THE EFFECTS OF A DEATH EDUCATION UNIT ON THE ATTITUDES

TOWARD DEATH AND ANXIETIES TOWARD DEATH

OF COLLEGE FRESHMEN

—————————————

A DISSERTATION

SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS

FOR THE DEGREE OF DOCTOR OF PHILOSOPHY

IN THE GRADUATE SCHOOL OF THE

TEXAS WOMAN'S UNIVERSITY

COLLEGE OF HEALTH, PHYSICAL EDUCATION,

RECREATION, AND DANCE

BY

MARY HUBBARD, B.S., M.E.

—————————————

DENTON, TEXAS

AUGUST   1982

The Graduate School

Texas Woman's University

Denton, Texas

_____ August _____ 19_82_

We hereby recommend that the _____ dissertation _____ prepared under

our supervision by _____ MARY HUBBARD _____

entitled _____ THE EFFECTS OF A DEATH EDUCATION UNIT ON THE

ATTITUDES TOWARD DEATH AND ANXIETIES TOWARD

DEATH OF COLLEGE FRESHMEN

_____

_____

be accepted as fulfilling this part of the requirements for the Degree of _____

Doctor of Philosophy _____.

Committee:

Ruth E. Tandy
Chairman, Department of Health
Education

Don Merki
Chairman

Marilyn Hinson
Dean, College of Health, Physical
Education, and Recreation

Marilyn Hinson
Melba A. Baldwin
Marie M. Fuller
Dwight Thompson
Ruth E. Tandy

Accepted:

_____
Provost of the Graduate School

DEDICATION

This dissertation is dedicated to my family and friends. Their belief and support of my efforts for a doctorate have encouraged and given me faith in myself.

ACKNOWLEDGMENTS

So many special people have aided me in the various aspects of obtaining a doctorate. To all, I wish to express my sincerest gratitude. Special acknowledgments are given to Dr. Don Merki, dissertation chairman, who brought about academic revelations. He was able to instill challenges for growth and professionalism within myself.

To the rest of my dissertation committee consisting of Dr. Melba Baldwin, Dr. Marie Fuller, Dr. Marilyn Hinson, Dr. Ruth Tandy, and Dr. Dwight Thompson, I gratefully acknowledge the guidance and work done on my behalf. I appreciate the fairness and encouragement given to the task of supervising my dissertation efforts.

Two other individuals that I would like to acknowledge are Don Rowlett and Mary Richter. Don Rowlett of Arkansas State University is acknowledged for the time and patience he spent in programming and running the computer analyses of data. Mary Richter, on staff at Texas Woman's University, was of tremendous help in typing the dissertation and aiding me in making the deadlines necessary for graduation.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

ix

CHAPTER I

ORIENTATION TO THE STUDY

Rationale for the Study

Simpson (1979) said, "We are not free to choose whether anyone will learn about death, though we have some choice about how we learn." (p. 165) The typical American has not always been adequately educated in a realistic approach to the finality of life. He is often misinformed and misguided in his attempt to understand death.

Death education, although popular, is controversial. Leviton (1975) suggested that the greatest benefit of offering such a controversial course to college students is that the controversy concerning death then disappears. He further stated that death implies unfavorable connotations. Examples of such connotations as myths, fright, and misconceptions can be eradicated by education.

Watts (1977) stated that many colleges offered units in death education, but that these units have not been followed up by scientific evaluation of death attitude change. He concluded that death education within college health courses should be followed up with a delayed

1

posttest in order to evaluate the long term effects and changes in attitudes concerning death.

Wittmaier (1979-1980) found, in his research on fear of death, that death education may have unintended results and effects. He stated that students may learn cognitively and enjoy the course; yet, testing may show negative results involving attitudes and anxieties toward death.

Hoelter and Epley (1979) pointed out that there is little evidence to support the positive results of death education. Even though colleges have increased their curricular offerings in death education over the past twenty years, the needed evaluation to prove the impact of death education on college students is still lacking. This investigation attempts to determine any changes in death attitudes and anxieties as a result of death education.

Purpose of the Study

The specific purpose of the investigation was to evaluate the effectiveness of a death education unit on attitudes toward death and anxieties toward death.

Statement of the Problem

The problem to be investigated was to determine if a
death education unit was of benefit as a part of a general
college level, health course. Hardt's Death Attitude Scale
and Templer's Death Anxiety Scale were used to collect the
data on attitudes and anxieties concerning death. A t-test
analysis of the data was used to evaluate the effectiveness
of a death education unit on attitudes and anxieties toward
death.

The study population consisted of 110 students. The
subjects were selected from the 710 freshman who were en-
rolled in health and safety classes at Arkansas State
University in Jonesboro, Arkansas, during the fall semester
of 1981. Each of the three groups used in the investiga-
tion constituted a separate health and safety class.
Experimental Group I received a pretest, a 2-week unit
in death education, and a delayed posttest one month after
the conclusion of the unit. Experimental Group II received
a prestest, a 2-week unit in death education, and an
immediate posttest after the conclusion of the unit. Con-
trol Group III did not receive a two week death education
unit, but did receive a pretest, a posttest two weeks after
the pretest, and a second posttest six weeks after the
pretest.

Subproblems

The following subproblems were investigated to determine: (a) whether a unit in death education was of value to freshman students in changing one's attitude toward death, (b) whether a unit in death education was of value to freshman students in changing their anxiety level toward death, and (c) whether a unit in death education had a retention effect on the attitudes and anxieties toward death of freshman students.

Hypotheses

The following hypotheses were tested:

1. There will be no significant difference between immediate posttest attitude scores of Group II and the immediate posttest attitude scores of Group III concerning death as determined by their mean scores.

2. There will be no significant difference between immediate posttest anxiety scores of Group II and the immediate posttest anxiety scores of Group III concerning death as determined by their mean scores.

3. There will be no significant difference between delayed posttest attitude scores of Group I and the immediate posttest attitude scores of Group III concerning death as determined by their mean scores.

4. There will be no significant difference between delayed posttest anxiety scores of Group I and the immediate posttest anxiety scores of Group III concerning death as determined by their mean scores.

5. There will be no significant difference between delayed posttest attitude scores of Group I and the delayed posttest attitude scores of Group III concerning death as determined by their mean scores.

6. There will be no significant difference between delayed posttest anxiety scores of Group I and the delayed posttest anxiety scores of Group III concerning death as determined by their mean scores.

7. There will be no significant difference between delayed posttest attitude scores of Group I and the immediate posttest attitude scores of Group II concerning death as determined by their mean scores.

8. There will be no significant difference between delayed posttest anxiety scores of Group I and the immediate posttest anxiety scores of Group II concerning death as determined by their mean scores.

9. There will be no significant difference between pretest attitude scores of Group III and the immediate posttest attitude scores of Group III concerning death as determined by their mean scores.

University and who volunteered to participate in the study.

Delimitation Two

The investigation measured the effects of a death education unit in only three aspects: (a) attitudes toward death, (b) anxiety toward death, and (c) the retention effects concerning attitudes and anxieties toward death.

Delimitation Three

The investigation involved freshman students without regard to ethnic background and scores earned on either the Death Attitude Scale or the Death Anxiety Scale.

Delimitation Four

The investigation involved freshman students without regard to sex differences and scores earned on either the Death Attitude Scale or the Death Anxiety Scale.

Delimitation Five

The investigation involved freshman students without regard to religious affiliation and scores earned on either the Death Attitude Scale or the Death Anxiety Scale.

Limitations of the Study

The findings of this investigation were subject to the following limiting factors.

Limitation One

The first limiting factor was the extent to which the students remained as participants in the investigation. Mortality could result from: (a) failure of the participants to continue to want to be involved with the investigation, (b) participants could drop out from the specified health and safety classes, and (c) participants could drop out from Arkansas State University.

Limitation Two

The second limiting factor was the possibility of a death of a family member or close friend of one of the participants during the investigation; thus, possibly biasing his attitudes and anxieties toward death.

Limitation Three

The third limiting factor was the possibility of widely divergent attitudes and anxieties about death brought into the investigation by participants from different parts of the United States or another country.

Limitation Four

The fourth limiting factor was the degree to which the two instruments (Death Attitude Scale and the Death Anxiety Scale) were valid measures of attitudes and anxiety about death, respectively.

Definition of Terms

For the purpose of clarification, the following terms were defined as they were used in this investigation.

Anxiety is a vague and diffused psychic pain used as a normal protective device in situations where one perceives apprehension. (Coleman, 1960)

Attitude "is a tendency to react positively or negatively in regard to an object or an enduring system of positive or negative evaluations, emotional feelings, and pro or con action tendencies, with respect to a social object." (Strasser, Aaron, Bohn, Eales, 1973, pp. 79, 80)

Death "is a final, boundary line situation which sums up the whole of our life." (Guthrie, 1971, p. 299)

Death Education

A process by which one explores man's relationship to life. The process includes but is not limited to an accumulation of learned experiences based on cultural and religious perspectives from which

evolves an attitude toward death and dying. The learner will gain an appreciation for life which is reflected in his behavior. (Harris, 1978, p. 162).

CHAPTER II

RELATED LITERATURE

The review of literature is divided into two major headings, (a) an American landmark study and (b) current related literature. The following review of literature is confined to materials relevant to studies of college students in the areas of (a) death education, (b) attitudes toward death, and (c) anxieties toward death.

