

THE RELATIONSHIP BETWEEN FEARS OF PERSONAL
DEATH, RELIGIOSITY, AND POSTHUMOUS
ORGAN DONATION ATTITUDES
AND COMMITMENT

By

LAWRENCE BRET STEIN

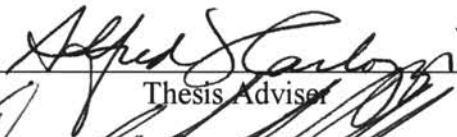
Bachelor of Arts
The University of Alabama
Tuscaloosa, Alabama
1992

Master of Arts
Eastern Illinois University
Charleston, Illinois
1995

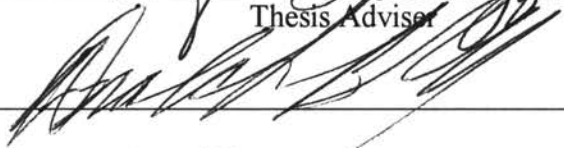
Submitted to the Faculty of the
graduate College of the
Oklahoma State University
in partial fulfillment of
the requirements for
the Degree of
DOCTOR OF PHILOSOPHY
December 1999


THE RELATIONSHIP BETWEEN FEARS OF PERSONAL
DEATH, RELIGIOSITY, AND POSTHUMOUS
ORGAN DONATION ATTITUDES
AND COMMITMENT


Thesis Adviser



Thesis Adviser











Dean of the Graduate College

ACKNOWLEDGMENTS

I wish to express a special thanks to Dr. Al Carlozzi, my committee chairperson, friend, an advisor, for his support, encouragement, and for his role as mentor. Also, I sincerely thank the other members of my committee for their kindness, encouragement, and patience. Thanks, Dr. Terry Stinnett, Dr. Don Boswell, Dr. John Romans, and Dr. Larry Mullins.

A very special thanks goes to many friends that have shared the graduate school experience. Thanks to my dearest friends, Mimi Mccaa, Dan and Heather Johnson, Christy Pearson, Robert Lone, Richard Yao, and Amy Jester. Their support, sense of humor, and companionship kept me sane over the past several years. I would have given up a long time ago without their love.

I would also like to thank John Coltrane, Theloneous Monk, Bob Dylan, The Grateful Dead, Robert Johnson, and Liquid Tongue for keeping me company through many long and lonely dissertation evenings.

I would like to express my appreciation and love to my family. Many years ago my parents, Barbara and Sanford instilled within me a sense of independence that has served me well. Their love and support have been an inspiration in all aspects of my life.

Finally, I would like to dedicate this dissertation to the blessed memory of my grandparents, Nathan and Dina Stein, and George and Ida Friedman. I think of them daily and miss them wholeheartedly.

TABLE OF CONTENTS

Chapter	Page
I. INTRODUCTION	1
Introduction	1
Statement of the Problem	6
Significance of the Study	7
Definition of Terms	7
Fears of Personal Death	7
Religiosity	8
Organ Donation	9
Research Hypotheses	10
Limitations	10
II. REVIEW OF LITERATURE	12
Introduction	12
Theory of Planned Behavior	13
Organ Donation Decisions by Next of Kin	15
Attitudes Toward Organ Donation and Commitment to Donate	18
Demographics and Attitudes Toward Organ Donation	19
Death Concerns and Organ Donation	22
Fears of Personal Death	27
Fears of Personal Death and Organ Donation	31
Religiosity and Organ Donation	32
III. METHOD	36
Introduction	36
Participants	36
Dependent Variables	36
Independent Variables	37
Fear of Personal Death Scale	37
The Gladding, Lewis, Adkins Scale of Religiosity	39
Organ Donation Attitude Scale	40
Demographic Questionnaire	41

Chapter	Page
Procedure for Data Collection	42
Statistical Hypotheses	43
Statistical Analyses	44
Summary	44
IV. RESULTS	45
Introduction	45
Tests of Assumptions and Limitations	46
Reliability Analysis of the GLASR	46
Means and Standard Deviations	50
Test of Hypotheses	50
Hypothesis One	52
Hypothesis Two	52
Hypothesis Three	55
Hypothesis Four	55
Hypothesis Five	57
Hypothesis Six	61
Additional Post Hoc Comparisons	64
Summary	67
V. SUMMARY, CONCLUSIONS, IMPLICATIONS AND RECOMMENDATIONS	68
Introduction	68
Summary	68
Null Hypothesis One	69
Null Hypothesis Two	70
Null Hypothesis Three	71
Null Hypothesis Four	72
Null Hypothesis Five	74
Null Hypothesis Six	75
Discussion and Conclusions	76
Self-Annihilation	76
Loss of Social Identification	78
Concerns about Family and Friends	78
Punishment in the Hereafter	79
Existence Following Death	80
Self-Fulfillment	81
Belief in a Deity	81
Religious Belief	82
Consistency of Belief and Action	82
Religious Effort	83

Chapter	Page
Recommendations for Future Research	84
REFERENCES	86
APPENDIXES	92
APPENDIX A – DEMOGRAPHIC QUESTIONNAIRE	93
APPENDIX B – CONSENT FORM	95
APPENDIX C – DEMOGRAPHIC FREQUENCIES	97
APPENDIX D – INSTITUTIONAL REVIEW BOARD APPROVAL FORM	102

LIST OF TABLES

Table	Page
1. Pearson Correlation Matrix for Entire Sample	47
2. Pearson Correlation Matrix for Male Participants	48
3. Pearson Correlation Matrix for Female Participants	49
4. Demographic and Predictor Mean Scores and Standard Deviations	51
5. Multiple Regression Analysis of Participants' Scores on the Fear of Personal Death Scale; Gladding, Lewis, and Adkins Scale of Religiosity; and Positive Attitudes Toward Organ Donation for the Total Sample	53
6. Multiple Regression Analysis of Participants' Scores on the Fear of Personal Death Scale; Gladding, Lewis, and Adkins Scale of Religiosity; and Organ Donation Commitment for the Total Sample	54
7. Multiple Regression Analysis of Participants' Scores on the Fear of Personal Death Scale; Gladding, Lewis, and Adkins Scale of Religiosity; and Negative Attitudes Toward Organ Donation for the Total Sample	56
8. Multiple Regression Analysis of Participants' Scores on the Fear of Personal Death Scale; Gladding, Lewis, and Adkins Scales of Religiosity; and Positive Organ Donation Attitudes for Males	58
9. Multiple Regression Analysis of Participants' Scores on the Fear of Personal Death Scale; Gladding, Lewis, and Adkins Scales of Religiosity; and Positive Organ Donation Attitudes for Females	59
10. Multiple Regression Analysis of Participants' Scores on the Fear of Personal Death Scale; Gladding, Lewis, and Adkins Scales of Religiosity; and Organ Donation Commitment for Males	60
11. Multiple Regression Analysis of Participants' Scores on the Fear of Personal Death Scale; Gladding, Lewis, and Adkins Scales of Religiosity; and Organ Donation Commitment for Females	62

12. Multiple Regression Analysis of Participants' Scores on the Fear of Personal Death Scale; Gladding, Lewis, and Adkins Scales of Religiosity; and Negative Organ Donation Attitudes for Males 63
13. Multiple Regression Analysis of Participants' Scores on the Fear of Personal Death Scale; Gladding, Lewis, and Adkins Scales of Religiosity; and Negative Organ Donation Attitudes for Females 65

CHAPTER I

INTRODUCTION

Introduction

The current shortage of organ donation in the United States is a major concern. Individuals who are fortunate enough to receive an organ from a donor have an opportunity to ameliorate their health, improve their quality of life, and live longer than those who do not receive this type of medical treatment. One study investigating the need for cardiac transplants reported that nearly 14,000 deaths occurred in 1980 due to a shortage of donors (Evans, Manninen, Gersh, Hart, & Rodin, 1984).

The need for organs including liver, pancreas, skin, bone marrow, corneas, and lungs is extremely high. In 1994, 27,498 usable kidneys were needed and because of a lack of donors only 10,463 transplant procedures could be conducted (U.S. Department of Health and Human Services, 1995). In 1995 the wait list for various donor organs totaled 32,431 and approximately 3,000 of these individuals died because of a shortage of necessary organ donors. *Tragically, nine people die everyday waiting for an organ transplant* (Mertz, 1985). The importance of organ donation is magnified by the fact that almost ten percent of all individuals awaiting kidney transplants are age five or younger, the average survival rate for a heart transplant is currently 82%, and the vital organs that

can be used from a single cadaveric donor has the potential to save the life of several individuals (U.S. Department of Health and Human Services, 1995).

By the beginning of the new millennium it is foreseeable that the need for usable organs will increase steadily. Due to rapid developments in medical technology, the ability to perform multiple organ transplant surgery will continue to become more successful. Therefore, organ transplantation, which even now is no longer considered experimental, will become an increasingly desirable treatment option. New procedures, highly effective medications, and growing medical knowledge will enable more individuals to be seen by the medical community as viable organ recipients. It is predicted that as the population of the United States grows older, the need for all vital organs will increase steadily. Thurkral and Cummins (1990) explained that between 1987 and 2000, approximately 100,000 individuals could benefit from a heart transplant.

Past research has concluded that the majority of Americans support organ donation and transplants (Evans & Manninen, 1988). Nonetheless, there remains a discrepancy between those who donate organs and those who need transplants. In an attempt to increase organ donation, The Uniform Anatomical Gift Act of 1969 was constructed. This legislative action was designed to provide guidelines concerning who can donate, to whom a donation can be made, and what in general can be donated.

Although the specific laws concerning organ donation vary from state to state, a donor must be at least 18 years of age. There are exceptions. Parents of a minor are free to donate their child's organs. Also, after any person, regardless of age passes away, the next of kin survivors may act to donate even if the deceased owner of the organ has not made this request. The Uniform Anatomical Gift Act has helped individuals who are

depending on organ donations tremendously, but there still remains a great discrepancy between those who need an organ donation and those who are willing to donate posthumously.

Due to the relative importance of organ donation on human life, one would expect that there would be a profusion of research in the social sciences investigating this type of behavior. This is not the case. Nolan and McGrath (1990) have explained that behavioral research in the organ donation arena is in a nascent state. *Psychological Abstracts* listed only nine empirical studies from 1972 to 1986 concerning this problem. Because so little research has been conducted on factors that either promote or inhibit organ donation, not much is known about how a person's beliefs, emotions, and attitudes interact with social influences in determining their decision to donate their organs or those of family members.

In summary, the shortage of organ donations continues to have a distressing effect on those who are not able to receive vital medical treatment. As these complex medical procedures improve with time, many more individuals could benefit from organ transplant surgery. Although the majority of people support organ transplants attitudinally, there still remains a vast discrepancy between those who need organs to continue living and those who are willing to donate their body parts following personal death. The social sciences, including the field of psychology have not given adequate attention to organ donation attitudes and commitment. It is clear that more studies are needed in order to determine why people are both willing and unwilling to donate their organs so that effective strategies can be utilized to encourage organ donation.

Olbrisch (1989) reviewed the shortage of organ donation literature and succinctly hypothesized three possible reasons why this topic has often been overlooked by the social

sciences. The author explained that academic health psychology is strongly biased toward primary and secondary prevention. Tertiary care is often regarded as less worthy of attention and research efforts. Much of the focus in the field of health psychology advocates finding viable ways in which to reduce health care costs and most researchers erroneously believe that organ donation is not a cost-effective procedure. According to Olbrisch, psychologists who contribute to improve the field of organ donation may place themselves in the unenviable position of being seen as raising the costs of health care.

A second possible reason for the shortage of organ donation research may be that psychologists are not immune from the “blaming the victim” attitude that stigmatizes organ donation recipients (Olbrisch, 1987). In short we, as psychologists, may hold beliefs that individuals who are in need of organ donations have led lives in which they have mistreated their bodies and that these people may not deserve a second chance at a healthy organ. Similarly, psychologists may be uncomfortable with the roles of “bad luck” or random events in shaping people’s lives that may steer us away from research that acknowledges these powerful life-threatening circumstances.

Finally, Olbrisch (1987) hypothesized that psychologists share the attitudes of broader society in placing heavy scrutiny on the efficacy of organ transplant technology. Psychologists have not hesitated to involve themselves in costly research and therapy for traumatic brain injury (TBI) patients, even though the likelihood of a TBI patient’s returning to a high level of functioning or even maintaining a level of personality that is similar to pre-injury is far less likely than that of the organ recipient. Perkins (1987) noted that 25% of heart transplant patients return to full time work and another 25% are

employed part time, attend school, or are looking for a job. These numbers increase dramatically with other organ donation patients (lung, kidney, eye, etc.).

Olbrisch's (1987) three hypotheses concerning the lack of organ donation research are based on misconceptions or erroneous beliefs that psychologists and society as a whole hold to be true concerning these medical procedures. Therefore, by making organ donation more prolific in the scientific literature, both psychologists and the public would become better educated about the benefits and need for more knowledge on this important health related topic.

Little research has been conducted on the various predictors of cadaver organ donation, especially how an individual's level of religiosity or fear of personal death influences organ donation behavior. Early studies have found high support for organ donation among individuals who are young women (Simmons, Fulton, & Fulton, 1973) and are well educated (Cleveland & Johnson, 1970). A strong sense of humor, belief in the efficacy of organ donation, and higher socioeconomic status, have also been demonstrated to be positive predictors of organ donation (Leftcourt & Shepard, 1995). Support for post-mortem organ donation was found for individuals who were more accepting of their own death, had less concern for traditional burial rituals, and had made out a will (Cleveland, 1975; Cleveland & Johnson, 1970; Simmons, Bruce, Bienvenue, & Fulton, 1974). Various investigations have reported that religiosity (O'Connell, 1968), as well as right wing authoritarianism behavior (Leftcourt & Shepard, 1995) are inversely related to organ donation attitudes. However, one of the major problems in assessing an individual's fear of personal death or religiosity is that until recently the measures and

surveys that have been widely used have been atheoretical, unidimensional, unreliable, or not valid (Florian & Kravetz, 1983).

In short, there may be several viable hypotheses as to why there is a scarcity of empirical investigations on organ donation attitudes and behaviors. Most of these hypotheses argue that psychologists lack of interest in this area of research has to do with erroneous beliefs about the efficacy of organ donation, the cost effectiveness of organ donation, and the attitude of blaming the victim. Therefore, it is still unclear at this point which factors can be consistently identified as predictors of organ donation or of refusal to donate. Of the specific predictors, the fear of death and high levels of religiosity have been demonstrated to be inversely related to organ donation. Due to the length of time since these studies were conducted and the unreliable measures, this topic warrants further investigation

Statement of the Problem

The proposed study is designed to determine the relationship between the multidimensional concepts of fear of personal death, religiosity, and posthumous organ donation attitudes and behaviors. Organ donation has been demonstrated to be a significant social concern with important ramifications (Lefcourt & Sheppard, 1995). Existing research suggests that death anxiety (Cleveland, 1975; Cleveland & Johnson, 1970; Simmons, Bruce, Bienvenue, & Fulton, 1974) and religiosity (Harris, Jasper, Shanteau, & Smith, 1990; O'Connell, 1968) may be important variables in deciding to donate organs. The specific question investigated in this study is: Is there a relationship between fear of personal death, religiosity, and organ donation attitudes and commitment?

Significance of the Study

The lack of organ donors along with the current paucity of research in this area is disturbing. Because of the limited amount of studies that investigate reasons why individuals refuse or are hesitant to donate organs following their death, there is a limited understanding of organ donation attitudes and behaviors. By gaining a clear picture of the factors that impede donations, we may be able to dismiss myths associated with organ donation or concentrate acquisition efforts on populations that may be more accepting of post cadaveric donation. Future research in this area may lead to more cost effective organ obtainment programs.

Definition of Terms

Fears of Personal Death

In the thanatological literature there has been some confusion between the concept of death anxiety and fear of personal death. Hoelter (1979) described *death anxiety* as, “. . . an emotional reaction involving subjective feelings of unpleasantness and concern based on contemplation or anticipation of *any of* several facets related to death” (p.996). Death anxiety is broad and encompasses fears of one’s own death, fear of dying, and fears of others dying. Fear of personal death, on the other hand, relates solely to an individual’s conscious concern about their own demise.

