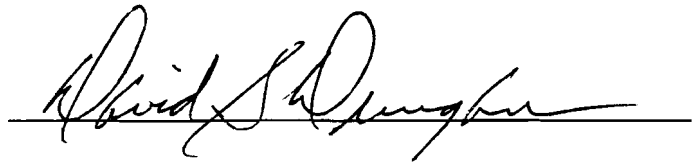


AN ABSTRACT OF THE THESIS OF

Celeste Marie Thomas for the Master of Science  
in Psychology presented on November 29, 1993

Title: Death Anxiety in Driving-Under-The-Influence  
Offenders

Abstract Approved:

A handwritten signature in black ink, appearing to read "David S. Dwyer", is written over a horizontal line.

Research into the personality characteristics of persons who have alcohol use-related problems suggests those individuals experience higher anxiety and depression levels than most individuals. Persons who have high death anxiety have also been shown to experience more anxiety and depression than most individuals. The present study was undertaken to explore the self-reported death anxiety of the driving-under-the-influence offender.

The sample population consisted of 59 DUI offenders referred to a rural midwestern mental health facility for group testing as part of that facility's evaluation procedure. Fifty males and nine females participated in the study. Scores on the Death Anxiety Scale were differentiated by the blood alcohol level of

the participant at the time of arrest and gender using the factorial analysis of variance statistical technique. Using the t test statistical technique, Death Anxiety Scales scores of the subjects were differentiated by family structure to determine if that factor produced a significant difference in the reported scores.

The results of the present study indicated no significant differences existed in the participants' scores on the Death Anxiety Scale, regardless of BAC level, gender, and family structure. While this study suggests those factors do not influence the self-reported death anxiety of DUI offenders, suggestions for additional studies that incorporate a larger female sample population and selection of subjects from a more diverse region are indicated.

DEATH ANXIETY IN  
DRIVING-UNDER-THE-INFLUENCE OFFENDERS

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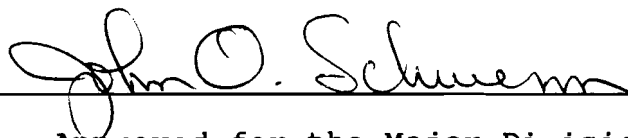
A Thesis  
Presented to  
the Division of Psychology and Special Education  
Emporia State University

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In Partial Fulfillment  
of the Requirements for the Degree  
Master of Science

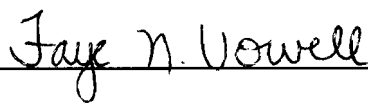
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by  
Celeste Marie Thomas  
November, 1993



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Approved for the Major Division



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Approved for the Graduate Council

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DEATH ANXIETY IN  
DRIVING-UNDER-THE-INFLUENCE  
OFFENDERS

Introduction

The number of individuals arrested each year for Driving-Under-the-Influence (DUI) is alarming. Despite statistics indicating alcohol is a leading cause of death among our nation's youth, individuals continue to drink and drive. Citizens from all economic and age levels have become increasingly aware of the negative consequences that arise from drinking and driving. This awareness has led to the development of such organizations as Students Against Driving Drunk (SADD) and Mothers Against Driving Drunk (MADD).

Individuals arrested for DUI are frequently referred to community mental health centers for evaluation of the severity of the substance abuse problem. Assessment of these individuals culminates in referral to a variety of substance abuse treatment programs, ranging from a single day Alcohol Drug Information School to inpatient treatment.

The treatment programs available for DUI offenders are diverse and frequently based on research into the



personality characteristics of individuals with substance abuse problems. The research into these personality characteristics is as diverse as the programs for treatment of substance abuse currently being employed. Research into the personality characteristics of individuals with substance abuse problems has addressed several dimensions, including anxiety level, self-esteem, sensation seeking, birth order, assertiveness, and ability to deal with stress.

#### Statement of Problem

A significant number of individuals with alcohol use-related problems are arrested each year for DUI. A common procedure practiced by law enforcement employees, when they are confronted with a possible DUI, is administration of a breath analyzer test. The results of this instrument yield a blood alcohol content (BAC), or amount of grams of alcohol in 100 ml. of blood. The BAC level is presented as a percentage, with .10 being the minimal level, in most states, at which an individual is considered to be driving while intoxicated (Ray & Ksir, 1990).