An American Landmark Study

Prior to the 1930s, there were no significant studies conducted for the evaluation of attitudes toward death and anxieties toward death of college students. Then in 1937, Middleton conducted a landmark study involving college students and their attitudes toward death. He administered a questionnaire entitled, "Questions Relative to Death and the Future Life," to 825 students from two universities. His data showed no significant difference between the sexes in response to questions on the questionnaire. The three strongest findings taken from the 14 questions of Middleton's study are as follows:

1. the majority of the subjects (92.99 percent) reported that they thought about their own death rarely or occasionally

2. when the subjects did think of death, 26 percent of them reported it was during a depressed mood. Another 24 percent of the subjects thought of their own death after attending a funeral service

3. a majority of the subjects (82.78 percent) reported that they never or rarely wished that they were dead.

After Middleton's study, interest in measurement of the college population and how it related to death seemed to wane. It was not until the 1950s that interest was revived and scientifically measured.

Current Related Literature

Not all researchers are in agreement that courses in death education are of significant benefit in changing attitudes concerning death. Knott and Prull (1976) had expected that a death education course would be constructive in changing students' attitudes toward death. However, evaluation of the death education course proved to have little impact in changing students' attitudes toward death. In a study they compared 35 students in a semester death education course with 35 students who did not have the course, but who were interested in the course. There was little change in attitude concerning grief, mourning, and suicide, but the materials used in the class were well

received by the students. Knott and Prull concluded that the evaluation of the course and not the content of the course proved to be the weakness in the study.

Hoelter and Epley (1979) also questioned the impact of a course of death education. These investigators stated that there was a basic assumption that a course in death produces positive benefits. Since there was little empirical evidence to prove this assumption to be true, they attempted to scientifically prove the benefits of a death education course. Subjects in their study, were enrolled in two sociology courses, one of which was a course in death and dying. The second course was entitled, Sociology of the Family. The two groups were measured on attitudes toward abortion, euthanasia, and capital punishment. The results showed no overall significant difference in the attitudes of the two groups. However, those students in the death and dying course significantly favored abortion when contrasted to the students in the Sociology of the Family course.

Comparison of the pretest scores showed that students in the death and dying course held more favorable attitudes concerning suicide than those students in the Sociology of the Family course. The authors found that those students in the death and dying course reported a

higher number of suicide attempts than those of the Sociology of the Family course. Hoelter and Epley concluded that death education was beneficial in the cognitive domain, but had little impact on the affective level of the students.

In contrast, Watts (1977) found that a short unit in death education was instrumental in changing attitudes toward death. He used college students in two basic health courses in his study. One class received five periods of instruction in death education, while the other received no instruction in death education. The Death Attitude Scale and the Watts-Andrews Death Questionnaire were used to collect the data. Significant favorable differences concerning attitudes toward death were found in the post-test scores between the experimental group and the control group on both the Death Attitude Scale and the Watts-Andrews Death Questionnaire.

Bell (1975) also found there were benefits of a death education course. He conducted an 18 week course in death education and studied these four aspects: (a) frequency of death thoughts, (b) degree of fear associated with death and dying, (c) interest in death topics, and (d) willingness to discuss one's own death or a close friend's death with other people.

Bell used 24 undergraduate students enrolled in a sociology class as his experimental group. He randomly selected 50 additional students to serve as the control group.

The pretest results showed no significant difference between the two groups in the cognitive domain. The experimental group had a significantly higher score on the posttest than did the control group in the areas of frequent thoughts of death and interest in discussion about death. Bell suggested that higher scores made by the class in death education might be the results of much class discussion, thereby, making death easier to discuss with other people. There were no significant differences in the posttest scores of the two groups concerning fear associated with death and feelings about discussing personal death with others.

A recent study by McDonald (1981) helped to add support for the effectiveness of a course in death education. She based her assessment of the 15-week course on five specific attitudinal considerations. The changes were: (a) negative evaluation of the thought of death, (b) belief in life after death, (c) belief in the freedom of choice for dying persons, (d) feeling comfortable with dying persons, and (e) feeling comfortable with bereaved persons.

She used 180 undergraduates of similar background and age. The subjects were then divided into two groups, one of which served as the experimental group and the other as the control group.

The experimental group showed that they had a significantly higher score in interacting with dying and bereaved people. The mean gain scores were higher in the experimental group regarding dying persons making choices about terminating their lives and conditions for the termination. There were no significant changes between the two groups concerning negative evaluation of the thoughts of death and belief in life after death.

The students taking the course changed their attitudes concerning the traditional methods of body disposal to a wider selection of alternatives of disposing of bodily remains. The control group did not change in this matter. The author suggested that deep, religiously based attitudes may not be subject to change. The teaching method and the teacher of death education may also be determining factors in causing change in attitudes toward death.

Leviton and Fretz (1978-1979) used students in three different classes in an effort to measure the effects of death education on attitudes toward life and death. The

classes used in the study were: (a) sex education, (b) basic psychology, and (c) death education.

The researchers found that death education had a significant effect on all three classes. Death education students were better able to talk with relatives about death than those students in sex education. Death education students also showed significantly less fear of the death of others than did the psychology students.

One of the desired goals of teaching a course in death education is the reduction or the alleviation of excessive anxiety toward death. Pandey and Templer (1972) and Bohart and Bergland (1979) attempted to measure the changes in anxiety after a treatment was given. Generally, the results show that anxiety toward death either increases or remains unchanged as a result of a course in death education.

Bohart and Bergland (1979) conducted a study in which the effects of "in vivo" systematic desensitization and systematic desensitization with modeling were measured. The 104 subjects used in the study were college students who had volunteered to participate in a death and dying counseling program. The students were randomly divided into the following groups: (a) Experimental group I,

("in vivo" systematic desensitization), (b) Experimental
group II, (systematic desensitization with modeling), and
(c) Delayed control group.

Both experimental groups received systematic desensi-
tization. This is a technique in which various aspects
concerning death and dying are openly discussed and
studied by the student in order to reduce anxiety about
death. "In vivo" treatment was added to experimental
group I. In this technique, the students were given
direct exposure to death related situations. An example
given by the authors, was that this group talked with a
dying person and made a visit to a mortuary. Experimental
group II did not have "in vivo" experiences but had sym-
bolic modeling. This group did not have actual experi-
ences with death related situations, but had vicarious
experiences through the use of videotape.

There was not significant difference among the
three groups. The researchers cited several reasons for
this result: (a) the need for more time allowance in the
treatment integration, (b) the need for better evaluation
of death anxiety, (c) the need to adjust for treatment
deficiencies, (d) the need to better understand the com-
plex nature of death anxiety in a given population, and
(e) the need to understand the radical variances of the
meaning of death anxiety in a given population.

Pandey and Templer (1972) used Templer's <u>Death Anxiety Scale</u> to determine if there was a significant difference in death anxiety between black and white students. After evaluating 258 students, the authors concluded there was no significant difference between the two groups on death anxiety.

Dickstein (1977-1978) attempted to determine the relationship between four scales used for measuring attitudes, anxiety, and social desirability toward death. The following four scales were used in the study: (a) <u>Death Concern Scale</u>, (b) <u>Tolor's and Reznikoff Death Attitude Scale</u>, (c) <u>Death Attitude Scale</u>, and (d) <u>Fear of Death and Dying Scale</u>. Dickstein used 68 students in the study.

He found no significant sex differences in the correlation of the various scales. The researcher did provide support for construct validity of the four scales. He also found that there was a significant correlation between the scales in measuring male and female responses. Finally, Dickstein found that those scales measuring attitudes toward death appeared to have an element of social desirability. This finding means that those people concerned with social desirability were less concerned with death than people who were less concerned with social desirability.

CHAPTER III

METHODOLOGY

The purpose of the study was to determine the effects
of death education on the attitudes and anxieties toward
death of college freshmen. The research included a total
of 110 freshmen who were enrolled in health and safety
classes during the fall semester of 1981 at Arkansas State
University.

The three health and safety classes were designated
as (a) Experimental Group I with 34 students, (b) Experi-
mental Group II with 39 students, and Control Group III
with 37 students. The investigation was based on a pre-
test, posttest, delayed posttest experimental design.
Figure 1 shows that all three groups were pretested.
Group I and II received a two-week unit in death education
but Group III did not receive any instruction. Group I
was posttested one month after the conclusion of the death
education unit. Group II was posttested immediately after
the conclusion of the death education unit. Group III re-
ceived no instruction, but was posttested two weeks after
the pretest and again six weeks after the pretest was
administered.

20

	Pretest	T	Immediate Posttest	Delayed Posttest
Group I	0	X		0
Group II	0	X	0	
Group III	0		0	.0

Figure 1.   A graphic display of the experimental pretest,
            posttest, delayed posttest design for this study.

The Death Attitude Scale and the Death Anxiety Scale
(see Appendix A) were used to evaluate the effects of the
death education unit on attitudes toward death and anxi-
eties toward death of college freshman.   The independent
t-test and the dependent t-test were selected as the most
appropriate statistical technique for the analysis and
interpretation of the data.

The procedures in the development of the investiga-
tion are explained under the following sub-headings: (a)
preliminary procedures, (b) selection and description of
the instruments, (c) selection of the site, (d)·selection
of the subjects, (e) collection of the data, and (f)
treatment of the data.

Preliminary Procedures

The First Preliminary Procedure

The first preliminary procedure for the investiga-
tion involved the review of the literature pertaining to

the effects of death education on the attitudes toward death and anxieties toward death of college freshmen. The studies relating to attitudes and anxieties toward death of college freshmen are inconclusive in their findings. Some researchers found that death education had an effect on attitudes and anxieties toward death, but others found no significant effects.