In this particular investigation Florian and Kravetz’s (1983) conceptualization of six factors that have been coalesced into three broad attitudinal dimensions towards personal death was utilized. The three broad dimensions of fears of personal death include

interpersonal, intrapersonal, and transpersonal consequences of death. Interpersonal fears of death are described as the concerns regarding the detrimental effect of personal death on family, friends, and social identity. Intrapersonal fears of death include the loss of self-fulfillment and self-annihilation. Fears of the unknown and fear of punishment in the hereafter reflect transpersonal fears of personal death.

The Fear of Personal Death Scale (FPDS: Florian & Kravetz, 1983) was employed to investigate interpersonal, intrapersonal, and transpersonal death concerns. The six factors that make up the three broad dimensions included:

1. Fear of loss of self-fulfillment (intrapersonal);
2. Fear of self-annihilation (intrapersonal);
3. Fear of consequences to family and friends (interpersonal);
4. Fear of loss of social identity (interpersonal);
5. Concerns regarding the state of existence following death (transpersonal);
6. Fear of punishment in the hereafter (transpersonal).

Religiosity

For the purpose of this study, the term “religiosity” was used to indicate the amount of religious effort, belief in a personalized deity, religious belief, and consistency of belief and action that an individual adheres to in his or her daily life. Religiosity was measured by the Gladding, Lewis, and Adkins Scale of Religiosity (GLASR: Gladding, Lewis, & Adkins, 1981).

Organ Donation

Organ donation is a process by which an individual agrees to have one or more of their vital organs surgically removed and placed in another individual who is suffering from any number of diseases. Organs can also be donated to science in order to gain a clearer understanding of certain types of diseases.

An organ donation can be made from either a live donor or can be procured following an individual's death. In the latter example of organ donation, an individual can sign a donor card at their local Department of Motor Vehicle (DMV) center or write to the United States Department of Health for a donor card. Also, following an individual's death, first degree relatives have the option to decide to donate organs on the deceased's behalf. These next of kin also have the option to refuse to donate organs even if the deceased signed an official donor card. For the purposes of this study, the relation between fears of personal death, religiosity, and organ donation were explored only in relation to those who are willing or not willing to donate their organs following their own death.

Organ donation attitudes and commitment was measured by the Organ Donation Attitude Scale (Parisi & Katz, 1986). This questionnaire was developed to measure positive and negative dimensions of attitudes about organ donation, as well as behavioral commitment to donate body organs posthumously.

Research Hypotheses

The following research hypotheses were tested at the .05 alpha level of significance:

1. Fears of personal death and religiosity will be significant inverse predictors of positive organ donation attitudes for the entire sample.
2. Fears of personal death and religiosity will be significant inverse predictors of organ donation commitment for the entire sample.
3. Fears of personal death and religiosity will be significant positive predictors of negative organ donation attitudes for the entire sample.
4. Fears of personal death and religiosity will be significant inverse predictors of positive organ donation attitudes for the male and female participants in this sample.
5. Fears of personal death and religiosity will be significant inverse predictors of organ donation commitment for males and females.
6. Fears of personal death and religiosity will be significant positive predictors of negative organ donation attitudes for males and females.

Limitations

The conclusions resulting from the proposed study were subject to the following limitations:

1. Because the current investigation is a correlational study, no statements of causality will be presented. The study is designed only to identify significant factors that can predict organ donation attitudes and behaviors.
2. Because the current study relies on participants' self report, no independent verification of fears of personal death, religiosity, or organ donation attitudes will be able to be made.
3. Because the current investigation is designed to investigate attitudes corresponding to posthumous organ donation, no inferences can be made concerning living donor attitudes and behaviors.
4. Because the current investigation utilizes university students, the results of this study are limited to individuals with similar ages and educational levels.
5. Because the current investigation was conducted in the Southwest, the results may not generalize to different geographic locations.

CHAPTER II

REVIEW OF LITERATURE

Introduction

The idea of taking the organ from one human being and transplanting it into another seems more like a fantasy than reality. Yet organ donations have saved thousands of lives since the first kidney procedure in 1954. This is truly a scientific miracle, one that we may take for granted. For example, in 1992 over eight hundred organ transplantation programs were in existence in the United States. During that year, almost 10,000 kidneys, 2,100 hearts, 3,000 livers, 500 pancreases, and 450 other vascularized organs were transplanted (United Network for Organ Sharing, 1992).

The transplantation of healthy organs into needy recipients depends on highly evolved medical technology, surgical expertise and advanced immunosuppressive medications. Regardless of the medical advances in these life saving techniques, the most important factor in the organ donation equation is the individual who relinquishes his or her organs following death. Without altruistic people and family members who are willing to donate vital organs, transplantation technology becomes moot and lives will continue to be lost. Therefore, it is essential to investigate the crucial factors that may lead one to consider organ donation as a viable option following personal death.

Organ donations must start with the death of an individual, usually a sudden and tragic one. Most organ donations are typically procured from young adults involved in accidents who are in their twenties and who are in good health until the time of their death (Prottas, 1994). Central nervous system trauma due to a motor vehicle accident is the typical cause of death for these individuals. Moreover, the donor must be pronounced brain dead and it is essential that organs still be functioning shortly prior to organ procurement. It is clear that one life will be salvaged in the aftermath another's nightmarish tragedy. Despite this fact there is a great deal of support for organ donation in Western culture.

In surveys conducted in different geographic locations in the United States, it was found that between 66% and 78% of the population supported organ donation and would seriously consider donating a relative's organ (Gallup Organization, 1983, 1985). Although attitudinally, willingness to donate is high, communication to family members and commitment to signing a donation card falls around the 30% range. The few scientific investigations in this area tend to focus on possible reasons why individuals are and are not willing to donate. Other studies explore the discrepancy between positive attitudes toward this procedure and low follow through rates.

Theory of Planned Behavior

When attempting to understand the differences that are often noted between an individual's attitudes and behaviors, especially in organ donation, a theoretical model is helpful. In an effort to understand the relationship between reasoning and action, Ajzen, (1988) conceptualized a general theory of behavior that results from an individual's

line of reasoning. This model has been an aid in predicting weight loss, the cessation of problem drinking, class attendance, and blood donation (Schifter & Ajzen, 1985).

It has been hypothesized that Ajzen's (1988) model can help explain why many individuals support organ donation but do not opt to become donors (Borgida, Simmons, Conner, & Lombard, 1990). According to this model, the best predictor of reasoned behavior is an *individual's intent* of carrying out a behavior. The stronger an individual's intentions, the more likely they are to follow through and act on their desire.

Ajzen (1985) explained that an individual's intention to perform a behavior is shaped by three powerful forces. One of these is the individual's *attitude towards the behavior*, which is a favorable or unfavorable evaluation of the behavior. An individual who holds a favorable attitude towards a behavior is more likely to act on his or her intentions. The opposite is expected for those who hold negative attitudes towards a behavior.

The second factor involved in shaping an intention is the *subjective norm*. A subjective norm can be conceptualized as the pressure that an individual feels to perform or not perform a specific behavior. These can be manifested in social pressure that an individual is exposed to through family, friends, institutions, the media, etc. The stronger the subjective norm, the more influence on the individual to carry out or refrain from a behavior.

Finally, the component of *perceived behavioral control* must be estimated by the individual. The subjective assessment of the degree of ease or difficulty of the behavior under question is the component of perceived behavioral control. It is thought to be

heavily influenced by an individual's past experiences and the anticipated ramifications of performing the behavior under question.

Borgida et al.(1990) succinctly argued that organ donation research should focus on the three factors that contribute to an individual's intention to donate. The components of intention should be investigated both singly and according to the manner in which they interact with each other in influencing behavioral intention. However, the majority of research on organ donation remains focused on the individual's attitudes toward being a donor. Although no hypotheses exist why nearly all of the research neglects the other components that influence intention, it may be possible that researchers consider it too difficult to assess the degree of social norm and behavioral control that an individual experiences. Attitudes, on the other hand, remain fairly easy to assess, even though they do not always present a comprehensive understanding of complex behaviors.

The model of planned behavior (Ajzen 1985) is able to explain in part why there is a discrepancy between organ donation attitudes and behaviors. Borgida et al.(1990) have noted that one must possess more than a favorable attitude towards organ donation. Sufficient social pressure and belief in the efficacy of one's actions in the donation procedure combined with positive attitudes make individuals more likely to follow through on their intentions.

Organ Donation Decisions by Next of Kin

A logical place to begin exploring organ donation attitudes is with an individual's next of kin. By law, regardless of an individual's desire to donate his or her organs and the existence of a signed organ donation card, the final decision rests with the deceased's

next of kin. Several studies have investigated the willingness to donate organs by the deceased's relatives because this decision typically occurs during a time of extreme stress and is dependent on the survivor's attitudes towards organ donation (Childress, 1987; Schwindt & Ving, 1986).

Harris, Jasper, Shanteau, and Smith (1990) designed an experimental simulation investigation that explored different types of pertinent information that individuals utilize when making next of kin organ donation decisions. Undergraduate college participants completed a demographic questionnaire and were instructed to check one of the following options concerning their organ donation attitudes and status: "Yes," "No, but I would be willing to do so if asked," "No, but I may decide to do so in the future," "No, I thought about it and decided not to," and "No, I didn't even know about it."

Participants in the Harris et al. (1990) study were then presented with 15 brief scenarios of 55 to 130 words. Each vignette contained a description of a young adult who had suddenly died and whose next of kin were facing a decision to donate his or her vital organs. Following each scenario the participants were asked if surviving relatives should or should not agree to donate the organs of the deceased or whether they were uncertain what should be done.

Each scenario had two versions that were identical except for a changing of one issue that the authors considered to be critical. The different versions included:

(a) signing or not signing of a donor card, (b) heart death versus brain death, (c) decedent's attitude toward organ donation, (d) abortion versus miscarriage for a fetal donor, (e) attitudes of next of kin, (f) intended use of organs, (g) particular organs donated, (h) descendant's attitude towards doctors, (i) descendant's attitude towards

religion, (j) descendant's character, (k) wording of the consent form, (l) age of decedent, (m) manner of death, (n) type of funeral planned, and (o) descendant's belief about body resurrection.

Harris et al.(1990) reported that the most important variable in the responses were the varying wishes of the deceased, the deceased's beliefs about life following death, and the deceased's character. Participants indicated that the deceased organ's should be donated if they had signed a donor card or that organs should not be used if the individual had specifically stated that he or she were against organ donations. The preferences of the survivors, on the other hand, had only a modest effect on organ donation decision making. Results supported that when both the deceased and his or her family held positive attitudes towards organ donation, participants were 99% likely to endorse donating the deceased's body organs, regardless of the participants' attitude of organ donations.

Indirect indications of the deceased wishes and concerns were also evident. In a scenario where the deceased believed that only his or her spirit would rise to heaven, 85% of the participants decided to donate organs; when the victim felt that his or her physical body would rise as well, only 60% opted to donate. Finally, participants decided to donate the deceased's body organs if he or she was portrayed as altruistic as opposed to having an anti-social lifestyle.

The Harris et al.(1990) study demonstrated that the decision to donate organs is often complex and multidimensional. The investigation identified transpersonal consequences of personal demise as a subtle, yet substantial factor in organ donation decisions. In other words, there was some support that beliefs concerning life following

death and other existential factors have an influence on organ donation attitudes and behaviors.

The authors (Harris et al. 1990) note that although the family of the deceased has the final say in the organ procurement procedure, the deceased's endorsement of donation, and their communication about this issue to family members is an extremely strong influence on the decision to allow the organs to be put to valuable use by the medical community. Therefore, continued investigations concerning the factors that shape an individual's attitudes toward organ donations remains a salient and critical factor in this area of research.

Attitudes Toward Organ Donation and Commitment to Donate

Parisi and Katz (1986) conducted an investigation designed to explore the relationship between organ donation attitudes and behavioral commitment. The authors attempted to develop a reliable and valid organ donation attitude scale for this specific purpose. The complete organ donation attitude scale consisted of 40 items that were answered on a 6 point Likert Scale. Actual willingness to donate, on the other hand, was measured with Claxton's (1975) Guttman-type set of statements representing a hierarchy of levels of behavioral commitment. This scale ranged from definite refusal to sign a donor card to definite willingness. The authors expected that an individual's attitude would be predictive of commitment to donate. Therefore, the organ donation attitude scale developed by Parisi and Katz contained both prodonation and antidonation items.

Result support that Parisi and Katz (1986) constructed a valid and reliable measure that taps two independent dimensions of attitudes concerning organ donation, one positive and the other negative. The positive dimension of organ donation stressed humanitarian benefits and personal satisfaction experienced by the act of donating. The opposite involved fear of bodily mutilation and fear of receiving adequate medical treatment when one's life is in jeopardy. Both positive and negative attitude scores were found to be predictive of individuals' willingness to sign a donor card.

Parisi and Katz's (1986) study supported that organ donation attitudes and behavioral commitment are somewhat related. Both positive and negative attitudes can be used as predictors of organ donation. However, as Harris et al.(1990) noted in their theory of planned behavior, organ donation is multidimensional and attitudes towards this procedure are only one segment of the commitment process.

Demographics and Attitudes Toward Organ Donation

In an attempt to determine donation attitudes and which individuals are actually more likely to donate their organs, Cleveland and Johnson (1970) conducted one of the first comprehensive investigations in this area. A total of 350 participants from a wide range of socioeconomic and educational levels completed the Organ Transplant Questionnaire (OTQ; Cleveland & Johnson, 1970). The OTQ offered respondents the opportunity to identify themselves as donors, potential donors, their ambivalence of donation, or their preference not to be donors. The questionnaire also afforded participants the chance to openly explain the reasons behind their current donation status.

Cleveland and Johnson (1970) found that donors rated transplant procedures more favorably than non-donors. Women held more positive attitudes towards organ donation than men. It was supported that those who were willing to donate their organs were also more willing to accept another individual's organ if the situation was necessary.

Organ donation was found to be closely associated with socioeconomic status and education level. Those who indicated that they were donors had completed at least high school. Also, as socioeconomic status and education level increased, so did positive attitudes towards organ donation. The most prominent reason for not donating organs was a general fear of body mutilation following death. Other reasons that were offered by nondonors included family objections, the idea that the procedure might go against God's will, and a pessimistic view about the efficacy of organ transplants.

Although Cleveland and Johnson's (1970) study is dated and the OTQ lacks many important psychometric properties, it did useful information. The finding that socioeconomic status and education level are positively related to organ donation has been consistently replicated (Cleveland, 1975; Prottas, 1994; Simmons, Fulton, & Fulton, 1972). Likewise, the finding that women view organ donation in a more favorable light has also been supported (Simmons, Fulton, & Fulton, 1972).

Manninen and Evans (1985) completed an investigation using the same methodology as Cleveland and Johnson (1970) but extended the sample to a national level. These authors found that the following individuals were more likely to hold favorable attitudes toward organ donation; young adults, women, and individuals who had completed past charitable work. Also those who had previously donated blood, who did

not belong to a formal religion, those with greater acceptance of mortality, and individuals who had prepared a will held favorable attitudes toward organ donation.

Some of the characteristics of individuals who actually signed donor cards, on the other hand, differed slightly from those who held positive attitudes towards organ donation. Manninen and Evans (1985) found that young white, better educated, upper socioeconomic status, and those who were aware of the procedures used in obtaining an organ donation card tended to donate. Although there were differences between genders in attitudes towards organ donation, a discrepancy between the males and females was not evident in actual organ donation behavior.

Perkins (1987) concisely explained the positive aspects and negative ramifications of the Cleveland and Johnson's (1970) and Manninen and Evans's findings (1985). According to Perkins, the discrepancy between gender differences in attitudes towards organ donation, but not in actual organ donation behavior, combined with young individuals holding both positive donor attitudes, and actually donating organs is fortunate. Young individuals of both gender are the most likely to be considered for organ donation candidates. However, older adults who hold less favorable attitudes towards organ donation, are likely to be the next of kin and may be less willing to give final approval for the procurement of their family members. This finding may not be a problem because as noted previously, families seldom refuse to consent if a signed donor card from a deceased relative is present (Harris et al. 1990).

