27) T or F It doesn't make me nervous when people talk
- about death. 28) T or F I dread to think about having to have an operation.
- 29) T or F I am not at all afraid to die.
- 30) T or F I am not particularly afraid of getting cancer.
- 31) T or F The thought of death never bothers me.
- 32) T or F I am often distressed by the way time flies so very rapidly.
- 33) T or F
- I fear dying a painful death.
  The subject of life after death troubles me 34) T or F
- greatly. 35) T or F I am really scared of having a heart attack.
- 36) T or F I often think about how short life really is. 37) T or F I shudder when I hear people talking about a
- World War III.
- 38) T or F The sight of a dead body is horrifying to me.
- 39) T or F I feel that the future holds nothing for me to

Circle the letter of the most appropriate answer.

- 40) Do you believe that God answers people's prayers, or not? A) No
  - B) Unsure
  - C) Yes
- 41) Some people wonder whether there is a God. What do you feel - do you believe there is a God, or not?
  - A) Yes
  - B) Unsure
  - C) No
- 42) Do you believe in life after death, or not?
  - A) Yes
  - B) Unsure
  - C) No

43) If yes, do you believe that in the next life some people will be punished and others rewarded by God, or not? A) No B) Yes C) Unsure 44) Do you believe that when they're able, God expects people to worship Him in their churches or synogogues every week or not? A) No B) Unsure C) Yes 45) Do you believe that God sends misfortune and illness on people as punishment for sins? A) Yes B) Unsure C) No 46) Do you think that God is like a Heavenly Father who watches over you or do you have some other belief? A) Yes, like a Heavenly Father B) Other belief: C) Doesn't apply - I don't believe in God 47) What do you believe about Jesus? Do you believe that Jesus was God's only son sent into the world to save sinful man; or do you believe that he was simply a very good man and teacher; or do you have some other belief? God's son A) B) Simply a good man and teacher C) Jesus never lived Other belief: Don't know 48) I think it is more important to go to church than to be active in politics. A) Strongly agree B) Agree C) Undecided D) Disagree E) Strongly disagree 49) Heaven and hell are very real to me. A) Agree B) Unsure C) Disagree 50) I think that there is practically no difference between what the different churches believe. A) Agree B) Unsure C) Disagree

51) About how often do you pray? A) Several times a day

Once a day C) Few times a week

B)

- D) Once a week or less
- E) Never F) Don't know
- 52) When you have decisions to make in everyday life, do you ask yourself what God would want you to do? Do you ask sometimes, often, or never?
  - A) Often
    - B) Sometimes
    - C) Never
    - D) Doesn't apply I don't believe in God
    - E) Don't know

# Appendix C

# Templer Death Anxiety Scale

- 1. I am very much afraid to die. (T)
- 2. The thought of death seldom enters my mind. (F)
- It doesn't make me nervous when people talk about death. (F)
- 4. I dread to think about having an operation. (T)
- 5. I am not at all afraid to die. (F)
- 6. I am not particualrly afraid of getting cancer. (F)
- 7. The thought of death never bothers me. (F)
- I am often distressed by the way time flies by so very rapidly. (T)
- 9. I fear dying a painful death. (T)
- The subject of life after death troubles me greatly.
- 11. I am really scared of having a heart attack. (T)
- 12. I often think about how short life really is. (T)
- I shudder when I hear people talking about World War III. (T)
- 14. The sight of a dead body is horrifying to me. (T)
- I feel that the future holds nothing for me to fear.
   (F)