The Second Preliminary Procedure

The second preliminary procedure for the investigation concerned a review of literature that was appropriate to the experimental research used in the investigation. A review of the related literature showed that experimental studies, conducted on different aspects of death education used a variety of statistical measures such as correlation, (Dickstein, 1977-1978) analysis of variance, (Leviton and Fretz, 1978-1979) covariance, (Bohart and Bergland, 1979) and t-test. (Pandey and Templer, 1972)

The Third Preliminary Procedure

The third preliminary procedure was to select criteria in two areas. The first criterion to be developed was for the selection of the instruments to measure attitudes and

anxieties toward death of college freshmen. The second criteria to be developed was for the selection of subjects involved in the investigation.

The Fourth Preliminary Procedure

The fourth preliminary procedure centered around the search for a college that offered a death education unit to freshmen students. Arkansas State University offered death education as part of health and safety instruction. An interview was set up with the Chairman of the Department of Health and Physical Education. The investigation was explained to him and he granted oral permission to conduct the study within his department. No further permission was necessary from Arkansas State University.

The Fifth Preliminary Procedure

The fifth preliminary procedure involved communication with proper authorities for permission to use the Death Attitude Scale and the Death Anxiety Scale. Permission was given by Hardt to use his Death Attitude Scale. The editors of the Journal of General Psychology granted use of Templer's Death Anxiety Scale.

The Sixth Preliminary Procedure

The sixth preliminary procedure was concerned with the administrative duties for the investigation. The outline

for the investigation included these tasks: (a) selection
of the dates for the investigation, (b) establishment of
procedures for informing the subjects concerning the
nature of the investigation, (c) explanation of the role
of the subjects in the investigation, (d) provision of
information concerning Consent Form B, (see Appendix B),
(e) determination of a code for the instruments, (see
Appendix C), and (f) scoring the scale (see Appendix C)

The Seventh Preliminary Procedure

The seventh preliminary procedure was concerned with
the treatment of data. The t-test was selected as the
most appropriate statistical technique for the analysis
and interpretation of the data.

The Eighth Preliminary Procedure

The eighth preliminary procedure included the de-
velopment of a two-week unit for death education (see
Appendix D). Materials and activities for the unit were
gathered from various sources such as periodicals, books,
audio-visual aids, and creative ideas from the investi-
gator. From these courses the following steps were taken:
(a) the development of a course outline, (b) the creation
of lectures, (c) the requisition of audio-visual materials,
and (d) the preparation of group and individual activities.

Selection and Description of the Instruments

Criteria were established for the selection of the
two instruments to be used in the investigation. The Death
Attitude Scale and the Death Anxiety Scale were the instru-
ments which were selected for the investigation.

The following criteria were set forth for the selec-
tion of an instrument to measure attitudes toward death of
college freshmen:

1. The instrument must be written so that it is
clearly understood by the subjects.

2. The instrument must be valid and reliable above
the .70 level.

3. The instrument must contain subject matter re-
lating to the measurement of attitudes toward death.

Hardt (1975) developed an instrument that provided
valid and reliable measurement for obtaining the range,
mean, and standard deviation of attitudes toward death.
Hardt stated that his instrument was useful as an evalua-
tion of death effectiveness. His Death Attitude Scale
was developed so that the comprehension level ranges from
fifth grade level to the adult level. The tool has been
validated and has a reliability coefficient of .87. The
estimated time for the administration of the scale is be-
tween 5 and 10 minutes.

The Death Attitude Scale contains 20 statements con-
cerning attitudes toward death. The subject is asked to
check each item that he agrees with. The items, that the
subject disagrees with, are left unmarked.

Below are the criteria set forth for the selection
of an instrument to measure anxiety toward death of
college freshmen:

1. The instrument must be written so that it is
clearly understood by the subjects.

2. The instrument must be valid and reliable above
the .70 level.

3. The instrument must contain subject matter
relating to the measurement of anxieties toward death.

Templer (1970) developed the Death Anxiety Scale
that met the established criteria for the investigation.
The instrument provided a valid and reliable measurement
for obtaining the range, mean, and standard deviation of
anxieties toward death. The tool has been validated and
has a reliability coefficient of .76.

Site Selection

Arkansas State University was chosen for the investi-
gation because death education was part of the course
content in some of the 23 sections offered in health and

safety. Other important factors in the selection of the site were: (a) the student population consisted of individuals who were basically from a conservative background, (b) the student population was predominately Protestant, (c) in general, the students were from a middle class background, and (d) the students were basically from the same surrounding area of the state; thus, resulting in a homogenous group for the investigation. The last consideration for site selection was that the investigator taught health and safety classes at Arkansas State University. This enabled the investigator to exclusively control and administer the study.

Selection and Assignment of Subjects

The following steps were taken in the selection of subjects for the investigation: (a) establishment of the criteria for the selection of the subjects, (b) selection of the subjects, and (c) the assignment of the subjects to groups.

Criteria for the Selection of the Subjects

1. Subjects must be freshmen attending Arkansas State University in Jonesboro, Arkansas.

2. The subjects must agree to volunteer to participate in the investigation.

3. Subjects must be 18 years of age or over to participate in the investigation.

4. Subjects must be present on the day that the investigation was explained or instrument administered.

5. The subjects assigned to Group I must be willing to respond to the Death Attitude Scale and the Death Anxiety Scale twice, once on a pretest and secondly, on a delayed posttest.

6. The subjects assigned to Group II must be willing to respond to the Death Attitude Scale and the Death Anxiety Scale twice, once on a pretest and secondly, on an immediate posttest.

7. The subjects assigned to Group III must be willing to respond to the Death Attitude Scale and the Death Anxiety Scale three times, once on a pretest, secondly on an immediate posttest, and thirdly on a delayed posttest.

Selection of the Subjects

The freshman involved in the investigation were pre-registered during the spring and summer of 1981. The freshmen had no prior knowledge that they would be asked to participate in an investigation concerning attitudes and anxieties toward death. The investigator had no

prior knowledge of what sections of health and safety she was to teach until the beginning of the fall semester of 1981, when she was assigned to teach three sections.

Assignment of the Subjects to Groups

The investigator arbitrarily assigned her first section to be Group I, her second section to be Group II, and her third section to be Group III. Each subject was assigned an identification number. This identification number appeared both in the investigator's roll book and on top of each instrument. A color code was used on the instruments so as to identify the group in which the subject belonged.

Collection of the Data

The following steps were considered in the collection of the data: (a) procedures for the administration of the instruments, and (b) instructions for completing the Death Attitude Scale and the Death Anxiety Scale.

Procedures for the Administration
of the Instruments

1. Exact dates for the administration of the pretest, immediate posttest, and delayed posttest were determined and announced to the subjects.

2. The investigator administered all tests and gave all instructions pertaining to the Death Attitude Scale and the Death Anxiety Scale.

3. The scales were given only to the subjects who had signed Consent Form B. (see Appendix B)

4. All directions for administering the scales were identical. The subjects were given both oral and written directions for taking the Death Attitude Scale and the Death Anxiety Scale.

5. Subjects were allowed as much time as they needed to complete the scales. The average length of time to complete both scales was 10 minutes.

6. The investigator collected the completed scales from the subjects.

Instructions for Completing the Scales

The investigator gave the same instructions for completing the scales to all three groups involved in the study. The investigator gave verbal instructions for each scale and answered questions from the subjects pertaining to the instructions. The instructions also appeared on top of each scale. (See Appendix A)

The scales were then distributed to the subjects. Upon completion of the scales, the investigator collected and stored the completed scales.

Treatment of the Data

The primary purpose of the data collection was to test the hypotheses that: (a) a unit in death education was of value to freshman students in changing one's attitude toward death, (b) a unit in death education was of value to freshman students in changing their anxiety level toward death, and (c) a unit in death education had a retention effect on the attitudes and anxieties toward death of freshman students.

Raw scores for each testing and each individual were systematically recorded on computer recording sheets. (see Appendix E) The raw scores were then ready for computer analysis.

The statistical procedure involved in processing both the Death Attitude Scale and the Death Anxiety Scale were the same. The t-test statistical analysis was used to find the significant differences between the group mean scores. (see Appendix F for formulae) Figure 2 shows the type of t-test used in each group comparison.

Groups Compared	Independent T-Test	Dependent T-Test

Figure 2.   Example of the t-tests used to compare the groups.

DP - Delayed posttest

IM - Immediate posttest

P - Pretest

CHAPTER IV

PRESENTATION OF THE FINDINGS

The purpose of this study was to determine if a death education unit was of benefit as part of a general health education course. The three subproblems investigated were: (a) to determine whether a unit in death education was of value to freshmen students in changing their attitudes toward death, (b) to determine whether a unit in death education was of value to freshmen in changing their anxiety level toward death, and (c) to determine whether a unit in death education had a retention effect on the attitudes and anxieties toward death of freshmen students. Hardt's Death Attitude Scale and Templer's Death Anxiety Scale were used to collect the data on attitudes and anxieties concerning death.

The sample consisted of 110 students. The subjects were randomly selected from a total of 710 freshmen who were enrolled in health and safety classes at Arkansas State University in Jonesboro, Arkansas, during the fall semester 1981. The material in this chapter was divided into three areas: (a) description of subjects, (b) item analysis, and (c) presentation and interpretation of test results.