Both the high rates of favorable attitudes toward organ donation procedures and organ donation behaviors in Whites are still somewhat unclear, because race is confounded with socioeconomic status. Several authors have noted that whatever the

cause of lower donation participation among African-Americans, the resulting shortage of organs likely to be biologically compatible with Black recipients is at least as high as the proportion of Whites (Callender, 1987; Hosten, 1987, Prottas, 1994). Therefore, more research is needed to determine why African-Americans are hesitant to donate their body organs. Once this is accomplished, special organ procurement programs should be developed that focus on this specific demographic area.

In summary, differences do exist between those who hold positive attitudes towards organ donation and others who do not share this opinion. Also, discrepancies are apparent between those who hold favorable attitudes towards organ donation and individuals who actually donate their organs following death. Education, socioeconomic status, race, and gender have been demonstrated to be demographics that do influence an individual's choice to donate organs following personal death.

Death Concerns and Organ Donation

Following Cleveland and Johnson's (1970) landmark investigation of organ donation demographics, Cleveland (1975) designed a study intended to unearth salient individual factors that are predictors of organ donation attitudes and behaviors. Thirty adult individuals who had signed donor cards were compared with the same number of nondonor adults on a variety of personality variables. Both groups were equated for age, socioeconomic status, and education. Participants completed the OTQ, The Rorschach Ink Blot Test, The Rotter Locus of Control Scale, The Kalish Death Scale, the MMPI K scale, the Allport-Vernon-Lindzey Study of Values, and the Thematic Apperception Test (TAT).

Cleveland (1970) found that those who were organ donors tended to believe that the events in their lives were internally controlled. These individuals believed that they had direct influence over life events. Nondonors, on the other hand, endorsed items that would suggest they felt that life events were outside of their control and due to chance factors or luck. On the TAT and Rorschach Inkblot Test, those who were donors expressed more hostility, depression, and guilt in their responses to the test stimuli. Cleveland (1970) theorized that the idea of donation for these individuals may represent an attempt at atonement because this act represents a socially acceptable outlet for the expression of humanitarian needs.

When looking at donor versus nondonor value systems, donors obtained significantly higher scores on social value items. It appears that donors may take a more altruistic approach to their interactions with others compared to nondonors. Nondonors on the other hand, endorsed more political values which is indicative of power and control concerns. As mentioned above, this need may stem from the external control orientation that nondonors expressed.

Significant difference existed in death anxiety between donors and nondonors on the Kalish Death Scale. This 12-item measure was constructed to determine the extent to which an individual is concerned about their death. Nondonors endorsed more items on the Kalish Death Scale such as “I dread the possibility of a lingering death” or “The fact that I will someday die does not seem real.” However, findings pertaining to the Kalish Death Scale should be interpreted with caution due to its unidimensional construction.

The contrasting personality constellations appear to have particular relevance in predicting organ donation. Donors, it would seem, have a set of internalized values to

serve as guidelines and aid them in accepting their own mortality. As Cleveland (1975) noted, donors plan ahead by executing a will, and not clinging to the image of an intact body after death by insisting that they be placed in the ground unchanged.

Nondonors lack the internal value system and rely more on external appearances and guidelines to aid them in their behavior. These individuals often avoid preparation for death by not executing a will. Nondonors also cling to the idea of an intact body following death, wish for a traditional funeral, and are reluctant to consider their own mortality. Several writers have suggested that the awareness of death is most often avoided if possible (Fiefel, 1962; Becker, 1973). Perhaps volunteering as an organ donor may be aversive because even for a brief period of time an individual is forced to consider their mortality.

Both Cleveland and Johnson's (1970) and Cleveland's (1975) investigations support that organ donation attitudes and behaviors are a complex process. Results demonstrate that both demographics and attitudes to an individual's stance on organ transplantation procedures. One of the personality factors, fear of death, has been consistently demonstrated to be inversely related to organ donation attitudes and behaviors. However, Claxton (1974) found no relationship between Templer's (1970) Death Anxiety Scale and card signing. Like the Kalish Death Anxiety Scale, Templer's measure is also unidimensional and others have noted difficulties with its reliability and validity (Florian & Kravetz, 1988).

In an attempt to clarify the relationship between fears of death and organ donation, Robbins (1990) had both donors and nondonors complete a variety of death anxiety measures and an organ donation questionnaire. Participants were administered the

Templer Death Scale (1970), Collette-Lester Fear of Death of Self Scale, and a one item measure of physical anxiety. The Collette-Lester Fear of Death Scale is a measure designed to assess four aspects of death anxiety: Fear of Death of Self, Fear of Death of Others, Fear of Dying of Self, Fear of Dying of Others.

Results supported that an inverse relationship between certain types of death anxiety and organ donation exists. More specifically, Robbins (1990) noted that on the Templer Death Scale, Collette-Lester Fear of Death of Self, Fear of Death of Others, and Fear of Dying of Self subscales, donors were more accepting of their death than those who were not willing to relinquish their organs following death.

A more recent investigation (Lefcourt & Sheppard, 1995) explored the linkage between the signing of donor forms and death related behaviors (e.g, visiting a dying friend), authoritarianism, and perspective-taking humor. The authors hypothesized that people do not sign donor cards because it forces them to consider the possibility of dying a violent death. Also, Lefcourt and Sheppard reasoned that those who evidenced a pattern of traits or a behavioral style characterized by a high degree of authoritarianism would be less likely to donate their organs. These individuals typically hold hostile attitudes towards those who are worse off than themselves and are less likely to hold altruistic views (Greenberg, Pyszczynski, Solomon, Rosenblatt, Veeder, Kirkland, & Lyon, 1990). Perspective-taking humor, which involved being able to distance oneself from emotional consequences of an aversive situation was hypothesized to be positively related to organ donation and inversely related to authoritarianism.

Participants completed the Death Behavior Questionnaire (Sheppard, 1989) which also assessed organ donation attitudes and behaviors, the Death Anxiety Scale (Templer,

1979), the Avoidance of Ontological Confrontation with Death Scale (Thauberger, Cleland, & Thauberger, 1979), the Death Affect Checklist (McNair, Lorr, & Droppelman, 1971), the Situational Humor Response Questionnaire (Lefcourt, Davidson, Sheppard, & Phillips, 1984), and the Right Wing Authoritarianism Scale (Altemeyer, 1988).

Lefcourt and Sheppard's (1995) results supported that organ donation is positively related to other death related behaviors such as attending funerals, making a will, or visiting a friend with a terminal illness. The single item relating to organ donation, however, did not produce significant results with other measures concerned with responses to death. Lefcourt and Sheppard explain that,

In essence, resistance to organ donation volunteering could be seen as an instance of avoiding mortality-related thoughts and actions. Though the signing of a donation form requires but a few seconds and little effort, the thoughts and feelings attendant upon considering death and mutilation may be so aversive that the commission of a signature to paper is commonly evaded. (p.134)

The data also supported the hypotheses linking authoritarianism, humor, and organ donation. Participants who were highly authoritarian were found to have lower perspective taking humor abilities and were less likely to sign donor cards. Lefcourt and Sheppard's (1995) investigation called attention to the many factors that influence organ donation behaviors including fears of death related behaviors, the healthy use of humor, and the willingness to help others who may be in need of critical medical procedures. At this point it is necessary to explore why a relationship between organ donation and fears of death is consistently present in related literature.

Fears of Personal Death

The fear of death has been postulated as a pervasive and potent influence on human emotions, behavior, and motivation (Bakan, 1968; Pollack, 1980). Existential philosophers and psychologists have stressed the human capacity for self-awareness, more specifically the individual's ability to consider his or her own mortality (Yalom, 1980). Becker (1973) argued that of all the factors that motivate individuals, the most salient is our terror of death. This alarm is natural and universally present. Rank's (1936) ideas are similar to Becker's, but he hypothesized that death is the fundamental source of anxiety upon which other psychopathology is based. Therefore, individuals who are able to deal with their own demise in a mature manner are able to lead productive and healthy lives. It is expected that these individuals would be more likely to make a will, visit friends who have a terminal illness, or sign a donor card. Those who are unable to cope with their own death may not be able to participate in death related activities.

In an early review of death related investigations, Lester (1967) postulated three methodological and conceptual issues in this area of research: 1) the differentiation of conscious versus repressed death anxiety; 2) the unidimensional versus multidimensional approach to the measure of death anxiety and concerns; 3) and the lack of reliable and valid measures. Others have noted these difficulties and added additional problems including the neglect to adequately distinguish fear from anxiety (Kastenbaum & Costa, 1977).

As Lester (1967) stated, a difference in the conceptualization of death anxiety and fears of death does exist. Death anxiety is traditionally a neopsychoanalytic theory that

has failed to generate adequate empirical support (Najman, 1974). Within Freud's theory, death anxiety is dismissed as a non-problem, and was considered to be superficial. Freud (1925) wrote that,

Our own death is indeed unimaginable, and whenever we make an attempt to imagine it we can perceive that we really survive as spectators. Hence . . . at bottom no one believes in his (sic) death, or to put the same thing in another way, in the unconscious every one of us is convinced of his (sic) own immortality. (p.304)

Other Psychoanalytically oriented theoreticians, especially Rank (1936), Stekel (1908), and Hall (1915) maintained that the unconscious does possess a fear of death that is repressed. Therefore, death anxiety is not conscious and is difficult if not impossible to assess.

Several critical investigations concerning organ donation have included death fears as a predictor of donor behavior (Cleveland, 1975; Cleveland & Johnson, 1970; Harris et al., 1990; Lefcourt & Sheppard, 1995 Robbins, 1990;). However, in the thanatological literature there is still some confusion between the concept of death anxiety and fear of personal death. Death anxiety is broad and encompasses fears of ones own death, fear of dying, and fears of other's dying and is thought to be mostly unconscious. Fear of personal death, on the other hand, is conscious and relates solely to an individual's concern about their own demise.

Much of the past research attempting to measure fears of death and its relationship to organ donation has been limited to measuring either the degree of preoccupation (Durlak, 1972) or intensity (Templer, 1970) of the fear of death. These are broad and general unidimensional approaches to death anxiety. Collet and Lester (1969), on the other hand, were the first to argue for a qualitative approach to investigating fears of

death. They provided one of the first multidimensional typologies of fears pertaining to death. One dimension distinguished one's fear of being dead from fear of the process of dying. A second dimension was related to the object of fear: fear of one's own death versus fear of others dying. Several authors have criticized research in the area of death concerns for the failure to distinguish between fear and anxiety and have blamed this as a factor in problems associated with the validity of various psychometric instruments (Kastenbaum & Aisenberg, 1972; Kastenbaum & Costa, 1977). Durlak (1982), cautioned against the continued use of the Templer Death Anxiety Scale (DAS), the most widely used research tool in this area. The DAS, Durlak argues, contains somewhere between three and five factors but some of these factors contain too few items for this approach. Also, the reliability and validity of this instrument have not been demonstrated consistently.

Florian and Kravetz (1983) specifically focused on the individual's fear of his or her own death. They offered a multidimensional approach designed to further explore and delineate the different aspects of fears of personal death. For this purpose, the 31 item FPDS was developed. Questions on the FPDS were designed to tap into six factors that were coalesced into three broad dimensions involving interpersonal, intrapersonal and transpersonal consequences of death. Interpersonal fears of death are described as detrimental effects of personal death on family, friends, and loss of social identity. Intrapersonal fears of death include the loss of self-fulfillment and self-annihilation. Fears of the unknown and punishment in the hereafter reflect concerns of transpersonal fears of personal death. The six factors that make up the three broad dimensions included:

- (1) Fear of loss of opportunities (intrapersonal);
- (2) fear of self-annihilation

(intrapersonal); (3) fear of consequences to family and friends (interpersonal); (4) fear of loss of social identity (interpersonal); (5) concerns regarding the state of existence following death (transpersonal); (6) fear of punishment in the hereafter (transpersonal).

The FPDS was administered to 252 religious and nonreligious Israeli Jewish males along with the Jewish Religiosity Index (JRI; Ben-Meir & Kedem, 1979). Participants were recruited from either religious schools or from the Israeli army. The JRI is a reliable and valid 26-item measure written in Hebrew and designed to assess the adherence to Jewish beliefs and practices. Results indicate that the FPDS is a reliable and valid instrument for measuring fears of personal death.

The initial FPDS investigation supported that individuals who scored higher on the JRI reported more fear in the area of punishment in the hereafter (transpersonal) and significantly less fear of self annihilation (intrapersonal). Moderately religious individuals on the other hand, expressed more fear of the consequences of personal death on their family and friends (interpersonal) than those who scored higher on the JRI. Florian and Kravetz (1983) concluded that the moderately religious Jews are transferring the transpersonal aspects of their death to the more obvious and clear interpersonal aspects of death. At this point, there have been no in depth investigations exploring the fear of ones personal death as a factor in organ donation attitudes and behaviors.

The FPDS (Florian & Kravetz, 1983) has been used in a variety of other investigations including studies exploring the relationship between fears of personal death and positive life regard (Florian & Snowden, 1989), the impact of fears of personal death on death-risk experiences (Florian & Mikulincer, 1993), and the relationship between fears

of personal death, religiosity, and the acceptability of suicide within Jewish denominations (Stein, 1995).

In summary, the differences between death anxiety and fears of personal death are clear but often not understood by social scientists. The former is conceptualized as being a conscious phenomena and is difficult to measure due to unreliable measures. The latter is consciously recognized by an individual and can be assessed with relative ease. The FPDS (Florian & Kravetz, 1983) has been as used as multidimensional measure that assesses an individual's conscious death concerns and has been used in various investigations. The FPDS has proven to be a reliable and valid instrument.

Fears of Personal Death and Organ Donation

At this time no investigations have been conducted exploring the relationship between fears of personal death and organ donation attitudes and behaviors. Past research has demonstrated that a relationship does exist between the fear of the death of self (Robbins, 1990) and other death related behaviors (Harris, et al, 1990; Cleveland & Johnson, 1970; Cleveland, 1975; Lefcourt & Sheppard, 1995). However, there are several limitations to these investigations.

The measures used in investigations looking at the relationship between organ donation and death concerns are not consistently reliable and valid. Also, Robbins (1990) finding that an inverse relationship exists between the fear of the death of self is unidimensional. For example, Robbin's investigation can not make predictions concerning the specific types of fears of personal death that are and are not related to organ donation behaviors and attitudes. The use of the FPDS (Florian & Kravetz, 1983) would afford an

opportunity to explore the difference between interpersonal, intrapersonal, and transpersonal fears of death as they related to organ donation behaviors and attitudes.

Religiosity and Organ Donation

Like death anxiety, there has been some support that religiosity is related to organ donation attitudes and behavior. (Cleveland, 1970; O'Connell, 1968). At this point it must be noted that these investigations are dated and utilize measures that are unidimensional. Therefore, the investigations that have included religiosity may be lacking appropriate depth to make clear conclusions considering the relationship between this factor and organ donation attitudes and behaviors.

The scientific study of religion and religiosity has been of interest to psychologists since the discipline was invented (Wuff, 1991). Many influential psychological theorists have argued passionately for continued inclusion of religion into the study of psychology (James, 1902; Hall, 1882; Freud, 1928; Jung, 1943). While some individuals have hypothesized that religion is normal and lends itself to healthy development (Spero, 1985), others have stated that it is superstitious (Freud, 1927) or irrational (Ellis, 1980). No matter one's personal view on the role religion in the social sciences, especially in the discipline of applied psychology, it remains an important factor in the study of attitudes and behavior.

Studies of religion and or religiosity have ranged from investigations of the efficacy of prayer (Galton, 1872), to the relationship between degree of religiosity and prejudice (Hoge & Jackson, 1975), and the role of religion in the prevention of suicide (Hoelter,

1979). However, the scientific study of religion in the social sciences is often an arduous task and agreement on how to approach this topic remains unclear.

In a review of the literature, Gladding, Lewis, and Adkins (1981) related that there are three basic ways of investigating religiosity in the social sciences. One may choose an extrinsic versus intrinsic approach to studying this complex topic; this is one way of measuring where and how an individual obtains their religious values. If an individual is extrinsic in his or her religious beliefs, their approach to religion is heavily influenced by factors outside of themselves (e.g., the church, family, friends). An intrinsically religious person, on the other hand, tends to create their own religious meaning without the aid of external sources or religious dogma.

Gladding et al.(1981) stated that social scientists tend to choose either an empirical or phenomenological approach to the to study religiosity. While an empirical or quantitative approach allows one to make broad generalizations concerning individuals as a whole, it often lacks depth and a wealth of important information is lost. Conversely, phenomenological studies allow for greater depth but often do not generalize the population as a whole.