Description of Subjects

Table 1 shows the number of students in each of the
three groups that were involved in the investigation.
Group I contained a total of 34 subjects, Group II a total
of 39 subjects, and Group III a total of 37 subjects. The
grand total was 110 subjects.

Table 1

Participants by Group and by Sex

Group	Number of females	Number of males	Total
Group I	20	14	34
Group II	25	14	39
Group III	20	17	37
Totals	65	45	110

All subjects participating in the investigation were
officially classified as freshmen. The majority of the
subjects gave verbal indication that they were from the
geographic area near Arkansas State University. The sub-
jects were largely from a conservative, Christian back-
ground. None of the subjects had previously been exposed
to an organized unit of death education. A total of six
subjects were above the age of 25. The remaining subjects
ranged between the ages of 18 and 20.

Item Analysis

An analysis for the Death Attitude Scale indicated that the three highest selected items on that scale, in the pretest, were items 9, 11, and 10 as seen on Table 2. For complete analysis of all items on the Death Attitude Scale see Appendix H. A total of 80.9% of the subjects responded to item 9; 68.2% of the subjects responded to item 11. The third highest percentage of responses, 61.8% came from item 10.

The three items on the Death Attitude Scale which received the highest responses in the immediate posttest were items 9, 11, and 6. The highest ranking response was again for item 9, with 54.5% of the subjects selecting that statement. The second highest response of 50% came from item. 11. The third highest percentage, 40.9% came from item 6.

The same three items received the highest responses in the delayed posttest, but there was a change in the order of the items. Item 9 ranked first with 56.4% of the responses. The second highest response of 44.% was on item 6. The third highest response of 41.8% was for item 11.

A Spearman Rank Correlation (see Appendix H) was performed on all items and testings. There was a significant correlation in the rankings of items between the

Table 2

Items Receiving the Highest Percentage of Response

and their Rankings on the Death Attitude Scale

for all Participants

Item		Pretest	
		%	Rank
#9	"I can accept the thought of death."	80.9	1
#11	"I don't fear thoughts of death, but I don't like them either."	68.2	2
#10*	"To think of death is common."	61.8	3
		Immediate posttest	
		%	Rank
#9	"I can accept the thought of death."	54.5	1
#11	"I don't fear thoughts of death, but I don't like them either."	50.0	2
#6**	"I find it fairly easy to think of death."	40.9	3
#10	"To think of death is common."	36.4	4
		Delayed posttest	
		%	Rank
#9	"I can accept the thought of death."	56.4	1
#6	"I find it fairly easy to think of death."	44.5	2
#11	"I don't fear thoughts of death, but I don't like them either."	41.8	3

Note: *On the delayed posttest #10 rated fifth with
           39.1% response
          **On the pretest #6 rated fifth with 50.0% response

pretest and the immediate posttest. There was a signifi-
cant difference in the rankings of items between the
immediate posttest and delayed posttest. There was a
significant correlation in the ranking of items between
the pretest and the delayed posttest.

A comparison of items selected within groups showed
that items varied somewhat from testing to testing. See
Table 3. Item 9 ranked highest for Group I in both the
pretest and delayed posttest. Item 10 ranked second, and
item 11 ranked third on the pretest, but the latter two
were not ranked in the top three selections of the delayed
posttest.

Table 3

Item Analysis Results for the Three Highest Item
Responses of Each Group on the
Death Attitude Scale

Group	Pretest		Immediate posttest		Delayed posttest	
	Items	%	Items	%	Items	%
Group I	9	85.3			9	91.2
	10	76.5			8	76.5
	11	67.5			7	76.5
					6	73.5
Group II	9	74.4	9	76.9		
	11	64.1	11	69.2		
	8	58.9	6	61.5		
Group III	9	83.8	9	81.1	9	83.8
	11	73.0	10	75.7	11	70.1
	10	67.6	11	59.5	6	64.9

Item 8, ("I do not mind thinking of death.") item 7,
("The thought of death isn't so bad.") and item 6, appeared
as the second and third ranked choices of the delayed
posttest, but did not appear in the pretest.

Group II ranked items 9 and 11 as first and second,
respectively, in both the pretest and immediate posttest.
Item 8 was ranked third in the pretest, but was not ranked
in the top three selections of the immediate posttest.
Item 6 appeared as the third ranked choice in the immedi-
ate posttest, but was not ranked in the top three choices
in the pretest.

Group III chose item 9 as the first ranked item in
all test periods. Item 11 ranked second in the pretest,
third in the immediate posttest, and second in the de-
layed posttest. Item 10 was ranked third in the pretest,
second in the immediate posttest, but was not among the
three choices in the delayed posttest. Item 6 was ranked
third in the delayed posttest, but was not among the three
highest ranked items on the pretest or immediate posttest.

A comparison among the three groups of items selected
indicates that item 9 was ranked first the majority of the
time. Item 11 was ranked second.

Table 4 shows the "true" items selected most fre-
quently and their rankings on the Death Anxiety Scale.

Scores for the <u>Death Anxiety Scale</u> are based on the number of statements the subject agrees are true about him or herself. (For complete analysis of all items on the <u>Death Anxiety Scale</u> see Appendix H.) Table 4 indicates the three highest ranking responses to the scale in the pretest were items 3, 2, and 9. A total of 79.1% of the subjects selected item 3, 61.8% of the subjects selected item 2, and 57.3% of the subjects selected item 9, as the third highest ranking item.

Immediate posttest summaries indicate a change in the order of item selection. Item 3 remained the most frequently chosen item with a 53.6% response. A total of 48.2% of the subjects responded to item 12 as a second ranked item. A total of 42.3% of the subjects chose item 9 as their third highest ranking item.

The delayed posttest summaries again indicate a difference in the order of ranking the three most fre-quently chosen true items. Item 3 was first with a total of 52.7% of the response. A total of 34.5% of the sub-jects selected item 2 as the second highest ranked item. Both item 6 and item 9 had 32.7% of the subject's response for the third highest selected items.

Table 4

Items Receiving the Highest Percentage of "True"
Response and their Rankings on the <u>Death</u>
<u>Anxiety</u> Scale for all Participants

Item		Pretest	
		%	Rank
#3	"It doesn't make me nervous when people talk about death."	79.1	1
#2	"The thought of death seldom enters my mind."	61.8	2
#9	"I fear dying a painful death."	57.3	3
		Immediate posttest	
		%	Rank
#3	"It doesn't make me nervous when people talk about death."	53.6	1
#12*	"I often think about how short life really is."	48.2	2
#9	"I fear dying a painful death."	42.3	3
#6**	"I am not particularly afraid of getting cancer."	37.6	4
		Delayed posttest	
		%	Rank
#3	"It doesn't make me nervous when people talk about death."	52.7	1
#2	"The thought of death seldom enters my mind."	34.5	2
#9	"I fear dying a painful death."	32.7	3
#6	"I am not particularly afraid of getting cancer."	32.7	3
#12	"I often think about how short life really is."	30.9	4

Note: * on the pretest #12 rated fifth with 53.6% response
       **on the pretest # 6 rated seventh with 41.8%
         response

The Spearman Rank Correlation (see Appendix H) was done on all items and testing periods. There was a significant correlation in the ranking of items between the pretest and the immediate posttest. There was a significant correlation in the ranking of items between the immediate posttest and the delayed posttest. There was a significant correlation between the ranking of items between the pretest and the delayed posttest.

A comparison of items selected within groups showed that items varied slightly from testing period to testing period. See Table 5 for an item analysis. Group I selected item 3 as the first chosen item in both the pretest and the delayed posttest. Item 2 was selected second in the rankings in both the pretest and the delayed posttest. Item 9 was the third ranking item in the pretest, but was not among the three highest ranking items on the delayed posttest.

Group II also chose item 3 as the first ranked item in all testing periods. Item 2 was selected as the second ranking item in both the pretest and the immediate posttest. Item 9 ranked third in both the pretest and the immediate posttest. Item 6 also held the third ranking position in the immediate posttest, but was not among the three highest ranking items in the pretest.

Table 5

Item Analysis Results for the Three Highest "True"

Item Responses of Each Group on the

Death Anxiety Scale

Group	Pretest Items	%	Immediate posttest Items	%	Delayed posttest Items	%
Group I	3	76.5			3	85.3
	2	64.7			2	61.8
	9	52.9			6	55.9
Group II	3	79.5	3	74.4		
	2	66.7	2	66.7		
	9	52.9	6	61.5		
			9	61.5		
Group III	3	81.1	3	81.1	3	78.4
	4	62.2	12	67.6	9	54.0
	12	62.2	9	62.2	12	48.6
	9	59.5				

The most frequently chosen true item for Group III was item 3 in all of the testing periods. Item 4 ("I dread to think about having an operation.") was the second ranking item in the pretest, but did not appear in the three highest selections in the immediate posttest of the delayed posttest. Item 12 appeared in the second ranking position in the pretest, the second ranking position in the immediate posttest, and the third ranking position in the delayed posttest. Item 9 appeared as the third ranking position in the pretest and immediate posttest, but was ranked second in the delayed posttest.

A comparison of items selected between the three groups indicates item 3 was ranked first. Item 9 was also frequently chosen by each group, but its rank position differed in the various testings.

Presentation and Interpretation of Test Results

The t-test was chosen as the best statistical procedure for analyzing and interpreting the raw data found on the Death Attitude Scale and the Death Anxiety Scale. Table 6 is a presentation of the analyses of the data collected from the Death Attitude Scale.

The results of the t-test analyses showed that there were no significant contrast between the mean scores of the groups when analyzed two at a time. Treatment and time or the retention factor was not significant in changing the attitudes of the subjects toward death.

Table 6

Results of the t-Test Analyses of the Groups

on the Death Attitude Scale

Groups		n	X	SD	df	t
**Group I	(D.P.)	34	3.25	0.44	71	0.47
Group II	(I.P.)	39	3.21	0.43		
**Group II	(I.P.)	39	3.21	0.43	74	1.68
Group III	(I.P.)	37	2.94	0.84		
**Group I	(D.P.)	34	3.25	0.44	69	1.94
Group III	(I.P.)	37	2.94	0.84		
**Group I	(D.P.)	34	3.25	0.44	69	1.37
Group III	(D.P.)	37	3.06	0.69		
***Group III	(Pre.)	37	3.09	0.49	36	1.05
Group III	(I.P.)	37	2.95	0.84		

*significant at .05 level
**independent t-test
***dependent t-test

D.P. = delayed posttest
I.P. = immediate posttest
Pre. = pretest

Table 7 is a presentation of the analyses of data collected from the Death Anxiety Scale. Results of the statistical t-test indicated there was no significant difference in anxiety toward death in any of the analyses. This finding meant that time or the retention factor, and treatment had no impact on the anxiety levels of the subjects.

Table 7

Results of the t-Test Analyses of the Group on the

Death Anxiety Scale

Groups	n	$\overline{X}$	S.D.	df	t	2-tailed prob.
**Group I (D.P.)	34	5.91	1.71	71	1.39	.17
Group II (I.P.)	39	6.54	2.09			
**Group II (I.P.)	39	6.54	2.09	74	1.59	.12
Group III (I.P.)	37	5.81	1.88			
**Group I (D.P.)	34	5.91	1.71	69	.24	.81
Group III (I.P.)	37	5.81	1.88			
***Group III (Pre.)	37	5.73	2.14	36	.36	.72
Group III (I.P.)	37	5.81	1.88			
**Group I (D.P.)	34	5.91	1.71	69	.79	.43
Group III (D.P.)	37	5.54	2.19			

*significant at .05 level   D.P. = delayed posttest
**independent t-Test   I.M. = immediate posttest
***dependent t-Test   Pre = pretest

CHAPTER V

SUMMARY, TESTS OF HYPOTHESES, DISCUSSION, CONCLUSIONS,

AND RECOMMENDATIONS FOR FURTHER STUDIES

Summary of the Investigation

This investigation was designed to assess the impact of a unit of death education on the attitudes and anxieties toward death by college freshmen. The 110 subjects were volunteers from the health and safety classes at Arkansas State University in Jonesboro, Arkansas, during the fall semester of 1981. Two classes served as experimental Groups I and II. The third class was designated as control Group III. All classes were given a pretest. Immediately after the administration of the pretest, the experimental groups were given a 2-week unit in death education. Upon completion of the unit, Group I waited 1 month and then took a delayed posttest. Group II received their posttest immediately after the conclusion of the unit. Group III received no unit in death education, but took a posttest 2 weeks after they had received a pretest. Group III, then waited 1 month after the first posttest and took a second posttest.

47

The Death Attitude Scale and the Death Anxiety Scale were used to collect the data for the investigation. The data were statistically analyzed and interpreted by the use of a t-test. The use of the t-test analysis of data from the Death Attitude Scale and the Death Anxiety Scale indicated there were no significant differences found in the effect of treatment upon changing attitudes toward death. However, the one significant finding showed that time or retention, inclusive of treatment, did change attitudes toward death. Anxiety levels toward death were not significantly changed in any group at any of the test periods.

The Spearman Rank Correlation statistic was applied to the Death Attitude Scale and the Death Anxiety Scale. The results indicated there were no significant differences in the ranked items on the Death Attitude Scale and the Death Anxiety Scale.

Tests of Hypotheses

The investigator has answered the following hypotheses:

1. There will be no significant difference between immediate posttest attitude scores of Group II and the immediate posttest attitude scores of Group III concerning death as determined by their mean scores.
Accepted.

2.   There will be no significant difference between immediate posttest anxiety scores of Group II and the immediate posttest anxiety score of Group III concerning death as determined by their mean scores.
Accepted.

3.   There will be no significant difference between delayed posttest attitude scores of Group I and the immediate posttest attitude scores of Group III concerning death as determined by their mean scores.
Accepted.

4.   There will be no significant difference between delayed posttest anxiety scores of Group I and the immediate posttest anxiety scores of Group III concerning death as determined by their mean scores.
Accepted.

5.   There will be no significant difference between delayed posttest attitude scores of Group I and the delayed posttest attitude scores of Group III concerning death as determined by their mean scores.
Accepted.

6. There will be no significant difference between delayed posttest anxiety scores of Group I and the delayed posttest anxiety scores of Group III concerning death as determined by their mean scores.

Accepted.

7. There will be no significant difference between delayed posttest attitude scores of Group I and the immediate posttest attitude scores of Group II concerning death as determined by their mean scores.

Accepted.

8. There will be no significant difference between delayed posttest anxiety scores of Group I and the immediate posttest anxiety scores of Group II concerning death as determined by their mean scores.

Accepted.

9. There will be no significant differences between pretest attitude scores of Group III and the immediate posttest attitude scores of Group III concerning death as determined by their mean scores.

Accepted.

10. There will be no significant difference between pretest anxiety scores of Group III and the immediate posttest anxiety scores of Group III concerning death as determined by their mean scores.

Accepted.

Discussion

The investigation showed that the treatment and retention factors were not significant in influencing attitudes or anxieties toward death. Even though there was no statistical significance, Experimental Groups I and II had a higher death attitude ranking than did Control Group III. The mean scores for Group I (3.25) and Group II (3.21) showed that these groups had an attitude toward death that was found in statement 9 on the Death Attitude Scale. The statement was, "I can accept the thought of death," whereas Group III's mean score was 3.00, indicating a lower ranking attitude on the Death Attitude Scale. Group III's attitude toward death was found in statement 10 on the Death Attitude Scale, "To think of death is common."

Values pertaining to death are complicated as they are entwined with religious and traditional values. It would be difficult to change such deep values concerning death in a 2-week unit in death education. However, many students have misconceptions and other less potent values about death that

may be changed in a 2-week unit of death education. The
investigator felt that more time, than was provided in
this study, was needed to change the deep-seated attitudes
concerning death.

No groups in any of the testing situations had a sig-
nificant change in anxiety toward death. Other research-
ers such as Bohart and Bergland, (1979) Pandey and Templer,
(1972) and Wittmaier (1979-1980) also found no significant
changes in anxiety toward death. The investigator believes
that anxiety is a manifestation of a complex of inner
fears. These fears are relative to each individual and
his life's conditioning and environment. The crux of the
fear complex is the preservation of the self. When death
is the topic of conversation, the anxiety level is higher
in some individuals. This happens because a person attempts
to protect the "self" from a word or concept that symboli-
zes the destruction of life. These deep-rooted feelings
about the "self" and the destruction of life take time to
assess and change.

Therefore, a 2-week unit in death education may not
afford enough time to reduce the manifestation of anxiety
from the fear complex. The investigator had hoped for
anxiety reduction through the activities which were pre-
sented in the death education unit. Although this goal was
not achieved, the investigator achieved a measure of

success in finding that anxiety was not elevated during the teaching of the unit.

The three most frequently chosen responses on the Death Attitude Scale were items 9, 6, and 11. Hardt (1975) considered items 9 and 6 to be representive of death attitudes ranging from "Neither Favorable" to "Favorable" statements. Item 11 fell in the "Unfavorable" to "Neither Favorable" category. The popularity of item 9 as a choice seems to indicate the subjects had a healthy attitude concerning death.

Item analysis of the Death Anxiety Scale indicated that items 3, 9, and 2 were the three most frequently chosen items on that scale. Templer (1970) considered all of the three highest ranked items to be statements that are universal to the human condition, but not statements that provoke anxiety toward death in the normal individual. The three highest ranked anxiety items did not indicate a high level of anxiety toward death by the subjects.

Teacher effectiveness had to be considered a limitation in the investigation. No effort was made to provide evaluation of teacher effectiveness in the instruction of the death education unit. However, the students did rate the entire course in health and safety and teacher effectiveness for that course at the end of the semester. Both the course and teacher effectiveness rated a "5". The five

represented the highest rating on a continuum from one to five.

Conclusions

Within the delimitations of the investigation it appears that a death education unit was not influential in significantly changing attitudes toward death of college freshmen or in changing their anxiety level toward death.

Recommendations for Further Studies

In the development of the present investigation new questions have been raised. These questions were encompassed into the following recommendations for further studies:

1. a replication of the investigation, with the extention of the 2-week unit in death education to a semester course.

2. a replication of the investigation comparing freshmen and seniors over longer time.

3. a replication of the investigation, but with an addition of a delayed posttest 6 months after the conclusion of a death education unit after longer unit.

4. a replication of the investigation after designing new techniques for reducing anxiety toward death and increasing time.

APPENDICES

APPENDIX A

DEATH ATTITUDE SCALE

DEATH ANXIETY SCALE

56

DEATH ATTITUDE SCALE

<u>Directions</u>: Read each item carefully. Place a check mark
    next to each item with which you agree. Make no marks
    next to the items with which you disagree

----

1.   249___The thought of death is a glorious thought..