Finally, Gladding et al.(1981) explained that a social scientist must choose either a single dimension or multidimensional approach to the study of religiosity. Gladding et al. argue that due to its complexity, the multidimensional approach to religiosity should be taken whenever possible when conducting an empirical investigation in this area.

In an attempt to study the relationship between religious beliefs and mental health, Gladding et al. (1981) developed the Gladding, Lewis and Adkins Scale of Religiosity (GLASR). The GLASR is a reliable and valid multidimensional measure that taps the

intensity of religious beliefs and behavioral commitment to these beliefs. The four dimensions of the GLASR include: (1) A belief in a personalized deity (i.e., God), (2) extent of religious beliefs, (3) religious effort (i.e., church attendance), and (4) consistency of belief and action.

Gladding et al. (1981) administered the GLASR along with several other measures including: The Purpose-in-Life Test (PIL; Crumbaugh & Maholick, 1969), The Rokeach Value Survey (Rokeach, 1969), and the Rotter Internal-External Locus of Control Scale (Rotter, 1966) to undergraduate students at a small southeastern community college. The PIL is a reliable and valid measure intended to assess an individual's ability to find meaning and purpose in his or her daily life. Rokeach's value survey taps important factors in an individual's value system. The Rotter Internal-External Locus of Control Scale, on the other hand, assess whether one considers life events under one's control or whether they are heavily influenced by factors outside their control.

Results supported that significant differences exist between those who score high and low on the GLASR (Gladding et al., 1981). Those who scored high on the GLASR viewed their life more meaningful, internally controlled, and integrated. The opposite was found to be true for those who scored low on the GLASR. Low Scores on the GLASR were associated with less feeling of meaning and purpose in life, stronger feelings of being under the power of things outside of direct control, and a less integrated value system.

Although Gladding et al. (1981) found support that religiosity was positively related to healthy functioning, the prosocial value of religiosity is still unclear. For example, high degrees of religiosity have been associated with right wing authoritarianism (Altemeyer, 1988) and prejudice (Struening, 1963). Similarly, Nelson and Dynes (1976)

found only a weak positive correlation between measures of religiosity and social responsibility.

The paradoxical relationship between prosocial behavior and religiosity can also be seen when exploring organ donation. Although all major religions encourage individuals to donate their organs and receive them when they are needed, there has been some evidence that those who are more religious are less likely to donate. Jackson et al. (1990) found that in a sample of participants in the general population, no differences existed in organ donations for individuals who described themselves as Catholic, Protestant, or Born-again Christians. However, those who stated that they had no religious preference were more likely to donate than any of the other religious groups.

In summary, not much is known yet about the influence of religiosity and organ donation behaviors and attitudes. There has been some support that those who are more religious are less likely to donate (Cleveland, 1970; O'Connell, 1968). However, these studies are dated, and utilized older measures of religiosity which may not be reliable and valid. Due to these factors, continued research into the relationship between fears of personal death, religiosity, and organ donation is warranted.

CHAPTER III

METHOD

Introduction

This chapter presents a discussion and description of the participants and procedures involved in the study. Instrumentation and collection of data are described. The procedures for statistical analysis and the statistical hypotheses are also presented.

Participants

In the current study, 200 males and 200 females enrolled as undergraduates at a large university in the southwestern United States were recruited to participate. In addition to the three instruments to assess fears of personal death, religiosity, and organ donation attitudes and behaviors, participants were asked to identify their age, gender, current educational level, religious affiliation, ethnicity, and if any of their family members had been an organ recipient.

Dependent Variables

In order to explore the primary research hypothesis, the dependent variable selected for this study was organ donation attitudes and commitment. Positive and

negative organ donation attitudes and behaviors were measured by Parisi and Katz's (1986) Organ Donation Questionnaire.

Independent Variables

To determine if organ donation is related to fears of personal death and religiosity, the following instruments were administered to participants; the Fear of Personal Death Scale (Florian & Kravetz, 1983), and The Gladding, Lewis, Adkins Scale of Religiosity (Gladding et al., 1981). Additionally, a brief demographic questionnaire was administered to participants.

Fear of Personal Death Scale

The Fear of Personal Death Scale was selected for this study to assess levels of personal death concern. The FPDS (Florian & Kravetz, 1983) was constructed to explore fears of personal death through three broad dimensions: the interpersonal, intrapersonal and transpersonal consequences of death. Each of these three dimensions is a composite of two factors. Therefore, the FPDS yields six separate scores, two for each of the three broad dimensions. These are:

1. Fear of loss of self-fulfillment (intrapersonal concerns);
2. Fear of self-annihilation (intrapersonal concerns);
3. Fear of consequences to family and friends (interpersonal concerns);
4. Fear of loss of social identity (interpersonal concerns);
5. Concerns regarding the state of existence following death (transpersonal concerns); and,

6. Fear of punishment in the hereafter (transpersonal concerns).

Questions concerning fears of loss of self-fulfillment center around loss of opportunities to be creative or not being able to experience life's pleasures. The loss of social identity factor taps concerns about being forgotten by survivors or that life will continue as normal after death for the survivors. FPDS items that comprise the concerns about family and friends factor include questions concerning the idea that family and friends will need the presence of the deceased individual. Common themes centering around concerns about existence after death focus on the uncertainty of what is to happen to the individual following death. The self-annihilation factor items center around the fate of the physical body and personal disintegration following death. Finally, fears of punishment in the hereafter factor taps the concern that one will be tormented in the afterlife.

The FPDS (Florian & Kravetz, 1983) was selected because it is widely recognized and accepted by researchers as a useful instrument in assessing fears of personal death (Florian & Har-Even, 1983; Florian & Snowden, 1989; Mikulincer, Florian, & Tolmacz, 1990; Orbach & Florian, 1991; Ungar, Florian, & Zernitsky-Shurka, 1990). Factor loading for items comprising the loss of self-fulfillment ranged from a low of .54 to a high of .81. Similarly, factor loading for items that make up the loss of social identity concerns ranged from a low of .56 to a high of .82. The factor loading for the variables that are included in the consequences to family and friends factor range from a low of .50 to a high of .86. The factor loading for the items comprising the self-annihilation scale range from a low of .56 to a high of .79. Finally, the fear of punishment item had a factor loading of .59. Test-retest reliability across for FPDS subscale items over a six week period varied between a low of .50 and a high of .91.

On the FPDS (Florian & Kravetz, 1983), individuals are asked to respond to 31 questions. Answers range from a low of 1 (“Totally correct for me”) to a high of 7 (“Totally incorrect for me”). Scores on each dimension are determined by summing the score of the items that make up each dimension. Therefore, a low score on the FPDS scale indicates greater death concerns and a higher score is indicative of lower concerns.

The Gladding, Lewis, Adkins Scale of Religiosity

The GLASR (Gladding et al., 1981) is a 23-item scale designed to assess religiosity on four individual factors. This measure has been used in investigations ranging from exploring the relationship between religiosity and suicide acceptability (Stein, 1995) to the role of religiosity in young adolescent’s identity formation (Glover, 1996). Gladding et al. (1981) reported a .84 test-retest reliability for the GLASR over a ten-week period. An additional study found that the GLASR was still a reliable measure for participants after a two year period (Lewis & Gladding, 1983).

The factors that make up the GLASR are:

1. Belief in a personalized deity, e.g., “I believe I have a personal relationship with a supreme being or power.”;
2. Amount of religious effort, e.g., “I believe in worshipping on a regular basis.”;
3. Religious belief, e.g., “My religious beliefs provide me a purpose for being”; and,
4. Consistency of belief and action, e.g., “Religious people practice what they preach.”

Respondents to the GLASR are instructed to give their honest opinion to each item on a 5-point Likert scale ranging from a score of 1 (strongly agree) to a high of 5 (highly disagree) with 3 (neutral) being intermediate. Therefore, lower score on the GLASR indicates a greater degree of religiosity and a higher score indicates a lower degree of religiosity.

Organ Donation Attitude Scale

The Organ Donation Attitude Scale (Parisi & Katz, 1986) was designed to assess individual's beliefs concerning posthumous organ donation and their behavioral commitment to being an organ donor. This measure was constructed with two subscales, positive (i.e., prodonation) and negative (i.e., antidonation). Examples of prodonation items include: "Organ donation would help someone who is suffering," and "A person willing to donate is almost a hero." Examples of antidonation items include: "Doctors are much more likely to prematurely declare the death of an organ donor," and "Transplanting organs is against God's will."

Internal consistency, measured by Cronbach's alpha was .89 for the positive scale and .82 for the negative scale. Parisi and Katz (1986) originally hypothesized that the positive and negative attitudinal scales would measure relatively independent dimensions about organ donation. An actual correlation between the two scales was in fact low ($r=.003$), confirming the expectation.

Participants are asked to rate each statement of this forty-item measure on a 6-point scale ranging from strongly agree to strongly disagree without a neutral point. Scores on each item can range from a low of -3 to a high of +3. A higher score on the

positive attitudes toward organ donation is indicative of positive attitudes. Likewise, a higher score on the negative attitudes towards organ donation represents higher negative attitudes.

A separate section of the Organ Donation Attitude Scale measures an individual's willingness to donate their own organs. Willingness to actually donate is measured with Claxton's (1975) Guttman-type set of five statements which represents a hierarchy of behavioral commitment from definite refusal to sign a donor card (alternative 1) to definite willingness (alternative 5), with consideration of organ donation with the aid of additional information being intermediate (alternative 3). Participants are asked to check only one of the presented alternatives. Parisi and Katz (1986) originally intended this section of the Organ Donation Attitude Scale to be quasi-behavioral measure for testing the predictive validity of the positive and negative scales. The relationship between commitment level and positive ($r = .43, p < .001$) and negative ($r = -.39, p < .001$) attitudes were consistent.

Demographic Questionnaire

The demographic questionnaire designed for this study contains items requesting information on the participants' gender, current years of education, ethnicity (e.g., Caucasian, African-American), and religious affiliation (e.g., Methodist, Catholic, Muslim). Participants checked the answer that best describes themselves. If the answer was not provided by the demographic questionnaire, participants were provided with adequate space to write in the answer that they feel best fits themselves. Participants were also asked to indicate if one of their relatives had been an organ donor recipient. The demographic questionnaire can be seen in Appendix A.

Procedure for Data Collection

Participants in the investigation were recruited from undergraduate courses in introductory psychology, sociology, education, and health promotion courses. All participants received course credit for taking part in the study if this was offered as part of their class requirements. Participants were surveyed in groups ranging from 4 to 82 individuals.

Prior to administering the questionnaires, all participants received a written informed consent form to read and sign (Appendix B). The informed consent statement explained that participants would remain anonymous, that they could choose to terminate their participation at any time during the investigation without penalty, and were given adequate information concerning resources to contact if the survey items caused any significant distress. Prior to signing this document the principal researcher reviewed the consent form verbally with the participants.

Each participant received a questionnaire packet containing the demographic questionnaire, the FPDS, GLASR, and the Organ Donation Scale. All participants completed the demographic questionnaire first. Participants were then presented with the additional questionnaires in a counterbalanced fashion.

After completing all four questionnaires, participants were debriefed as to the purpose of the investigation. Possible benefits that may result from their taking part in the study were explained, and a brief educational speech concerning organ donation procedures was provided. Participants were also given the opportunity to receive organ donation education material in the mail, as well as organ donor cards. Furthermore,

subjects were offered the opportunity to receive a brief description of the results and conclusions of the investigation once completed. It was also explained that if a participant felt disturbed or upset by participating in the investigation, the investigator could arrange for the participant to receive assistance through an agency that would be suitable for their needs.

Statistical Hypotheses

Following a review of relevant research related to organ donation attitudes and commitment the following statistical (null) hypotheses were generated and tested at the .05 alpha level of significance.

1. Fears of personal death and religiosity will not be significant inverse predictors of positive organ donation attitudes for the entire sample.
2. Fears of personal death and religiosity will not be significant inverse predictors of organ donation commitment for the entire sample.
3. Fears of personal death and religiosity will not be significant positive predictors of negative organ donation attitudes for the entire sample.
4. Fears of personal death and religiosity will not be significant inverse predictors of positive organ donation attitudes for the male and female participants in this sample.
5. Fears of personal death and religiosity will not be significant inverse predictors of organ donation commitment for males and females.
6. Fears of personal death and religiosity will not be significant positive predictors of negative organ donation attitudes for males and females.

Statistical Analyses

In order to explore the relationship between religiosity, fears of personal death, and organ donation behavior, a linear regression model was utilized such that all independent variables were forced into the equation simultaneously. This statistical method was chosen due to the exploratory nature of the current investigation and lack of empirical research in the area of organ donation attitudes and commitment. The predetermined alpha level to determine statistical significance was set at .05.

Summary

Chapter III presents a discussion and description of the methodology utilized in this study. The participants, independent and dependent variables, and instrumentation were discussed. Procedure for data collection and strategy for statistical analysis were described. Organ donation attitudes and commitment were selected as the dependent variables for this study. Fears of personal death and religiosity were chosen as the independent variables. The statistical (null) hypotheses were stated and the .05 alpha level was chosen with a linear multiple regression analysis.

CHAPTER IV

RESULTS

Introduction

The purpose of this study was to ascertain if different types of fears of personal death (self-annihilation, existence following death, punishment in the hereafter, loss of social identification, consequences to family and friends, and loss of self-fulfillment) and religiosity (belief in a personalized deity, amount of religious effort, religious belief, and consistency of belief and action) provided significant prediction of positive and negative attitudes towards organ donation, as well as commitment to donating posthumously. Data also were collected on age, current years of schooling, gender, religious affiliation, ethnicity, and whether or not a participant was an organ donor or had any relatives who had received an organ transplant. This chapter presents the statistical analyses of the data collected and the subsequent evaluation of the specific hypotheses formulated for this study. The results provide information concerning the contribution of the independent variables to prediction of organ donation attitudes and commitment in this sample of participants. Finally, for the purposes of this investigation in order to determine the internal consistency reliability of the GLASR, Chronibach's alpha coefficients for each subscale were computed.

Tests of Assumptions and Limitations

Application of a regression model implies certain assumptions in the statistical analysis. Pedhazur (1997) reviews the specific limitations which involve pertinent information concerning sample size, multicollinearity, linearity, normality, and homoscedasticity. It has been suggested that the multiple regression analysis is generally robust in regard to violations of these assumptions, especially with a large sample size. The 400 participants used in this study exceed the sample size suggested by Cohen (1977). An examination of the residuals on scatterplots were completed to ensure a normal distribution of the data. Also, an examination of the correlation matrices (Tables 1, 2, and 3) indicates relatively low levels of correlation among most pairs of predictor variables. This suggests that multicollinearity did not affect the stability of the correlation matrices.

Reliability Analysis of the GLASR

Due to no previous data concerning the reliability of each subcale of the GLASR, alpha coefficients were computed using the current sample of data. This analysis supported that three of the four GLASR subscales are sufficiently reliable. The alpha coefficients were determined to be: .78 for religious belief; .82 for consistency of religious belief and action; .76 for religious effort; and .43 for belief in a personalized deity. The low alpha coefficients for belief in a personalized deity may exist because this GLASR subscale consists of only four items.