2.   247___When I think of death I am most satisfied.

3.   245___Thoughts of death are wonderful thoughts.

4.   243___The thought of death is very pleasant.

5.   241___The thought of death is comforting.

6.   239___I find it fairly easy to think of death.

7.   237___The thought of death isn't so bad.

8.   235___I do not mind thinking of death.

9.   233___I can accept the thought of death.

10.   231___To think of death is common.

11.   229___I don't fear thoughts of death, but I don't like
            them either.

12.   227___Thinking about death is over-valued by many.

13.   225___Thinking of death is not fundamental to me.

14.   223___I find it difficult to think of death.

15.   221___I regret the thought of death.

16.   219___The thought of death is an awful thought.

17.   217___The thought of death is dreadful.

18.   215___The thought of death is traumatic.

19.   213.___I hate the sound of the word death.

20.   211___The thought of death is outrageous.

DEATH ANXIETY SCALE

Directions: Read each item carefully. If you agree with
the statement, write TRUE in the blank next to the
statement. If you disagree with the statement, write
FALSE in the blank next to the statement.

_____ 1. I am very much afraid to die.

_____ 2. The thought of death seldom enters my mind.

_____ 3. It doesn't make me nervous when people talk about
death.

_____ 4. I dread to think about having to have an operation.

_____ 5. I am not at all afraid to die.

_____ 6. I am not particularly afraid of getting cancer.

_____ 7. The thought of death never bothers me.

_____ 8. I am often distressed by the way time flies so
very rapidly.

_____ 9. I fear dying a painful death.

_____ 10. The subject of life after death troubles me greatly.

_____ 11. I am really scared of having a heart attack.

_____ 12. I often think about how short life really is.

_____ 13. I shudder when I hear people talking about World
War III.

_____ 14. The sight of a dead body is horrifying to me.

_____ 15. I feel that the future holds nothing for me to
fear.

APPENDIX B

Permission for the Investigation by the Human Subjects
   Committee

Copy of Consent Form B

Permission to Use the Death Attitutde Scale

Permission to Use the Death Anxiety Scale

TEXAS WOMAN'S UNIVERSITY
Box 23717 - TWU Station
Denton, Texas   76204

HUMAN SUBJECTS REVIEW COMMITTEE

Name of Investigator: __Mary Hubbard__   Center _Denton_

Address: _726 South West Drive_   Date __11-14-80__

Apartment A-2

Jonesboro, Arkansas   72401

Dear___Mary Hubbard_____

Your study entitled__Effects of Death Education on___

Attitudes Toward Death and Anxiety Toward Death of College

Freshmen

has been reviewed by a committee of the Human Subjects Re-
view Committee and it appears to meet our requirements in
regard to protection of the individual's rights.

Please be reminded that both the University and the
Department of Health, Education, and Welfare regulations
typically require that signatures indicating informed consent
be obtained from all human subjects in your studies. These
are to be filed with the Human Subjects Review Committee.
Any exception to this requirement is noted below. Furthermore,
according to DHEW regulations, another review by the Committee
is required if your project changes.

Any special provisions pertaining to your study are
noted below:
____Add to informed consent form: No medical service or com-
pensation is provided to subjects by the University as a
result of injury from participation in research.

____Add to informed consent form: I UNDERSTAND THAT THE
RETURN OF MY QUESTIONNAIRE CONSTITUTES MY INFORMED CON-
SENT TO ACT AS A SUBJECT IN THIS RESEARCH.

____The filing of signatures of subjects with the Human Subjects Review Committee is not required.

____Other:

____No special provisions apply.

Sincerely,

Chairman, Human Subjects
    Review Committee

at__Denton_____

cc: Graduate School
      Project Director
      Director of School or
          Chairman of Department

Consent Form
TEXAS WOMAN'S UNIVERSITY
HUMAN SUBJECTS REVIEW COMMITTEE

(Form B)

Title of Project: _____

_____

Consent to Act as A Subject for Research and Investigation:

I have received an oral description of this study, including
a fair explanation of the procedures and their purpose, any
associated discomforts or risks, and a description of the
possible benefits. An offer has been made to me to answer all
questions about the study. I understand that my name will not
be used in any release of the data and and that I am free to
withdraw at any time. I further understand that no medical
service or compensation is provided to subjects by the univer-
sity as a result of injury from participation in research.

_____   _____
Signature   Date

_____   _____
Witness   Date

Certification by Person Explaining the Study:

This is to certify that I have fully informed and explained
to the above named person a description of the listed ele-
ments of informed consent.

_____   _____
Signature   Date

_____   _____
Position

_____   _____
Witness   Date

One copy of this form, signed and witnessed, must be given
to each subject. A second copy must be retained by the in-
vestigator for filing with the Chairman of the Human Sub-
jects Review Committee. A third copy may be made for the
investigator's files.

March 19, 1980

Dr. Dale V. Hardt
Health Education Dept.
University of Wisconsin
Oshkosh, Wisconsin 54901

Dear Dr. Hardt:

Presently, I'm working on my perposal for my Ph.D. dissertation in the
area of death education. I will be measuring the effects of death ed-
ucation on sixth grade students and need your Death Attitude Scale as one
of my tools. (Journal of School Health, 45, No. 2, February, 1975,
pages 96-99.) How may I gain permission to use this scale? How much
cost is involved and what else do I need to know in order to use this
scale? I sure would appreciate your help in this matter. Thank you.

Sincerely,

Mary Hubbard
1910 Ruddell #221
Denton, Texas 76201

Dear Mary,

I am delighted you wish to use my scale. Please
do so with my best wishes. all information for use
of the DAS is included in the article. If you
need more information, please write.

Best of luck.

Sincerely,

Dale V. Hardt

TEXAS WOMAN'S UNIVERSITY
COLLEGE OF HEALTH, PHYSICAL EDUCATION, AND RECREATION
DENTON, TEXAS 76204

DANCE
HEALTH EDUCATION

PHYSICAL EDUCATION
RECREATION

March 19, 1980

Managing Editor
The Journal Press
2 Commericial Street
Proviencetown, Mass. 02657

Dear Sir:

Presently, I'm working on my perposal for my Ph.D. dissertation in
the area of death education. I will be measuring the effects of death
education on sixth grade students and would like to use Donald Templer's
Death Anxiety Scale as part of my measurement of the effect on students.
The orginal tool appears in The Journal of General Psychology, issue
82, pages 167-177, in the year 1970. How do I get permission to use this
tool and how much is the expense involved if I should get permission
to use this tool? Thank you for any help you can give me in this
matter.

Sincerely,

Mary Hubbard
1910 Ruddell #221
Denton, Texas 76201

Dear Ms. Hubbard: Permission is not required for the use
of the material you refer. Appropriate acknowledgement
should be used, of course. If the dissertation is published,
permission for a copyright license will be required. Best
wishes.

Very sincerely;

Betty Chin
Permissions
May 6, 1980

APPENDIX C

Examples of Methods of Scoring

Example of Coding Forms

Scoring the Death Attitude Scale

The Death Attitude Scale contains twenty statements concerning attitudes toward death. The subject is asked to check each item he agrees with and make no marks by the items with which he disagrees. A scoring key is placed over the responses. To the left of each item and on the scoring key, are three numbers. To score the scale, one simply disregards the first number of the items checked by the subjects. Place a decimal point between the two remaining numbers of each checked item, and average the responses. The average will fall on one of the attitude statements or between two attitude statements. Example: A subject checks items 233 (3.3), 231 (3.1), and 229 (2.9). Add the decimal figures together and divide by the total items checked, an average of 3.1 is found. Therefore, the subject's attitude about death, at that time, was described by statement 231.

Scoring the Death Anxiety Scale

The Death Anxiety Scale contains fifteen statements concerning anxieties toward death. The subject is to read each statement and write the word true in the blank to the left of the statement, if he agrees with that statement.

If the subject disagrees with the statement, he is to write the word <u>false</u> in the blank to the left of the statement.

The scoring key for the <u>Death Anxiety Scale</u> is shown below. False responses are disregarded. The higher the number of true responses, the higher the score on anxiety toward death. Excessive anxiety may indicate that a person is fearful of death and does not know how to deal with his anxieties toward the termination of life.

Scoring Key of the Death Anxiety Scale	
	Items
T	I am very much afraid to die.
F	The thought of death seldom enters my mind.
F	It doesn't make me nervous when people talk about death.
T	I dread to think about having to have an operation.
F	I am not at all afraid to die.
F	I am not particularly afraid of getting cancer.
F	The thought of death never bothers me.
T	I am often distressed by the way time flies so very rapidly.
T	I fear dying a painful death.
T	The subject of life after death troubles me greatly.
T	I am really scared of having a heart attack.
T	I often think about how short life really is.
T	I shudder when I hear people talking about World War III.
T	The sight of a dead body is horrifying to me.
F	I feel that the future holds nothing for me to fear.

CODING FORMS

The codes used in this investigation are as follows:

1. Each group was color coded as in the example below:

  Group I   Red

  Group II   Blue

  Group III   Green

2. Each individual was assigned an identification number from the grouping below. This identification number was placed by their names in the class roll book.

  Group I   assigned numbers from 100 to 145

  Group II   assigned numbers from 200 to 245

  Group III   assigned numbers from 300 to 345

3. Coding for pretest, immediate posttest, and delayed posttest are shown below:

  All pretest--showed the identification number in the right hand corner of the two stapled scales. The identification number was written in the color which identified the group. (see example 1)

Immediate Posttest--in addition to the identification

number, the letters IP (immediate

posttest) were placed to the right

of the identification number.

Delayed Posttest--in addition to the identification

number, the letters DP (delayed

posttest) were placed to the right

of the identification number

EXAMPLE 1

---

310 ——————— Group III - Pretest

DEATH ATTITUDE SCALE
310 ——————— Group III - Immediate Posttest
IP

DEATH ATTITUDE SCALE
310 ——————— Group III - Delayed Posttest
DP

DEATH ATTITUDE SCALE
315 ——————— Group III - Pretest for Persons Other
X   than Freshmen

DEATH ATTITUDE SCALE

Directions: Read each item carefully. Place a check
mark next to each item with which you agree.
Make no marks next to the items with which
you disagree.

4. All students were given the scales regardless
of classification. However, only freshmen were included
in the study. Students other than freshmen were identified
by placing an "X" under their identification number.

Course Outline for a Death Education Unit

Objectives

The students will:

1. analyze attitudes and behaviors related to them-
   selves and the American society

2. identify typical concerns about grief

3. discuss death as it relates to the finality of
   life

4. relate the needs and helping behaviors that are
   characteristic to dying and surviving persons

5. express feelings concerning their own death and
   death of loved ones

6. appraise the value of postmortem ritual

7. identify needs of children regarding death and
   death behaviors

8. discuss the issues involved with organ transplants,
   euthanasia, and suicide

9. express own wishes concerning pre and postmortem
   care.

Course Contents

I. What is death?
    A. Biological death

    B. Clinical death

    C. Spiritual death

APPENDIX D

DEATH EDUCATION UNIT OUTLINE

Course Outline for a Death Education Unit

Objectives

The students will:

1. Analize attitudes and behaviors related to them-selves and the American society

2. Identify typical concerns about grief

3. Discuss death as it relates to the finality of life

4. Relate the needs and helping behaviors that are characteristic to dying and surviving persons

5. Express feelings concerning their own death and death of loved ones

6. Appraise the value of postmortem ritual

7. Identify needs of children regarding death and death behaviors

8. Discuss the issues involved with organ transplants, euthanasia, and suicide

9. Express own wishes concerning pre and postmortem care.

Course Contents

I. What is death?

   A. Biological death

   B. Clinical death

   C. Spiritual death

II. Why the negative connotation of death?

    A. Fear

        1. universal
        2. conditioning
        3. religious values

    B. Lack of education

III. The individual's attitude toward death

    A. Group discussion about the formation of personal attitudes concering death

    B. Personification of death (Students draw a picture of what they hope death would look like when it comes after them. Try not to sterotype the image.)

    C. Filmstrip (Living with Dying)

        1. acceptance
        2. living with dying

    D. Attitude questionnaire ("Are You Someone Who . . .?)

        1. interaction practice with grieving family, friends, or individual
        2. practice answering questions asked by children

    E. Word association

    This activity was given every session. The instructor read a list with 30 words, including 6 words related to death. The students practiced making the death words neutral instead of negative in its connotation

IV. Behavior of the grieving

    A. The nature of grief

        1. denial
        2. anger
        3. bargaining
        4. depressions
        5. acceptance

    B. Needs of the dying

        1. to know about their death
        2. to live to the end with dignity
        3. hope
        4. to work out feelings
        5. to know personal worth
        6. not to be forgotten
        7. to communicate
        8. to function on a constructive level
        9. for family and friend's support
      10. for permission to die

    C. Funeral behavior (A vignette)

        1. A skit is presented concerning an old
           woman's loss of a pet and the activities
           surrounding the pet's funeral

        2. Values and behaviors are evaluated from
           the skit

V. Death decisions

    A. Living wills

    B. Wills

    C. Donation of body parts

    D. Funeral decisions

        1. disposal of body remains
        2. itemized funeral expense
        3. insurance

VI. Ethical issues of death

    A.   euthanasia

    B.   suicide

    C.   "Letting Die" (social status, age, economics)

    D.   patient's right to refuse treatment

    E.   truth telling

References

1. Hafen, B.   Death and dying, Health Education, November-December, 1977.

2. Hart, E. Philosophical views of death, Health Education, November-December, 1977.

3. Insel, E., & Roth, J. Core concepts in health. Palo Alto, CA: Mayfield Publihsers, 1979.

4. Kubler-Ross, E. Death, the final state of growth. Englewood Cliffs, NJ: Prentice-Hall, Inc. 1975.

5. Lee, M. Death education activities packet. Received at Southern District of American Association of Health, Physical Education, Recreation, and Dance, March, 1980.

6. Russell, R. Educating about death, Health Education, November-December, 1977.

7. Sunburst Communication. Living with dying, Pound Ridge, NY.

APPENDIX E

EXAMPLE OF RECORDING DATA FOR COMPUTER USE

PROGRAM

PROGRAMMER

PUNCHING INSTRUCTIONS | GRAPHIC

PAGE | OF

CARD ELECTRO NUMBER

*Student ID No.	Death Attitude Scale Pretest-Mean Scores	Death Anxiety Scale Pretest Items 1-15	Death Attitude Scale Immediate Posttest Mean Scores	Death Anxiety Scale Immediate Posttest Items 1-15	Death Attitude Scale Delayed Posttest Mean Scores	Death Anxiety Scale Delayed Posttest Items 1-15
					3 . 2	/ / / / / /
1 0 0	3 . 5	/ / /			2 . 1	/ / / / / / / /
1 0 2	2 . 8	/ / / /				
2 0 1	3 . 8	/ / / / / / / /	3 . 6	/ / / / / / /		
2 0 3	3 . 6	/ / / / / / / /	3 . 4	/ / / / / / /		
3 0 3	3 . 2	/ / / / / /	3 . 3	/ / / / / / / /	3 . 3	/ / / / / / /
3 0 4	3 . 6	/ / / / / / / /	3 . 6	/ / / / / / / /	3 . 2	/ / / / / /

*100 Series = Group I

200 Series = Group II

300 Series = Group III

APPENDIX F

EXAMPLES OF FORMULAS USED IN THE INVESTIGATION

The three formulas used in the study are the pooled (a) independent t-test, (b) pooled dependent t-test, and (c) Spearman Rank Correlation. The formulas are shown below.

Formula for the Pooled Independent t-Test

$$ t = \frac{\overline{X}_1 - \overline{X}_2}{S \ \overline{X}_1 - X_2} = \frac{\overline{X}_1 - \overline{X}_2}{S^2/N_1 - S^2/N_2} $$

(Ferguson, 1981, p. 178)

Formula for the Pooled Dependent t-Test

$$ t = \frac{D}{[N \ \& \ D^2 - (\ D)^2]/(N-1)} $$

Ferguson, 1981, p. 180)

$$ P(rho) = 1 - \frac{(\ D^2)}{N\ (N^2 - 1)} $$

(Isaac Michael, 1977)

Computer t-Test of the Analysis of Data Group II Immediate Posttest

Versus Group III Immediate Posttest

Variable	n	$\overline{X}$	S.D.	df	*t
Attitude					
Group II (I.P.)	39	3.21	0.43	74	1.68
Group III (I.P.)	37	2.95	0.84		
Anxiety					
Group II (I.P.)	39	6.54	2.09	74	1.59
Group III (I.P.)	37	5.81	1.88		

*Pooled variance estimated   D.P. = Delayed posttest

                                     I.P. = Immediate posttest

Computer t-Test of the Analysis of Data Group I Delayed Posttest

Versus Group III Immediate Posttest

Variable		n	$\overline{X}$	S.D.	df	*t
Attitude						
Group I	(D.P.)	34	3.25	0.44	69	1.94
Group III	(I.P.)	37	2.95	0.84		
Anxiety						
Group I	(D.P.)	34	5.91	1.71	69	0.24
Group III	(I.P.)	37	5.81	1.88		

*Pooled variance estimate   D.P. = Delayed posttest
                                    I.P. = Immediate posttest

Computer t-Test of the Analysis of Data Group I Delayed Posttest

Versus Group III Delayed Posttest

Variable		n	$\overline{X}$	S.D.	df	*t
Attitude						
Group I	(D.P.)	34	3.25	0.44	69	1.37
Group III	(D.P.)	37	3.06	0.69		
Anxiety						
Group I	(D.P.)	34	5.91	1.71	69	0.79
Group III	(D.P.)	37	5.54	2.19		

*Pooled variance estimate

D.P. = Delayed posttest
I.P. = Immediate posttest

Computer t-Test of the Analysis of Data Group I Delayed Posttest

Versus Group II Immediate Posttest

Variable	n	X̄	S.D.	df	*t
Attitude					
Group I (D.P.)	34	3.25	0.44	71	0.47
Group II (I.P.)	39	3.21	0.42		
Anxiety					
Group I (D.P.)	34	5.91	1.71	71	-1.39
Group II (I.P.)	39	6.54	2.09		

*Pooled variance estimated   D.P. = Delayed posttest
                                       I.P. = Immediate posttest

Computer t-Test of the Analysis of Data Group III Pretest

Versus Group III Immediate Posttest

Variable	n	$\overline{X}$	S.D.	df	*t
Attitude					
Group III (Pre.)	37	3.09	0.49	36	1.05
Group III (I.P.)	37	2.95	0.84		
Anxiety					
Group III (Pre.)	37	5.73	2.14	36	-0.36
Group III (I.P.)	37	5.81	1.81		