TABLE 1

PEARSON CORRELATION MATRIX FOR
ENTIRE SAMPLE (N=400)

Variable	Pos	Neg	Comm	Deity	Consis	Effort	Belief	Self-Ann	Existence	Punish	Social ID	Fam/Friends	Self-Fulfill
Pos	1.0	-0.443***	0.386***	0.027	0.160***	0.033	-0.026	0.096	0.066	-0.254	0.555	-0.164**	0.490
Neg		1.0	-0.410***	-0.092	-0.296**	-0.198***	-0.200***	-0.420*	-0.148***	-0.361***	-0.325***	0.067	-0.221***
Comm			1.0	-0.037	0.268***	0.231***	0.144**	0.220***	0.104*	0.299***	0.195***	-0.109*	0.160**
Deity				1.0	0.274	0.257***	0.324***	0.224***	0.067	0.143**	0.179***	0.706	0.123*
Consis					1.0	0.413***	0.374***	0.271***	0.188***	0.272***	0.308***	0.129*	0.247***
Effort						1.0	0.764***	0.408***	0.205***	0.326***	0.362***	-0.362	0.358***
Belief							1.0	0.556***	0.214***	0.418***	0.486***	0.115*	0.472***
Self-Ann								1.0	0.366***	0.559***	0.758***	0.208***	0.604*
Existence									1.0	0.283*	0.349*	0.096	0.370*
Punish										1.0	0.478*	0.102*	0.458*
Social ID											1.0	0.285*	0.657*
Fam/Friends												1.0	0.121*
Self-Fulfill													1.0

Note: * = $p < .05$, ** = $p < .01$, *** = $p < .001$

TABLE 2

PEARSON CORRELATION MATRIX FOR
MALE PARTICIPANTS (N=200)

Variable	Pos	Neg	Comm	Deity	Consis	Effort	Belief	Self-Ann	Existence	Punish	Social ID	Fam/Friends	Self-Fulfill
Pos	1.0	-0.28***	0.481***	0.584	0.272***	0.616	0.107	0.163*	0.100	0.046	0.159*	-0.072	0.899
Neg		1.0	-0.538***	-0.076	-0.304***	-0.195**	-0.222**	-0.414**	-0.126	-0.310***	-0.394***	-0.060	-0.268***
Comm			1.0	-0.059	0.331***	0.245***	0.217**	0.317***	0.144	0.328***	0.305***	-0.002	0.198**
Deity				1.0	-0.043	0.187*	0.253***	0.195*	0.053	0.148	0.140	0.051	0.087
Consis					1.0	0.428***	0.362***	0.210**	0.189*	0.243**	0.250***	0.131	0.211**
Effort						1.0	0.774***	0.387***	0.207**	0.291**	0.381***	0.018	0.335***
Belief							1.0	0.577***	0.235**	0.431***	0.568***	0.162*	0.475***
Self-Ann								1.0	0.356***	0.640**	0.777**	0.228***	0.576***
Existence									1.0	0.290**	0.340***	0.124	0.382***
Punish										1.0	0.573**	0.029	0.486**
Social ID											1.0	0.321**	0.666**
Fam/Friends												1.0	0.213**
Self-Fulfill													1.0

Note: * = $p < .05$, ** = $p < .01$, *** = $p < .001$

TABLE 3

PEARSON CORRELATION MATRIX FOR
FEMALE PARTICIPANTS (N=400)

Variable	Pos	Neg	Comm	Deity	Consis	Effort	Belief	Self-Ann	Existence	Punish	Social ID	Fam/Friends	Self-Fulfill
Pos	1.0	-0.455***	0.303***	-0.469	0.064	-0.513	0.107	-0.144***	0.037	-0.075	-0.032	-0.217***	0.010
Neg		1.0	-0.292***	-0.172***	-0.288***	-0.203**	-0.178**	-0.422**	-0.169**	-0.407**	-0.264**	0.138**	-0.180**
Comm			1.0	0.004	0.216***	0.218**	0.084	0.127	0.067	0.274**	0.091	-0.176**	0.123
Deity				1.0	0.188***	0.503***	0.611***	0.380***	0.125	0.181**	0.339***	0.148**	0.256**
Consis					1.0	0.405***	0.382***	0.320***	0.189**	0.295***	0.353***	0.129	0.275***
Effort						1.0	0.767***	0.435***	0.203**	0.360**	0.346**	-0.700	0.383**
Belief							1.0	0.537**	0.196**	0.409**	0.416***	0.934	0.469**
Self-Ann								1.0	0.376**	0.491**	0.738**	0.205**	0.628**
Existence									1.0	0.278***	0.358**	0.086	0.358**
Punish										1.0	0.398**	-0.171	0.437**
Social ID											1.0	0.278**	0.646**
Fam/Friends												1.0	0.074
Self-Fulfill													1.0

Note: * = $p < .05$, ** = $p < .01$, *** = $p < .001$

Means and Standard Deviations

For the total number of participants in the study ($N=400$), the descriptive statistics (mean and standard deviation) for the dependent variables were determined to be: $M = 31.44$ and $SD = 19.23$ for positive organ donation attitudes; $M = 4.43$ and $SD = 20.65$ for negative organ donation attitudes; and $M = 3.06$ and $SD = 1.39$ for organ donation commitment. For male participants, the descriptive statistics for the dependent variable were: $M = 29.79$ and $SD = 19.07$ for positive organ donation attitudes; $M = 5.63$ and $SD = 21.27$ for negative organ donation attitudes; and $M = 3.04$ and $SD = 1.47$ for organ donation commitment. The descriptive statistics for female participants were determined to be: $M = 32.73$ and $SD = 18.80$ for positive organ donation attitudes; $M = 3.50$ and $SD = 20.16$ for negative organ donation attitudes; and $M = 3.09$ and $SD = 1.33$ for organ donation commitment. The predictor means, standard deviations for the entire sample and for both genders are presented in Table 4. Frequencies, percentages, and cumulative percentages for the demographic variables and organ donation status of participants are presented in Appendix C.

Test of Hypotheses

In order to determine the relationship between the criterion variables (fears of personal death and religiosity) and the predictor variables (organ donation attitudes and commitment) linear multiple regression analyses were performed on the sample. Computations were calculated using the Statistical Package for the Social Sciences (SPSS-X User's Guide, 1990).

TABLE 4
 DEMOGRAPHIC AND PREDICTOR MEAN SCORES
 AND STANDARD DEVIATIONS (N=400)

Demographics and Predictors	Sample		Males		Females	
	M	SD	M	SD	M	SD
<u>Demographics</u>						
Age	21.90	5.80	21.56	5.51	22.30	6.25
Years of School	14.68	1.12	14.23	1.19	14.88	1.09
<u>Predictors</u>						
<u>GLASR</u>						
Belief in Deity	19.02	3.32	19.14	4.67	19.93	1.66
Consistency of Religious Belief and Effort	20.18	1.84	20.11	1.81	20.23	1.87
Religious Effort	26.60	2.48	26.63	2.72	26.58	2.30
Religious Belief	38.89	3.64	38.61	3.59	39.10	3.677
<u>FPDS</u>						
Self-Annihilation	24.18	4.42	23.82	3.64	24.45	3.23
Existence	24.79	7.98	24.71	8.50	24.85	7.58
Punishment	6.13	1.03	6.23	1.05	6.13	1.01
Social Identity	42.92	5.63	48.48	5.88	49.25	5.36
Self-Fulfillment	38.23	5.78	36.45	5.23	40.23	5.26
Family and Friends	23.57	7.98	23.16	5.86	23.88	9.30

Hypothesis One

The null hypothesis that fears of personal death and religiosity would not be significant inverse predictors of positive organ donation attitudes for the entire sample was tested. The regression equation was significant with all of the variables entered, $F(10,348) = 4.92$; $p < .001$. An R^2 of .123 was observed when all the measures were entered. This indicates that 12.3% of the variance in positive organ donation was accounted for in concert by all the FPDS and GLASR subscales. The contribution to the overall variance by each individual subscale of the FPDS and GLASR can be observed in Table 5. Consistency of religious belief and action, concerns about self-annihilation, fears of punishment in the hereafter, and concerns about family and friends following personal death made significant contributions to the variance in positive attitudes towards organ donation.

Hypothesis Two

The null hypothesis that fears of personal death and religiosity would not be significant inverse predictors of organ donation commitment for the entire sample was tested. The regression equation was significant with all the variables entered, $F(10,369) = 8.488$; $p < .001$. An R Square of .187 was observed when all the subscales of the FPDS and GLASR were entered. This indicates that 18.7 percent of the variance in organ donation commitment was accounted for in concert by all the FPDS and GLASR subscales. The contribution to the overall variance by each individual subscale of the FPDS and GLASR can be observed in Table 6. Consistency of religious belief and action,

TABLE 5
 MULTIPLE REGRESSION ANALYSIS OF PARTICIPANTS'
 SCORES ON THE FEAR OF PERSONAL DEATH SCALE,
 GLADDING, LEWIS, AND ADKINS SCALE OF
 RELIGIOSITY, AND POSITIVE ATTITUDES
 TOWARDS ORGAN DONATION FOR
 THE TOTAL SAMPLE (N=400)

Variable	B	SE B	β	t	R	R ²	p
<u>FPDS</u>							
Self-Annihilation	1.31	0.477	0.228	2.749***	.350	.123	.000
Social Identification	0.249	0.288	0.069	0.866			.387
Family and Friends	-0.656	0.130	-0.287	-5.022***			.000
Punishment Existence following Death	-3.900	1.210	-0.208	-3.202***			.001
Self-Fulfillment	0.090	0.126	0.431	0.784			.433
	-0.102	0.240	-0.030	-0.428			.668
<u>GLASR</u>							
Belief in Deity	0.328	0.292	0.603	1.123			.262
Religious Belief	-0.604	0.459	-0.113	-1.315			.189
Consistency of Belief and Action	2.634	0.587	0.255	4.481***			.000
Religious Effort	-0.551	0.629	-0.071	-0.876			.381

Note: * = $p < .05$, ** = $p < .01$, *** = $p < .001$

TABLE 6
 MULTIPLE REGRESSION ANALYSIS OF PARTICIPANTS'
 SCORES ON THE FEAR OF PERSONAL DEATH SCALE,
 GLADDING, LEWIS, AND ADKINS SCALE OF
 RELIGIOSITY, AND ORGAN DONATION
 COMMITMENT FOR THE TOTAL
 SAMPLE (N=400)

Variable	B	SE B	β	t	R	R ²	p
<u>FPDS</u>							
Self-Annihilation	0.279	0.328	0.697	0.852	.432	.187	.394
Social Identification	0.180	0.019	0.732	0.904			.366
Family and Friends	-0.016	0.009	-0.096	-1.805			.071
Punishment Existence following Death	0.341	0.084	0.251	4.032***			.000
Self-Fulfillment	-0.001	0.008	-0.008	-0.016			.869
	-0.016	0.015	-0.069	-1.040			.298
<u>GLASR</u>							
Belief in Deity	-0.348	0.020	-0.084	-1.683			.093
Religious Belief	-0.063	0.031	-0.167	-2.005*			.045
Consistency of Belief and Action	0.013	0.040	0.174	3.246***			.001
Religious Effort	0.113	0.043	0.202	2.632**			.008

Note: * = $p < .05$, ** = $p < .01$, *** = $p < .001$

religious effort, religious belief, and fear of punishment in the hereafter made significant contributions in the prediction of organ donation commitment.

Hypothesis Three

The null hypothesis that fears of personal death and religiosity would not be significant positive predictors of negative organ donation attitudes for the entire sample was tested. The regression equation was significant with all of the variables entered, $F(10,343) = 13.56; p < .001$. An R Square of .283 was observed when all the subscales were entered. This indicates that 28.3 percent of the variance in negative attitudes towards organ donation was accounted for in concert by all of the FPDS and GLASR subscales. The contribution of each individual subscale can be observed in Table 7. Consistency of religious belief and action, concerns about self-annihilation, self-fulfillment, fear of punishment in the hereafter, and concerns about family and friends following personal death made significant contributions to negative attitudes towards organ donation.

Hypothesis Four

The null hypothesis that fears of personal death and religiosity will not be significant inverse predictors of positive organ donation attitudes for the male and female participants in this sample was tested. For males, the regression equation was significant with all of the variables entered, $F(10,144) = 3.30; p < .001$. An R^2 of .186 was observed when all of the subscales were entered. This indicates that 18.6% of the variance in positive attitudes towards organ donation can be accounted for in concert by all the FPDS

TABLE 7
 MULTIPLE REGRESSION ANALYSIS OF PARTICIPANTS'
 SCORES ON THE FEAR OF PERSONAL DEATH SCALE,
 GLADDING, LEWIS, AND ADKINS SCALE OF
 RELIGIOSITY, AND NEGATIVE ATTITUDES
 TOWARDS ORGAN DONATION FOR
 THE TOTAL SAMPLE (N=400)

Variable	B	SE B	β	t	R	R ²	p
<u>FPDS</u>							
Self-Annihilation	-2.425	0.476	-0.381	-5.089**	.537	.283	.000
Social Identification	-0.423	0.285	-0.107	-1.483			.139
Family and Friends	0.388	0.131	0.153	2.957**			.003
Punishment Existence following Death	-3.668	1.230	-0.173	-2.981**			.003
Self-Fulfillment	0.563	0.242	0.147	2.318*			.021
<u>GLASR</u>							
Belief in Deity	-0.215	0.295	-0.035	-0.730			.465
Religious Belief	0.586	0.462	0.099	1.268			.205
Consistency of Belief and Action	-2.545	0.579	-0.227	-4.393***			.000
Religious Effort	0.327	0.629	0.038	0.520			.603

Note: * = $p < .05$, ** = $p < .01$, *** = $p < .001$

and GLASR subscales. The contribution of each individual subscale of the FPDS and GLASR for the male participants can be observed in Table 8. Consistency of religious belief and action, and concern for family and friends were found to significantly predict positive organ donation attitudes for males.

For females, the regression equation was significant with all of the variables entered, $F(10,193) = 3.16$; $p < .001$. An R^2 of .140 was observed when all of the subscales were entered. This indicates that 14.0% of the variance in positive attitudes towards organ donation can be accounted for in concert by all the FPDS and GLASR subscales. The contribution of each individual subscale for the FPDS and GLASR for the female participants can be observed in Table 9. Concerns about family and friends, self-annihilation, punishment in the hereafter, consistency of religious belief and action and religious belief significantly contributed to the prediction of positive organ donation attitudes for females.

Hypothesis 5

The null hypothesis that fears of personal death and religiosity will not be inverse predictors of organ donation commitment for males and females was tested. For males, the regression equation was significant with all variables entered, $F(10,154) = 4.96$; $p < .001$. An R Square of .243 was observed when all of the subscales were entered. This indicates that 24.3% of the variance in organ donation commitment can be accounted for in concert by all of the FPDS and GLASR subscales. The contribution of each subscale of the FPDS and GLASR for males participants can be observed in Table 10. Consistency of religious

TABLE 8
 MULTIPLE REGRESSION ANALYSIS OF PARTICIPANTS'
 SCORES ON THE FEAR OF PERSONAL DEATH SCALE,
 GLADDING, LEWIS, AND ADKINS SCALE OF
 RELIGIOSITY, AND POSITIVE ATTITUDES
 TOWARDS ORGAN DONATION
 FOR MALES (N=200)

Variable	B	SE B	β	t	R	R ²	p
<u>FPDS</u>							
Self-Annihilation	1.141	0.698	0.206	1.163	.431	.186	.246
Social Identification	0.645	0.431	0.188	1.497			.136
Family and Friends	-0.713	0.259	-0.228	-2.751**			.006
Punishment Existence following Death	-3.323	1.863	-0.177	-1.783			.076
Self-Fulfillment	0.109	0.176	0.051	0.617			.538
	-0.470	0.364	-0.142	-1.292			.198
<u>GLASR</u>							
Belief in Deity	0.330	0.300	0.087	1.098			.274
Religious Belief	0.287	0.721	0.549	0.398			.691
Consistency of Belief and Action	3.920	0.875	0.377	4.480***			.000
Religious Effort	-1.028	0.884	-0.147	-1.163			.246

Note: * = $p < .05$, ** = $p < .01$, *** = $p < .001$

TABLE 9
 MULTIPLE REGRESSION ANALYSIS OF PARTICIPANTS'
 SCORES ON THE FEAR OF PERSONAL DEATH SCALE,
 GLADDING, LEWIS, AND ADKINS SCALE OF
 RELIGIOSITY, AND POSITIVE ATTITUDES
 TOWARDS ORGAN DONATION
 FOR FEMALES (N=200)

Variable	B	SE B	β	t	R	R ²	p
<u>FPDS</u>							
Self-Annihilation	1.533	0.653	0.258	2.346*	.374	.140	.020
Social Identification	-0.200	0.393	-0.054	-0.508			.612
Family and Friends	-0.617	0.154	-0.313	-4.001***			.000
Punishment Existence following Death	-3.923	1.621	-0.209	-2.419**			.014
Self-Fulfillment	0.100	0.178	0.041	0.566			.572
	0.133	0.320	0.038	0.418			.676
<u>GLASR</u>							
Belief in Deity	0.915	1.021	0.079	0.897			.371
Religious Belief	-1.433	0.642	-0.264	-2.230*			.026
Consistency of Belief and Action	1.916	0.796	0.186	2.404*			.017
Religious Effort	-0.322	0.914	-0.386	-0.353			.724

Note: * = $p < .05$, ** = $p < .01$, *** = $p < .001$

TABLE 10
 MULTIPLE REGRESSION ANALYSIS OF PARTICIPANTS'
 SCORES ON THE FEAR OF PERSONAL DEATH SCALE,
 GLADDING, LEWIS, AND ADKINS SCALE OF
 RELIGIOSITY, AND ORGAN DONATION
 COMMITMENT FOR MALES (N=200)

Variable	B	SE B	β	t	R	R ²	p
<u>FPDS</u>							
Self-Annihilation	0.052	0.502	0.130	1.035	.493	.243	.302
Social Identification	0.437	0.031	0.176	1.370			.172
Family and Friends	-0.019	0.019	-0.079	-1.016			.311
Punishment Existence following Death	0.028 3.393	0.136 0.013	0.204 0.001	2.082* 0.026			.039 .979
Self-Fulfillment	-0.279	0.023	-0.120	-1.210			.228
<u>GLASR</u>							
Belief in Deity	-0.032	0.227	-0.106	1.440			.149
Religious Belief	-0.044	0.053	-0.110	-0.846			.398
Consistency of Belief and Action	0.191	0.064	0.234	2.950***			.003
Religious Effort	0.067	0.063	0.123	1.052			.294

Note: * = $p < .05$, ** = $p < .01$, *** = $p < .001$

belief and action and fear of punishment in the hereafter made significant contributions to organ donation commitment for males.