*Pooled variance estimate

I.P. = Immediate posttest
Pre. = Pretest

APPENDIX H

ITEM ANALYSIS MADE ON THE <u>DEATH ATTITUDE SCALE</u>

ITEM ANALYSIS MADE ON THE <u>DEATH ANXIETY SCALE</u>

SPEARMAN RANK CORRELATION ANALYSIS OF THE

<u>DEATH ATTITUDE SCALE</u>

SPEARMAN RANK CORRELATION ANALYSIS OF THE

<u>DEATH ANXIETY SCALE</u>

Item Analysis Made on the Death Attitude Scale

by All Subjects

*Item number	Pretest pct.	Immediate posttest pct.	Delayed posttest pct.
1	7.3	7.3	8.2
2	8.2	7.3	5.5
3	5.5	4.5	6.4
4	7.3	7.3	5.5
5	13.6	11.8	9.1
6	50.0	40.9	44.5
7	47.3	33.6	38.2
8	53.6	36.4	40.0
9	80.9	54.5	56.4
10	61.8	36.4	39.1
11	68.2	50.0	41.8
12	28.2	19.1	31.8
13	27.3	17.3	22.7
14	11.8	5.5	4.5
15	12.7	9.1	9.1
16	14.5	11.8	8.2
17	13.6	10.0	7.3
18	9.1	5.5	5.5
19	7.3	5.5	3.6
20	2.7	0.9	3.6

*See Appendix A for an interpretation of item numbers

N = 110

Item Analyses Made on the <u>Death Anxiety Scale</u> by

all Subjects

*Item number	Pretest pct.	Immediate posttest pct.	Delayed posttest pct.
1	25.5	10.9	8.2
2	61.8	37.3	34.5
3	79.1	53.6	52.7
4	55.5	37.3	25.5
5	29.1	21.8	26.4
6	41.8	37.3	32.7
7	20.0	15.5	16.4
8	43.6	31.8	25.5
9	57.3	42.3	32.7
10	14.5	10.9	4.5
11	15.4	15.5	13.6
12	53.6	48.2	30.9
13	37.3	20.9	23.6
14	37.3	17.3	20.9
15	30.0	26.4	20.9

*See Appendix A for an interpretation of item numbers

Spearman Rank Correlation of Items Selected by

All Subjects on the Death Attitude Scale for

Pretest and Immediate Posttest

Item	Pretest	Immediate posttest	Rank difference	Squared difference
1	14	13	1	1
2	13	13	0	0
3	15	15	0	0
4	14	13	1	1
5	10	9	1	1
6	5	3	2	4
7	6	6	0	0
8	4	4	0	0
9	1	1	0	0
10	3	4	-1	1
11	2	2	0	0
12	7	7	0	0
13	8	8	0	0
14	12	12	0	0
15	11	11	0	0
16	9	9	0	0
17	10	10	0	0
18	13	14	-1	1
19	14	14	0	0
20	16	16	0	0
			$\overline{\text{D=3}}$	$D^2 = \overline{\text{D=9}}$

*Significant at .05 or .450   p = .993

Spearman Rank Correlation of Items Selected by all

Subjects on the <u>Death Attitude Scale</u> for Immediate

Posttest and Delayed Posttest

Item	Immediate posttest	Delayed posttest	Rank difference	Squared difference
1	13	10	3	9
2	13	13	0	0
3	15	12	3	9
4	13	13	0	0
5	9	9	0	0
6	3	2	1	1
7	6	6	0	0
8	4	4	0	0
9	1	1	0	0
10	4	5	-1	1
11	2	3	-1	1
12	7	7	0	0
13	8	8	0	0
14	12	14	-2	4
15	11	9	-2	4
16	9	10	-1	1
17	10	11	-1	1
18	14	13	1	1
19	14	15	-1	1
20	16	16	0	0
			$\overline{D=1}$	$D^2 = \overline{D=33}$

*Significant at .05 or .450   p = .975

Spearman Rank Correlationof Items Selected by all
Subjects on the Death Attitude Scale for Pretest
and Delayed Posttest

Item	Pretest	Delayed posttest	Rank difference	Squared difference
1	14	10	4	16
2	13	13	0	0
3	15	12	3	9
4	14	13	1	1
5	10	9	1	1
6	5	2	3	9
7	6	6	0	0
8	4	4	0	0
9	1	1	0	0
10	3	5	-2	4
11	2	3	-1	1
12	7	7	0	0
13	8	8	0	0
14	12	14	-2	4
15	11	9	2	4
16	9	10	-1	1
17	10	11	-1	1
18	13	13	0	0
19	14	15	-1	1
20	16	16	0 $D=6$	0 $D^2=52$

*Significant at .05 or .450 $p = .961$

Spearman Rank Correlation of Items Selected by all

Subjects on the <u>Death Anxiety Scale</u> for Pretest

and Immediate Posttest

Item	Pretest	Immediate posttest	Rank difference	Squared difference
1	11	11	0	0
2	2	4	-2	4
3	1	1	0	0
4	4	4	0	0
5	10	7	3	9
6	7	4	3	9
7	12	10	2	4
8	6	5	1	1
9	3	3	0	0
10	14	11	3	9
11	13	10	3	9
12	5	2	3	9
13	8	8	0	0
14	8	9	-1	1
15	9	6	3	9
			D=18	$D^2=62$

*Significant at .05 or .506 $p = .889$

Spearman Rank Correlation of Items Selected by all

Subjects on the <u>Death Anxiety Scale</u> for

Immediate Posttest and Delayed Posttest

Item	Immediate posttest	Delayed posttest	Rank difference	Squared difference
1	11	11	0	0
2	4	2	2	4
3	1	1	0	0
4	4	6	-2	4
5	7	5	2	4
6	4	3	1	1
7	10	9	1	1
8	5	6	-1	1
9	3	3	0	0
10	11	12	-1	1
11	10	13	-3	9
12	2	4	-2	4
13	8	7	1	1
14	9	8	1	1
15	6	8	-2	4
			$D = -3$	$D^2 = 35$

*Significant at .05 or .506 $p \doteq .950$

Spearman Rank Correlation of Items Selected by all

Subjects on the Death Anxiety Scale for

Pretest and Delayed Posttest

Item	Pretest	Delayed posttest	Rank difference	Squared difference
1	11	11	0	0
2	2	2	0	0
3	1	1	0	0
4	4	6	-2	4
5	10	5	5	25
6	7	3	4	16
7	12	9	3	9
8	6	6	0	0
9	3	3	0	0
10	14	12	2	4
11	13	10	3	9
12	5	4	1	1
13	8	7	1	1
14	8	8	0	0
15	9	8	1	1
			$D=18$	$D^2=70$

*Significant at .05 or .506 $p = .876$

References

Bell, B. D. The experimental manipulation of death atti-
tudes: a preliminary investigation. Omega, 1975, 6,
199-204.

Bohart, J.B., & Bergland, B. W. The impact of death and
dying counseling groups on death anxiety in college
students. Death Education, 1979, 2, 281-390.

Coleman, J. Personality dynamics and effective behavior.
Chicago: Scott Foresman, 1960.

Dickstein, L. S. Attitudes toward death, anxiety, and social
desirability. Omega, 1977-78, 8, 369-377.

Ferguson, G. Statistical analysis in psychology and educa-
tion. New York: McGraw Hill, 1981.

Guthrie, G. P. The meaning of death. Omega. 1971, 2,
299-300.

Hardt, D. V. Development of an investigatory instrument to
measure attitudes toward death. Journal of School Health,
1975, 45, 96-99.

Harris, W. H. Some reflections concerning approaches to
death education. Journal of School Health, 1978, 48,
162-165.

Hoelter,J., & Epley, R. Death education and related atti-
tudes. Death Education, 1979, 3, 69-74.

Isaac, S., & Michael, W. Handbook in research and evaluation.
San Diego: Edits Publishers, 1977.

Leviton, D. Education for death, or death becomes less a
stranger. Omega, 1975, 6, 183-190.

Leviton, D., & Fretz, B. Effects of death education on
fear of death and attitudes toward death and life.
Omega, 1978-79, 9, 267-277.

Knott, J. E., & Prull, R. W. Death education: accountable
    to whom? for what? Omega, 1976, 7, 177-181.

McDonald, R. T. The effects of death education on specific
    attitudes toward death in college students. Death
    Education. 1981, 5, 59-64.

Middleton, W. C. Some reactions toward death among college
    students. Journal of Abnormal Psychology, 1937, 42,
    165-173.

Pandey, R. E., & Templer, D. I. Use of the death anxiety scale
    in an inter-racial setting. Omega, 1972, 3, 127-130.

Simpson, M. A. Death education - where is they sting?
    Death Education, 1979, 3, 165.

Strasser, M., Aaron, J., Bohn, R., & Eales, J. Fundamentals
    of safety education. New York: MacMillan Publishing
    Company, 1973, 79, 80.

Templer, D. I. The construction and validation of a death
    anxiety scale. Journal of General Psychology, 1970, 82,
    165-175.

Watts, P. R. Evaluation of death attitude change resulting
    from a death education instructional unit. Death
    Education, 1977, 1, 187-192.

Wittmaier, B. C. Some unexpected attitudinal consequences
    of a short course on death. Omega, 1979-80, 10, 271-275.