For females, the regression equation was significant, $F(10,204) = 4.08$; $p < .001$. An R Square of .166 was observed when all of the subscales were entered. This indicates that 16.6% of the variance in organ donation commitment can be accounted for in concert by all of the FPDS and GLASR subscales. The contribution of each subscale of the FPDS and GLASR for female participants can be observed in Table 11. Fear of punishment in the hereafter and religious effort made significant contributions to the prediction of organ donation commitment for females.

Hypothesis Six

The null hypothesis that fears of personal death and religiosity will not be significant positive predictors of negative organ donation attitudes for males and females was tested. For males, the regression equation was significant with all variables entered, $F(10,141) = 5.20$; $p < .001$. An R^2 of .269 was observed when all of the subscales were entered. This indicates that 26.9% of the variance in negative organ donation attitudes can be accounted for in concert by all of the FPDS and GLASR subscales. The contribution of each subscale of the FPDS and GLASR for male participants can be observed in Table 12. Consistency of religious belief and action and self-annihilation, and fear of loss of social identification made significant contributions to the prediction to negative attitudes towards organ donation.

For females, the regression equation was significant with all variables entered, $F(10,191) = 9.48$; $p < .001$. An R^2 of .331 was observed when all of the subscales were

TABLE 11
 MULTIPLE REGRESSION ANALYSIS OF PARTICIPANTS'
 SCORES ON THE FEAR OF PERSONAL DEATH SCALE,
 GLADDING, LEWIS, AND ADKINS SCALE OF
 RELIGIOSITY, AND ORGAN DONATION
 COMMITMENT FOR FEMALES (N=200)

Variable	B	SE B	β	t	R	R ²	p
<u>FPDS</u>							
Self-Annihilation	0.003	0.444	0.008	0.077	.406	.166	.938
Social Identification	-0.003	0.026	-0.015	-0.144			.885
Family and Friends	-0.012	0.010	-0.889	-1.190			.235
Punishment Existence following Death	0.355	0.109	0.268	3.238***			.001
	-0.002	0.012	-0.017	-0.241			.810
Self-Fulfillment	-0.002	0.216	-0.166	-0.126			.900
<u>GLASR</u>							
Belief in Deity	-0.031	0.065	-0.039	-0.471			.638
Religious Belief	-0.084	0.043	-0.232	-1.962			.052
Consistency of Belief and Action	0.103	0.052	0.145	1.955			.052
Religious Effort	0.156	0.614	0.269	2.543*			.011

Note: * = $p < .05$, ** = $p < .01$, *** = $p < .001$

TABLE 12
 MULTIPLE REGRESSION ANALYSIS OF PARTICIPANTS'
 SCORES ON THE FEAR OF PERSONAL DEATH SCALE,
 GLADDING, LEWIS, AND ADKINS SCALE OF
 RELIGIOSITY, AND NEGATIVE ATTITUDES
 TOWARDS ORGAN DONATION
 FOR MALES (N=200)

Variable	B	SE B	β	t	R	R ²	p
<u>FPDS</u>							
Self-Annihilation	-1.939	0.757	-0.307	-2.559*	.518	.269	.011
Social Identification	-1.033	0.476	-0.261	-2.169*			.031
Family and Friends	0.290	0.285	0.080	1.018			.310
Punishment Existence following Death	-1.658	2.079	-0.074	-0.798			.426
	0.058	0.195	0.235	0.298			.766
Self-Fulfillment	0.382	0.399	0.099	0.958			.339
<u>GLASR</u>							
Belief in Deity	-0.218	0.334	-0.049	-0.654			.514
Religious Belief	0.801	0.801	0.134	1.000			.381
Consistency of Belief and Action	-3.147	0.962	-0.265	-3.270***			.000
Religious Effort	.0376	0.971	0.047	0.387			.669

Note: * = $p < .05$, ** = $p < .01$, *** = $p < .001$

entered. This indicates that 33.1 percent of the variance in negative organ donation attitudes can be accounted for in concert by all of the FPDS and GLASR subscales. The contribution of each subscale of the FPDS and GLASR for female participants can be observed in Table 13. Concerns about self-annihilation, loss of family and friends, punishment in hereafter, loss of self-fulfillment, and consistency of religious belief and action made significant contributions to the prediction of negative attitudes towards organ donation.

Additional Post Hoc Correlational Analysis

Additional correlational analyses were calculated to determine the nature of the relationship between fears of death and religiosity. Separate analyses were conducted for the entire sample and for the male and female participants. For these analyses corrections were made for family wise error. The adjusted alpha level for the correlations between fears of death and religiosity was determined to be .001. These matrices were previously displayed in Tables 1, 2, and 3.

From Table 1 it can be observed that there are several significant relationships between fears of death and religiosity for the entire sample. Belief in a deity is positively related to concerns about self-annihilation ($r = .224$; $p < .001$) and loss of social identification ($r = .179$; $p < .001$). Consistency of religious belief was observed to be positively related to self-annihilation ($r = .271$; $p < .001$), existence following death ($r = .188$, $p < .001$), punishment in the hereafter ($r = .272$; $p < .001$), loss of social identification ($r = .308$; $p < .001$), and loss of self-fulfillment ($r = .247$, $p < .001$). Religious effort was found to be positively related to self-annihilation ($r = .408$; $p < .001$), existence following

TABLE 13
 MULTIPLE REGRESSION ANALYSIS OF PARTICIPANTS'
 SCORES ON THE FEAR OF PERSONAL DEATH SCALE,
 GLADDING, LEWIS, AND ADKINS SCALE OF
 RELIGIOSITY, AND NEGATIVE ATTITUDES
 TOWARDS ORGAN DONATION
 FOR FEMALES (N=200)

Variable	B	SE B	β	t	R	R ²	p
<u>FPDS</u>							
Self-Annihilation	-2.852	0.616	-0.443	-4.625***	.575	.331	.000
Social Identification	0.086	0.364	0.022	0.239			.811
Family and Friends	0.386	0.145	0.183	2.645**			.008
Punishment Existence following Death	-5.356	1.545	-0.263	-3.466***			.000
Self-Fulfillment	-0.025	0.169	-0.009	-0.152			.879
	0.679	0.305	0.179	2.222*			.027
<u>GLASR</u>							
Belief in Deity	-1.465	0.972	-0.120	-1.507			.133
Religious Belief	1.008	0.618	0.174	1.629			.104
Consistency of Belief and Action	-2.209	0.725	-0.205	-3.044**			.002
Religious Effort	0.282	0.854	0.031	0.331			.741

Note: * = $p < .05$, ** = $p < .01$, *** = $p < .001$

death ($r = .205$, $p < .001$), punishment in the hereafter ($r = .326$; $p < .001$) loss of social identification ($r = .362$; $p < .001$), and loss of self-fulfillment ($r = .358$; $p < .001$). Finally, religious belief was observed to be positively related to self-annihilation ($r = .556$; $p < .001$), existence following death ($r = .214$; $p < .001$), punishment in the hereafter ($r = .418$; $p < .001$) loss of Social Identification ($r = .486$; $p < .001$), and loss of self-fulfillment ($r = .472$; $p < .001$).

From Table 2 it can be observed that there are several significant relationships between fears of death and religiosity for the male participants. Consistency of religious belief and action was positively related to fear of loss of social identification ($r = .250$; $p < .001$). Religious effort was found to be positively reacted to fears of self-annihilation ($r = .387$; $p < .001$), loss of social identification ($r = .381$; $p < .001$), and loss of self-fulfillment ($r = .335$; $p < .001$).

Table 3 presents several significant relationships between fears of death and religiosity for the female participants. Belief in a deity was observed to be positively related to self-annihilation ($r = .380$; $p < .001$) and loss of social identification ($r = .339$; $p < .001$). Consistency of religious belief and action was determined to be positively related to self-annihilation ($r = .320$; $p < .001$), punishment in the hereafter ($r = .295$; $p < .001$), loss of social identification ($r = .353$; $p < .001$), and fears of loss of self-fulfillment ($r = .275$; $p < .001$). Religious effort was observed to be positively related to concerns about loss of self-annihilation following death ($r = .435$; $p < .001$). Finally, religious belief was found to be positively related to loss of social identification ($r = .416$; $p < .001$).

Summary

Chapter IV presented a summary of the statistical analysis used to assess the statistical hypotheses outlined for this investigation. Summaries of the demographic and Pearson correlations were also presented. Statistically significant predictors of organ donation attitudes and commitment were found. Fears of personal death and religiosity were found to be positively related to positive attitudes and organ donation. Similarly, Fears of personal death were inversely related to negative attitudes towards organ donation. Additional relationships regarding the relationship between religiosity and fears of personal death were explored.

CHAPTER V
SUMMARY, CONCLUSIONS, IMPLICATIONS,
AND RECOMMENDATIONS

Introduction

This chapter presents a summary of the study, conclusions, and discussions based on the results. Also provided are recommendations for future research in the study of organ donation attitudes and commitment are made.

Summary

The problem addressed in this study was to further expand the limited understanding of organ donation attitudes and commitment. More specifically, fears of personal death, religiosity, and gender were explored as variables related to positive and negative organ donation attitudes, as well as commitment to posthumous donation. Even though a large body of literature concerning organ donation demographics exists, there are few investigations concerning factors associated with this important medical procedure.

The present study utilized the Fears of Personal Death Scale (FPDS: Florian & Kravetz, 1983), the Gladding, Lewis and Adkins Scale (GLASR: Gladding et al., 1981), the Organ Donation Attitude scale (Parisi & Katz, 1986), and a brief demographic questionnaire designed specifically for this investigation. A total number of 400

undergraduate students enrolled in introductory sociology, psychology, education, and health promotion courses were administered these measures in a counterbalanced fashion. Six hypotheses were tested using a linear regression model with all the subscales from the FPDS and GLASR forced into the equation. Additionally, descriptive statistics were provided and Pearson correlations were included to examine the relationship between religiosity and fears of personal death. The following is a summary of the six null hypotheses with accompanying results from the statistical analyses.

Null Hypothesis One

Fears of Death And Religiosity Will Not Be Significant Inverse Predictors of Positive Organ Donation Attitudes For The Entire Sample.

A significant inverse relationship between some FPDS and GLASR subscales and positive organ donation attitudes was found using multiple regression analysis. The entire regression equation accounted for 12.3% of the variance in positive organ donation attitudes in conjunction with all the FPDS and GLASR subscales. Concerns about family and friends and punishment in the hereafter were positively related to positive organ donation attitudes. Death concerns about self-annihilation were inversely related to positive organ donation attitudes. Consistency of religious belief and action was inversely related to positive organ donation attitudes.

In short, as an individual's concerns about self-annihilation following death increases, his or her positive attitudes towards organ donation are likely to decrease. The opposite was found when examining the influence of concerns based on the welfare of

family and friends following personal death. As people become increasingly worried about the welfare of their friends and family, the likelihood of positive organ donation attitudes increases. An inverse relationship was also found for consistency of religious belief and action. It appears that as people become increasingly consistent in their religious beliefs and actions, they become less likely to hold positive attitudes toward organ donation. Concerns about fear of punishment in the hereafter were significant in the regression equation but no correlation was found between this variable and positive attitudes towards organ donation. Therefore, concern about punishment in the hereafter is a suppressor variable and no further explanation can be made. Due to these findings the null hypothesis is rejected, with the exception of the significant positive relationship between concerns about family and friends following personal death and positive organ donation attitudes.

Null Hypothesis Two

Fears of Death and Religiosity Will Not Be Significant Inverse Predictors of Organ Donation Commitment for the Entire Sample.

A significant inverse relationship between some FPDS and GLASR subscales and organ donation commitment attitudes was found using multiple regression analysis. The entire regression equation accounted for 18.7% of the variance in donation commitment and was accounted for in conjunction with all the FPDS and GLASR subscales. Concern about personal death centering on punishment in the hereafter was found to be an inverse predictor of organ donation commitment. Consistency of religious belief and action and effort was also found to be an inverse predictor of organ donation commitment.

Furthermore, the amount of religious belief was determined to be a positive predictor of organ donation commitment.

In short, as an individual's fear of punishment in the hereafter decrease, their commitment to organ donation is likely to increase. Concerning religiosity, as an individual's religious effort and consistency of religious belief and action increases their commitment to organ donation decreases. However, as an individual's amount of religious belief increases, his or her commitment to organ donation is likely to increase. Due to these findings contradictory statements about the null hypothesis are supported.

Null Hypothesis Three

Fears of Death and Religiosity Will Not Be Significant Positive Predictors of Negative Organ Donation Attitudes for the Entire Sample.

A significant positive relationship between some FPDS and GLASR subscales and the negative organ donation attitudes was found using multiple regression analysis. The entire regression equation accounted for 28.3% of the variance in negative organ donation attitudes and was accounted for in conjunction with all the FPDS and GLASR subscales. Concerns about self-annihilation and fear of punishment in the hereafter were positively related to negative organ donation attitudes. Concerns about family and friends and loss of self-fulfillment were inversely related to negative organ donation attitudes. Concerning religiosity, consistency of religious belief and action was determined to be inversely related to negative organ donation attitudes.

In short, as an individual's concerns about self-annihilation and punishment in the hereafter increase they become more likely to hold negative attitudes towards organ donation. However, as an individual's concern for family and friends and concerns about self-fulfillment increases, he or she is likely to hold less negative attitudes towards organ donation. Concerning religiosity, as an individual's consistency of religious belief and action becomes stronger, his or her negative attitudes towards organ donation are likely to increase. Due to these findings contradictory statements concerning the null hypothesis are supported. The positive relationships between concerns about self-annihilation fear of punishment in the hereafter, and, loss of social identification, and consistency of religious belief and action support the rejection of the null hypothesis. On the other hand, an inverse relationship between concerns about family and friends and negative organ donation attitudes exist.

Null Hypothesis Four

Fears of Personal Death and Religiosity Will Not Be Significant Inverse Predictors of Positive Organ Donation Attitudes for the Male and Female Participants in this Sample.

A significant positive relationship between one GLASR subscale and positive organ donation attitudes for male participants was found using multiple regression analysis. The entire regression equation accounted for 18.6% of the variance in positive organ donation attitudes and was accounted for in conjunction with all the FPDS and GLASR subscales. Consistency of religious belief and action was inversely related to

positive organ donation attitudes. Concerns about family and friends following death, however, was positively related to positive organ donation attitudes.

For females, a significant positive relationship was found between some GLASR and FPDS subscales and positive organ donation attitudes. The entire regression equation accounted for 14.0% of the variance in positive organ donation attitudes and was accounted for in conjunction with all the FPDS and GLASR subscales. Concerns about punishment in the hereafter and about the welfare of family and friends following death were positively related to positive organ donation attitudes. When examining the Pearson correlation between punishment in the hereafter and positive attitudes towards organ donation, it can be observed that no significant relationship exists between these two variables. Therefore, fear of punishment is a suppressor variable. Concerns about self-annihilation, on the other hand, was inversely related to positive organ donation attitudes. On the GLASR, amount of religious belief was supported to be positively related to positive organ donation attitudes. Consistency of religious belief and action, on the other hand, was found to be inversely related to positive organ donation attitudes.

In short, for males and females, as concerns about family and friends increases, they become more likely to hold positive attitudes towards organ donation. For females as concerns about self-annihilation decrease, they become more likely to hold positive organ donation attitudes. Because the relationship between punishment in the hereafter and positive organ donation remains unclear, no further implications can be made. When considering religiosity for males and females, as consistency of religious belief and action decreases, they become more likely to hold positive organ donation attitudes. However, for females, as amount of religious belief increases, they become more likely to hold

positive organ donation attitudes. Therefore, for males, the inverse relationship between consistency of religious belief and action supported the null hypothesis. The inverse relationship between concerns about self-annihilation also supported the null hypothesis. However, the positive relationship for both genders regarding the relationship between concerns about family and friends following death and positive organ donation attitudes does not support the null hypothesis.

Hypothesis Five

Fears of Personal Death and Religiosity Will Not Be Significant Inverse Predictors of Organ Donation Commitment for Males and Females.

A significant relationship between some GLASR and FPDS subscales and organ donation commitment for male participants was found using multiple regression analysis. The entire regression equation accounted for 24.3% of the variance in organ donation commitment and was accounted for in conjunction with all the FPDS and GLASR subscales. Fear of punishment in the hereafter and consistency of religious belief and action were inversely related to organ donation commitment.

For females, the entire regression equation accounted for 16.6% of the variance in organ donation commitment and was accounted for in conjunction with all the FPDS and GLASR subscales. Fear of punishment in the hereafter and amount of religious effort were found to be inversely related to organ donation commitment.

In sum, for males, as punishment in the hereafter and/or consistency of religious belief and action decreases, commitment to organ donation is expected to increase. For

females, as fear of punishment in the hereafter decreases and amount of religious effort decreases, organ donation commitment is expected to increase.

Hypothesis Six

Fears of Personal Death and Religiosity Will Not Be Significant Positive Predictors of Negative Organ Donation Attitudes for Males and Females.

A significant positive relationship between one GLASR and FPDS subscale and negative organ donation attitudes for male participants was found using multiple regression analysis. The entire regression equation accounted for 26.9% of the variance in organ donation commitment and was accounted for in conjunction with all the FPDS and GLASR subscales. Concerns about self-annihilation and loss of social identification were significantly positively related to negative organ donation attitudes at the .05 level. Likewise, consistency of religious belief and action was significant positively related to negative organ donation attitudes.

For females, the entire regression equation accounted for 33.1% of the variance in negative organ donation attitudes and was accounted for in conjunction with all the FPDS and GLASR subscales. Concerns about self-annihilation and punishment in the hereafter were found to be significantly positively related to negative attitudes towards organ donation at the .01 level. Conversely, significant inverse relationships at the .01 and .05 level respectively was supported between concerns about family and friends, as well as loss of self-fulfillment and negative organ donation attitudes. In regard to religiosity, a

positive relationship was observed between consistency of religious belief and action and negative organ donation attitudes at the .01 level.

In short, as both males and females concerns about self-annihilation and or consistency of religious belief and action increase, they become more likely to hold negative attitudes about organ donation. However, as males concerns about loss of social identification increase, they become more likely to hold negative attitudes towards organ donation. As females concerns about family and friends and loss of self-fulfillment decrease, they become more likely to hold negative attitudes towards organ donation. Finally, as females' concerns about punishment in the hereafter increase, they become more likely to hold negative attitudes towards organ donation.

Discussion and Conclusions

Results of the present study provide tentative support that fears of personal death and religiosity are related to organ donation attitudes and commitment. For the purpose of this discussion each predictor variable used in the regression equation will be discussed separately. Included in each discussion will be how the variable relates to the overall sample and to both males and females.

Self-Annihilation

For the overall sample, the findings that positive attitudes towards organ donation are likely to increase as concerns about self-annihilation decrease, and that negative attitudes towards organ donation are likely to increase as concerns about self-annihilation increase are consistent with each other. Since concerns about self-annihilation following

death center on the fate of the physical body following the cessation of life, these findings are similar with Parisi and Katz's (1986) hypothesis that bodily mutilation following death may be one of the strongest deterrents to non-donors. This finding is also contiguous with Cleveland's (1970) conclusion that non-donors cling to an idea of an intact body following death. As individuals become more concerned about the fate of their body following death, they may be less likely to hold positive organ donation attitudes. The opposite may be true for those who are not concerned about what will become of their physical body. As these individuals become less concerned about self-annihilation, they become more open to positive organ donation attitudes. Although concerns about self-annihilation are related to organ donation attitudes, no relationship between this variable and organ donation commitment was found.

Similar results were found when looking between genders. For females, the finding that positive attitudes towards organ donation are likely to increase as concerns about self-annihilation decrease, and that negative attitudes towards organ donation are likely increase as concerns about self-annihilation increase are consistent. However, for males, as concerns about self-annihilation increase, negative organ donation attitudes increase; but their positive attitudes towards organ donation do not increase as their concerns about self-annihilation decrease. It is possible that male's concerns about the fate of their body following death affect their negative attitudes towards organ donation. However, lack of concerns about self-annihilation does not appear to be sufficient in facilitating positive attitudes toward organ donation. Concerns about self-annihilation were not a significant predictor of organ donation commitment for either gender. Although concerns about self-annihilation may affect attitudes towards organ donation, it

is possible that individual's may appreciate the importance of organ donation. Therefore, these individual's may or may not actually commit to donating, regardless of their concerns about loss of self-annihilation.

Loss of Social Identification

For the overall sample, no significant relationships existed between the concern over loss of social identification and negative or positive organ donation attitudes. Likewise, loss of social identification was not a significant predictor of organ donation commitment. These findings were also observed for the female participants. However, for males, as concerns over loss of social identification increased, so did negative attitudes towards organ donation. Perhaps as males become increasingly concerned that their absence will not be felt, they may be hesitant to help those they leave behind.

Concerns about Family and Friends

The findings that positive attitudes towards organ donation increase as individuals hold more concerns about the welfare of their family and friends following death, and that negative attitudes towards organ donation increase as individuals hold less concern about what will happen to their family and friends are consistent with each other. The relationship between concerns about family and friends and organ donation may not be a direct one. It seems natural that as people become increasingly concerned about family and friends, they will also become concerned about people in general. Therefore, for these individuals, as concern about others increases, so do their positive attitudes towards organ donation. The opposite may also be true. As a person becomes less concerned about the

welfare of their family and friends they may care less about people in general and hold higher negative attitudes towards organ donation. These findings lend some support to Cleveland's (1975) assertion that those with positive organ donation attitudes tend to take a more altruistic approach when interacting with others. However, for the entire sample, concerns about family and friends following personal death were not found to be a predictor of organ donation commitment.

For females, the findings that positive attitudes towards organ donation increase as an individual holds more concerns about the welfare of their family and friends following death, and the finding that negative attitudes towards organ donation increase as an individual holds fewer concerns about what will happen to their family and friends was observed. However, for males only the finding that as individuals hold more concerns about the welfare of their family and friends following death they become more likely to hold more positive attitudes toward organ donation was supported. No relationship between concerns about family and friends and organ donation commitment were observed for either gender. Similar to the inverse relationship that was found between worries about family and friends and positive organ donation attitudes, it is conceivable that as people become less concerned about the welfare of friends and family, they care less about the fate of other individuals. Therefore, this factor may not influence actual organ donation commitment.

Punishment in the Hereafter

For the entire sample, it was found that as individuals hold more concerns about punishment in the hereafter they become more likely to hold negative attitudes towards

organ donation. On the other hand, as individuals hold more fear of punishment, they are likely to be more committed to organ donation. Cleveland (1970) hypothesizes that some individuals may see organ donation as an opportunity to atone for past wrong doings or sins based on their fears of punishment in the afterlife. Based on these results, it seems likely that individuals who hold concerns about being punished in the after life would view donating their organs as a last chance at doing a charitable deed.

For males and females, as fears of punishment in the hereafter increased, so did organ donation commitment. It is possible that males who give credence to the notion of eternal punishment in the hereafter may view organ donation behavior as a way of escaping this terror-filled possibility.

Existence Following Death

For the entire sample, concerns about existence following death were not found to be a significant factor in organ donation attitudes and commitment. Therefore, the mysteriousness of what happens following death does not appear to affect individuals' commitment to organ donation, nor does it affect their positive attitudes towards organ donation. It is plausible that the uncertainty of existence following death may leave an individual ambivalent about organ donation attitudes and commitment. By not having a clear and definite answer to what happens after an individual dies, it may be difficult to form opinions about the possibility relinquishing body parts. Therefore, no relationship between this variable and organ donation attitudes or commitment was found.

Self-Fulfillment

For the entire sample and for females, individuals who are less concerned about the loss of self-fulfillment are more likely to have negative attitudes towards organ donation than those who had more concerns about this fear of personal death. It can be hypothesized that individuals may view organ donation as a creative act. By relinquishing their organs following death, an individual has an opportunity to gain a sense that part of them will continue to live on in a positive way through helping another individual. Therefore, as one becomes less concerned about losing their ability to be creative, they may hold more negative attitudes towards organ donation. Organ donation can also be viewed as an opportunity to respond in a generative manner to those who survive your personal death. In short, organ donation may be a way of ensuring that part of you will live on even following death. Individuals who do not have concerns about loss of self-fulfillment may not view organ donation in this light or feel the desire to make a contribution to be remembered for following death.

Belief in a Deity

No relationships were found between organ donation attitudes and commitment and belief in a deity. Perhaps this religious belief is too general to make any judgments about organ donation attitudes or behaviors. In other words, believing in the existence of a God may be a concept that is too general for individuals to base their attitudes or behaviors. Perhaps belief in a malicious, benevolent, or jealous God would influence

organ donation attitudes and behaviors. Thus, simple belief in a god appears to have no influence on organ donation attitudes and commitment.

Religious Belief

For the entire sample it was found that as religious beliefs increased, commitment to organ donation also increased. For females, as religious belief increased so did positive attitudes towards organ donation. It appears that for both males and females, as religious belief increases (such as the importance of worshipping on a daily basis, following the tenets of your faith, and viewing religiosity as a way of answering important issues in life), one becomes more likely to donate. These factors also influence females' positive attitudes towards organ donation.

These findings are not surprising. Nelson and Dynes (1976) have noted that the majority of Americans consider themselves to be religious, especially females. Similarly, Cleveland (1975) explained that most individuals hold positive attitudes towards organ donation, especially females. Therefore, it is consistent and logical that as an individual's basic religious belief increases, positive attitudes and organ donation commitment should also increase. For these individual's religious beliefs may help them think and act in a more prosocial manner.

Consistency of Belief and Action

For males and females it was found that as consistency of religious beliefs and action increase, they become more likely to hold negative attitude towards organ donation. Likewise, as consistency of religious belief and action decreases, positive

attitudes towards organ donation became more likely to increase. Consistency of religious belief and action was only a significant predictor of organ donation commitment for males. As males became less consistent in their religious beliefs and actions, they became less committed to this medical procedure.

These findings support previous conclusions that religious individuals are less likely to be organ donors (Cleveland & Johnson, 1970). It appears that as individuals tend to practice their religious beliefs in an everyday lifestyle, they may become less concerned with prolonging life because the hereafter may be more important. Thus, these individuals would be less likely to donate or hold positive attitudes towards donation. Also, these individuals may be more vehement in their desires to keep an intact body following death. Perhaps these individuals believe that a physical body is needed in the afterlife. A significant relationship between concerns of self-annihilation and consistency for religious belief and action support this hypothesis.

Religious Effort

For the entire sample, no significant relationship was found between religious effort and organ donation attitudes and commitment. However, for females, as religious effort decreased, organ donation commitment increased. Again, this finding is consistent with Cleveland and Johnson's (1975) that the less religious an individual tends to be, the more likely they are to donate their organs following personal death. Therefore, the less religious effort that females put forth, the more they may consider organ donation commitment a viable option that does not interfere with their religious practices.

Recommendations for Future Research

The findings of this study reveal a complex and multidimensional relationship between fears of personal death, religiosity, and organ donation attitudes and commitment. Likewise, differences in organ donation attitudes and behaviors exist between genders. Further studies are called for to make organ donation, an important social issue better understood. The following research recommendations are advised:

1. While it has been demonstrated that organ donation decision making is an important issue to be investigated in the social sciences, it is by no means understood. Continued research of the factors that either increase or decrease and an individual's positive attitudes as well as organ donation commitment behaviors is critical to develop better theoretical understanding and practical applications.
2. Results of this study suggest that a significant and meaningful amount of the variance reported for in organ donation is correlated with fears of personal death and religiosity. Further research is necessary to replicate this finding and to ascertain the etiology of the correlation between fear these factors.
3. Future research should replicate this study using other geographical locations. Likewise, a replication of this study using a more heterogeneous age range would lead to a better understanding of organ donation attitudes and behaviors in a general population.

4. Replication of this study should be conducted using different theoretical models of religiosity to gain a more diverse understanding of how this important variable influences organ donation attitudes and commitment.

REFERENCES

- Ajzen, I. (1988). Attitudes, Personality, and Behavior. Chicago, IL: Dorsey Press.
- Altemeyer, B. (1988). Enemies of freedom: Understanding right-wing authoritarianism. San Francisco, CA: Jossey-Bass.
- Bakan, D. (1968). Disease, pain, and sacrifice. Chicago, IL: University of Chicago Press.
- Becker, E. (1973). The denial of death. New York, NY: The Free Press.
- Ben-Meir, Y., & Kedem, P. (1979). Index of religiosity of the Jewish population of Israel. Megamont, 24, 353-362.
- Borgida, E., Simmons, R. G., Conner, C., & Lombard, K. (1990). The Minnesota living donor studies. In J. Shanteau & R.J. Harris (Eds.), Organ donation and transplantation: Psychological and behavioral factors. (Pp. 25-37). Washington, D.C.: American Psychological Association.
- Cohen, J. (1977). Statistical power analysis for the behavioral sciences. New York, NY: Academic.
- Callender, C. O. (1987) Organ donation in the black population: Where do we go from here? Transplantation Proceedings, 19, 36-40.
- Childress, J. F. (1987). Some connections between organ procurement and organ distribution. Journal of Contemporary Health Law and Policy, 3, 85-110.
- Claxton, R. N. (1975). A study of attitude and other variables in prediction of commitment behavior regarding human organ donation. Dissertation Abstracts International, 35, 616B.
- Cleveland, S. E. (1975). Personality characteristics, body image, and social attitudes of organ transplantation donors versus nondonors. Psychosomatic Medicine, 37, 313-319.

- Cleveland, S. E. (1975). Personality characteristics, body image, and social attitudes of organ transplant donors. Psychosomatic Medicine, *37*, 313-319.
- Cleveland, S. E., & Johnson, D. L. (1970). Motivation and readiness of potential human tissue donors and nondonors. Psychosomatic Medicine, *32*, 225-231.
- Claxton, R. N. (1974). A study of attitude and "other variables" in the prediction of commitment behavior regarding human organ donation. Dissertation Abstracts.
- Collet, L. J., & Lester, D. (1969). The fear of death and the fear of dying. Journal of Psychology, *72*, 179-181.
- Crumbaugh, J. C., & Maholick, L. T. (1969). The purpose of life test. Munster, IN: Psychometric Affiliates.
- Durlak, J. A. (1972). Measurement of the fear of death: An examination of some existing scales. Journal of Clinical Psychology, *28*, 545-547.
- Ellis, A. (1980). Psychotherapy and atheistic values: A response to A.E. Bergin's "Psychotherapy and religious values." Journal of Consulting and Clinical Psychology, *48*, 635-639.
- Evans, R., & Manninen, D. (1988). U.S. public opinions concerning the procurement and distribution of donor organs. Transplantation Proceedings, *20*, 781-785.
- Evans, R., Manninen, D., Gersh, B., Hart, G., & Rodin, J. (1984). The need for and supply of donor hearts for transplantation. Journal of Heart Transplantations, *4*, 57-60.
- Florian, V. & Har-Even, D. (1983). Fear of personal death: The effects of sex and religious belief. Omega, *14*, 83-91.
- Florian, V., & Kravetz, S. (1983). Fear of personal death: Attribution, structure, and relation religious belief. Journal of Personality and Social Psychology, *44*, 600-607.
- Florian, V. & Mikulincer, M. (1993). The impact of death-risk experiences and religiosity on the fear of personal death: The case of Israeli soldiers in Lebanon. Omega, *26*, 101-111.
- Florian, V. & Snowden, L. R. (1989). Fear of personal death and positive life regard: A study of different ethnic and religious-affiliated American college students. Journal of cross-cultural Psychology, *20*, 64-79.

Freud, S. (1925). Thoughts for the times of war and death. In Collected papers (Vol. 4) London, UK: Imago

Freud, S. (1927). The future of an illusion. Standard Edition, 21, 5-56.

Freud, S. (1928). A religious experience. Standard Edition, 21, 167-172.

Gallup Organization. (1983). Attitudes and Opinions of the American Public Toward Kidney Donation. Princeton, NJ: Gallup Organization.

Gallup Organization. (1985). Attitudes and Opinions of the American Public Toward Kidney Donation. Princeton, NJ: Gallup Organization.

Galton, F. (1872). Statistical inquiries into the efficacy of prayer. Fortnightly Review, 12, 125-135.

Gladding, S., & Lewis, E. (1979). Religiosity, Psychological anomie and positive mental health: The GLASR scale. Paper presented at 87th Annual Convention, American Psychological Association. New York, NY.

Gladding, S., Lewis, E., & Adkins, L. (1981). Religious beliefs and positive mental health: The GLASR scale and counseling. Counseling and Values, 52, 206-215.

Glover, R. J. (1996). Religiosity in adolescence and young adulthood: Implications for identity formation. Psychological Reports, 78, 427-431.

Hoelter, J. W. (1979). Religiosity, fear of death and suicide acceptability. Suicide and Life-Threatening Behavior, 9, 163-172.

Hoge, D. R., & Carol, J. W. (1975). Christian beliefs, nonreligious factors and anti-semitism. Social Forces, 53, 581-594.

Greenberg, J. H., Pszycynski, T., Solomon, S., Rosenblatt, A., Veeder, M., Kirkland, S., & Lyon, D. (1990). Evidence for terror management theory: The effects of mortality salience on reactions to those who threaten or bolster the cultural world view. Journal of Personality and Social Psychology, 58, 308-318.

Hall, G. S. (1882). The Moral and Religious Training of Children. The Princeton Review, 9, 26-48.

Harris, R. J., Jasper, J. D., Shanteua, J., Smith, S. A. (1990). Organ donation consent decisions by the next of kin: An experimental simulation approach. In J. Shanteau & R. J. Harris (Eds.), Organ donation and transplantation: Psychological and behavioral factors. (Pp. 13-24). Washington, D.C.: American Psychological Association.

Hosten, A. O. (1987). Kidney disease in blacks in North America - An overview. Transplantation Proceedings 19, 5-8.

James, W. (1902). *The Varieties of Religious Experience: A Study in Human Nature*. Cambridge, MA: Harvard Press.

Jung, C. J. (1943). The Psychology of Eastern meditation. In *Collected Works*, Vol. 11, Pp.558-575.

Lewis, E. L., & Gladdin, S. T. (1983). Test-retest reliability of the Gladding, Lewis, Adkins scale of religiosity: A longitudinal study. Psychological Reports, 52, 34.

Lester, D. (1974). *The Collett-Lester fear of death scale: A manual*. Unpublished manuscript.

Manninen, D. L., Evans, R. W. (1985). Public attitudes and behavior regarding organ donation. Journal of the American Medical Association, 253, 3111-3115.

Mikulincer, M., Florian, V., & Tolmacz, R. (1990). Attachment Styles and fear of personal death: A case study of affect regulation. Journal of Personality and Social Psychology, 58, 273-280.

Nelson, L. D., & Dynes, R. R. (1976). The impact of devotionality and attendance on ordinary and emergency helping behavior. Journal for the Scientific Study of Religion, 15, 47-59.

Nolan, B. E., & McGrath, P. J. (1990). Social-Cognitive influences on the willingness to donate organs. In J. Shanteau & R. J. Harris (Eds.), Organ donation and transplantation: Psychological and behavioral factors. (Pp. 25-37). Washington, D.C.: American Psychological Association.

Lefcourt, H. M., & Shepherd, R. S. (1995). Organ donation, authoritarianism, and perspective-taking humor. Journal of Research in Personality, 29, 129-138.

McNair, D. M., Lorr, M., & Dopleman, L. F. (1971). *Profile of Mood States*. San Diego, CA: Educational and Industrial Testing Services.

O'Connell, W. E. (1968). Humor and death. Psychological Reports, 22, 391.

Olbrisch, M. E. (1989). Psychology's contribution to relieving the donor organ shortage: Barriers from within. American Psychologist, 44, 77-78.

Orbach, I., & Florian, V. (1991). Attitudes towards life and death, religiosity, and gender in Israeli children, Omega, 24, 139-149.

Parisi, N., & Katz, I. (1986). Attitudes toward posthumous organ donation and commitment to donate. Health Psychology, 5, 656-580.

Pedhazur, E. J. (1997). Multiple regression in behavioral research: Explanation and prediction. Forth Worth, TX: Harcourt Brace.

Perkins, K. A. (1987). The shortage of cadaver donor organs for transplantation: Can psychology help? American Psychologist, 42, 921-930

Prottas, J.(1994) The Most Useful Gift. San Francisco, CA: Jossey-Bass Publishers.

Rank, O. (1936). Will therapy and truth and reality. New York, NY: Knopf.

Robbins, R.A. (1990). Signing an organ donor card: Psychological factors. Death Studies, 14, 219-229.

Rokeach, M. (1967). Rokeach Value Survey. Sunnyvale, CA: Halgreen Tests.

Rotter, J. (1966). Generalized expectancies of internal versus external control of reinforcement. Psychological Monographs, 80, 167-173.

Sapp, G. L., & Gladding, S. T. (1989). Correlates of religious orientation, religiosity, and moral judgment. Counseling and Values, 33, 140-145.

Schifter, D. B., & Ajezen, I. (1985). Intention and perceived control, and weight loss. Journal of Personality and Social Psychology, 49, 843-851.

Schwindt, R., & Ving, A. R. (1986). Proposal for a future delivery market for transplanted organs. Journal of Health Politics, Policy and Law, 11, 483-500.

Sheppard, R. S. (1989). What's so funny about death? Sense of humor, mood disturbance, and beliefs as predictors of willingness to confront mortality. Unpublished doctoral dissertation. University of Waterloo, Canada.

Simmons, R. G., Bruce, J., Bienvenue, R., & Fulton, J. (1974). Who signs an organ donor card: Traditionalism versus transplantation. Journal of Chronic Diseases, 27, 491-502.

Simmons, R.G., Fulton, J., & Fulton, R. (1972). The prospective organ transplant donor: Problems and prospects of medical innovation. Omega, 3, 319-339.

Statistical Package for the Social Sciences (SPSS-X) User's Guide. (1990) New York, NY: McGraw Hill.

- Spero, M. (1978). Psychotherapy of the religious patient. Springfield, IL: Charles C. Thomas.
- Stein, L. (1995). Religiosity, fears of personal death, and the acceptability of suicide within Reformed, Conservative, and Orthodox Jews. Unpublished masters' thesis.
- Strueing, E. L. (1963). Anti-democratic attitudes in Midwest university. Remmers (Ed.) Anti-democratic attitudes in American schools, (pp. 210-258) Evanston, IL: Northeastern University Press
- Templer, D. I. (1970). The construction and validation of a death anxiety scale. Journal of General Psychology, 82, 165-177.
- Thuaberge, P. C., Cleland, J. F., & Thuaberge, E. M. (1979). The avoidance of the ontological confrontation of death: A psychometric research scale. Essence, 3, 9-12.
- Thurkral, V. K., & Cummings, G. (1990). The vital organ shortage in the year 2000: A new problem and a new proposal. In J. Shanteau & R. J. Harris (Eds.), Organ donation and transplantation: Psychological and behavioral factors. (Pp. 25-37). Washington, D.C.: American Psychological Association.
- Ungar, L., Florian, V., & Zernitsky-Shurka, E. (1990). Aspects of fear of personal death, levels of awareness, and professional affiliation among dialysis unit staff members. Omega, 21, 51-67.
- Wuff, D. (1991). Psychology of Religion: Classic and Contemporary Views. New York, NY: Wiley Brothers.
- Yalom, I (1980). Existential Psychotherapy. New York, NY: Basic Books.

APPENDIXES

APPENDIX A

DEMOGRAPHIC QUESTIONNAIRE

DEMOGRAPHICS QUESTIONNAIRE

Thank you for taking the time to participate in this investigation. Before answering items on each survey please complete the following background information questions. Thank you.

Age: _____

GENDER: Female Male

Classification:

Freshman Sophomore
Junior Senior
Graduate Student

Religious Affiliation:

Agnostic	Jehovah's Witness
Non-Denominational Christian	Jewish
Atheist	Pentecostal
Baptist	Catholic
Methodist	Lutheran
Presbyterian	Episcopalian
Mormon	Muslim
Hindu	Other _____
	(please specify)

Ethnicity (please check one):

African-American	Asian-American
Native American	Caucasian
Hispanic	International
Other	
(please specify)	

Are you currently an organ donor?

yes no

Has anyone in your family ever been an organ donor recipient?

yes no

APPENDIX B

CONSENT FORM

Consent Form

"I _____, hereby authorize or direct Larry Stein to perform the following procedures:"

Procedure: You will be asked to complete a packet of assessment instruments, including a brief demographic data sheet; a religiosity questionnaire; a survey concerning your concerns about death; and an organ donation questionnaire.

Duration: The completion of the aforementioned assessment scales should take approximately 20 minutes.

Confidentiality: In an effort to gain open and honest responses, confidentiality will be ensured. Your name will not be associated with the responses you provide. To ensure this you will be assigned a participation number that will not be associated with your name or student number. The research material will only be available to the principal investigator.

Possible Discomforts or Risks: The completion of the above mentioned self-report measures will require a certain level of introspection. Self-examination may lead to temporary change in mood/affect which may be either positive or negative. If any discomfort is experienced as a result of this investigation, you may obtain psychological counseling at the Personal Counseling Services Center, located at 310 Student Union.

Possible Benefits for Society: The results of this study may lead to a better understanding concerning factors that inhibit or facilitate organ donation. Also, the results of this study may be applied to increase organ donation in the general population.

This study is being completed as part of an investigation examining the relationship between religiosity, fears of personal death, and organ donation.

I understand that participation is voluntary, that there is no penalty for refusal to participate, and that I am free to withdraw my consent and participation in this project at any time without penalty after notifying the project director.

I may contact Larry Stein at (405) 624-0867 should I wish further information about the research project. I may also contact Gay Clarkson, IRB Executive Secretary, 305 Whitehurst, Oklahoma State University, Stillwater, Oklahoma, 74078: Telephone (405) 744-5700.

I have read and fully understand the consent form. I sign freely and voluntarily. A copy has been given to me.

Date: _____

Time: _____

Participant Signature: _____

I certify that I have personally explained all elements of this form to the subject before requesting the subject to sign it.

Larry Stein

APPENDIX C

DEMOGRAPHIC FREQUENCIES

Age of Participants (N=400)

Age	Frequency	Percent	Cumulative Percent
18	14	3.0	1.0
19	80	17.1	24.5
20	92	19.7	47.5
21	103	22.0	73.3
22	50	10.7	85.8
23	8	2.0	87.8
24	4	.9	88.8
25	4	.9	89.8
26	4	.9	90.8
28	11	2.4	93.5
34	2	.4	94.0
36	2	.4	94.4
37	4	.9	95.5
40	5	1.1	96.5
44	2	.4	97.3
45	3	.8	98.0
46	5	1.1	99.3
49	3	.6	100.0

Current Level of Education for Participants (N=400)

Class	Frequency	Percent	Cumulative Percent
Freshman	75	18.8	18.8
Sophomore	95	23.8	42.6
Junior	130	27.8	75.5
Senior	11	21.6	96.7
Graduate	13	2.8	100.0

Religious Affiliation for Participants (N=400)

Religion	Frequency	Percent	Cumulative Percent
Agnostic	2	.5	.5
Non-Denominational Christian	72	18.0	18.5
Atheist	6	1.5	20.0
Baptist	116	29.0	49.0
Methodist	52	13.0	62.0
Presbyterian	31	7.8	69.8
Mormon	4	1.0	70.8
Disciples of Christ	20	5.0	75.8
Jehovah's Witness	2	.5	76.3
Pentecostal	10	2.5	79.0
Catholic	56	14.0	93.0
Lutheran	17	4.3	97.3
Episcopalian	6	1.5	99.3
Other	3	.7	100.0

Ethnicity for Participants (N=400)

Ethnicity	Frequency	Percent	Cumulative Percent
African- American	17	4.3	4.3
Native-American	21	4.5	9.5
Other	3	0.8	10.3
Asian-American	4	1.0	11.3
Caucasian	350	87.5	98.8
International	5	1.2	100.0

APPENDIX D

INSTITUTIONAL REVIEW BOARD

APPROVAL FORM

OKLAHOMA STATE UNIVERSITY
INSTITUTIONAL REVIEW BOARD
HUMAN SUBJECTS REVIEW

Date: February 27, 1998

IRB #: ED-98-077

Proposal Title: THE RELATIONSHIP BETWEEN FEARS OF PERSONAL DEATH, RELIGIOSITY,
AND POSTHUMOUS ORGAN DONATION ATTITUDES AND BEHAVIORS

Principal Investigator(s): Al Carozzi, Lawrence B. Stein

Reviewed and Processed as: Expedited

Approval Status Recommended by Reviewer(s): Approved

ALL APPROVALS MAY BE SUBJECT TO REVIEW BY FULL INSTITUTIONAL REVIEW BOARD AT
NEXT MEETING, AS WELL AS ARE SUBJECT TO MONITORING AT ANY TIME DURING THE
APPROVAL PERIOD.

APPROVAL STATUS PERIOD VALID FOR DATA COLLECTION FOR A ONE CALENDAR YEAR
PERIOD AFTER WHICH A CONTINUATION OR RENEWAL REQUEST IS REQUIRED TO BE
SUBMITTED FOR BOARD APPROVAL.

ANY MODIFICATIONS TO APPROVED PROJECT MUST ALSO BE SUBMITTED FOR APPROVAL.

Comments, Modifications/Conditions for Approval or Disapproval are as follows:

Signature: 

Chair of Institutional Review Board

cc: Lawrence B. Stein

Date: March 18, 1998

VITA

Lawrence Brett Stein

Candidate for the Degree of

Doctor of Philosophy

Thesis: THE RELATIONSHIP BETWEEN FEARS OF PERSONAL DEATH,
RELIGIOSITY, AND POSTHUMOUS ORGAN DONATION ATTITUDES
AND COMMITMENT.

Major Field: Applied Behavioral Studies

Biographical:

Personal Data: Born in Pittsburgh, Pennsylvania, April 14, 1969, the son of Sanford and Barbara Stein.

Education: Graduated from Taylor Allderdice High School, Pittsburgh, Pennsylvania, in May 1988; received Bachelor of Arts degree from the University of Alabama in August 1992; received Master of Arts degree from Eastern Illinois University in August 1995; completed requirements for Doctor of Philosophy degree at Oklahoma State University in December 1999.

Professional Organizations: American Psychological Association, Student Affiliate; Rocky Mountain Educational Association, Student Affiliate.

Professional Experience: Counselor, Student Counseling Services, July 1993 to July 1995; Counselor, Coles County Mental Health Center, July 1993 to August 1995; Therapist, Sarah Bush Lincoln Hospital, September 1994 to August 1995; Therapist, Edwin Fair Community Mental Health Center, August 1995 to August 1996; Therapist, Jim Thorpe Rehabilitation Hospital, August 1996 to August 1997. Psychology Intern, Pittsburgh Veterans Affairs Health Care System, September 1998 to September 1999.