As individuals progress from alcohol abuse to alcohol dependence, their ability to tolerate larger

amounts of alcohol with less impairment of visual and motor ability increases. An individual who uses alcohol minimally will feel highly intoxicated at .10 BAC. However, a moderate consumer of alcohol will probably experience less impairment than the minimal user, while the heavy drinker may feel only slight effects of the substance. This clearly indicates tolerance to alcohol does develop, requiring an individual who is a regular to heavy drinker to ingest more of the substance to achieve the desired effect. Consequently, a higher BAC level will be present in individuals with tolerance development. Minimal users of alcohol would probably be immobilized at a BAC of .15, while those persons with alcohol tolerance, and quite possibly alcohol dependence, would probably still exhibit some motor and visual functioning (Ray & Ksir, 1990).

Research into the personality characteristics of substance abusers has produced contradictory results. However, considerable evidence suggests persons with alcohol use-related problems have higher anxiety and depression levels than most individuals (Marku, 1989; Schuckit & Monteiro, 1988). These personality

characteristics have also been identified as factors attributing to high death anxiety (Gilliland & Templer, 1985-86). The presence of anxiety and depression in persons with alcohol use-related problems and individuals who have high levels of death anxiety suggests these populations may be similar.

#### Statement of Purpose

The purpose of this study is to assess the level of self-reported death anxiety DUI offenders experience. Although previous studies have shown a relationship exists between alcoholism and high death anxiety, no studies have been conducted which use, as participants, DUI offenders.

Because a high BAC level is suggestive of alcohol tolerance, a characteristic of alcohol dependence, it is hypothesized participants with higher BACs will report high death anxiety. However, female DUI offenders with higher BACs are particularly expected to report a higher than average amount of death anxiety.

Because alcohol treatment is often based in systems theory, investigating the family background of participants may provide information relative to programs currently employing this form of therapy. A

therapist who practices this form of alcohol and other substance abuse counseling believes all members of the family must be involved in the treatment of the substance abuser. This approach focuses on the patterns of interaction which characterize family relationships rather than on individual members. Families are viewed as having distinct properties that cannot be understood when focus is on the individual (Erekson & Perkins, 1989). Individuals with alcohol use-related difficulties often come from families in which the parents have divorced or parental separation occurred. With regard to family structure, it is hypothesized those persons who experienced parental separation/divorce will report a greater fear of death.

#### Statement of Significance

This study is significant because it will provide data on levels of reported death anxiety in DUI offenders. DUI offenders are seen at community mental health centers for evaluation of the severity of their substance abuse problem and then referred to either a prevention\education or treatment program based on the results of the evaluation. BAC level at an

individual's time of arrest is often used to determine how serious the client's substance use is, with individuals receiving higher BACs viewed as having a more significant problem.

Because treatment programs for alcoholics and other substance abusers develop out of information gathered through research into the personality characteristics of these individuals, the information gathered through this investigation could be helpful in developing therapy programs which better address the specific needs of this population. Through my own experience, I have learned that treatment programs for substance abusers, whether the addiction is to alcohol or other drugs, do not have an outstanding success rate. This poor level of success could be the result of limited information. There are numerous studies that relate high anxiety to substance abuse and dependence (Himle & Hill, 1991; Kushner, Sher, & Beitman, 1990), but research into what underlies or contributes to this anxiety is not robust. Although death anxiety has been related to alcoholism, little replication of this finding has occurred.

In addition, there is a vast amount of data on

attitudes towards death, but a minute amount of attention has been focused toward understanding death related activities and their relationship to death anxiety. Driving while impaired from the effects of alcohol is a death related activity which involves risking not only the alcohol impaired individual's life, but the lives of other individuals as well.

### Literature Review

A plethora of research has indicated a relationship exists between anxiety disorders and the substance abuse diagnoses. Cox, Norton, Swinson, and Endler (1990) report 10% to 40% of alcoholics have a panic-anxiety disorder. In addition, these researchers found that individuals who have anxiety disorders tend to abuse alcohol and other drugs. In their research, Cox et al. found that when individuals have the dual problems of substance abuse and anxiety, the anxiety problems usually were present prior to the onset of the substance abuse. The use of alcohol and other drugs by individuals with anxiety problems can be seen as an attempt by these persons to self-medicate the resultant anxiety symptoms. The symptoms presented by individuals who have both anxiety and substance use-

related diagnoses are more severe than those exhibited when only one of these diagnoses is present (Cox et al.).

According to Marku (1989), alcoholics commonly report anxiety, depression, and insomnia. It is therefore essential that therapists in alcohol and drug programs be aware of these underlying problems and provide treatment which addresses these issues. Mulder, Sellman, and Joyce (1991) also support treatment of the comorbid, or co-existing, anxiety disorders of alcohol and drug abusers.

Wesner (1990) related the use of alcohol by individuals with anxiety disorders to the tension reduction theory of alcohol use. According to the tension reduction theory, first introduced by Conger (1956), an individual consumes alcohol in an attempt to reduce anxiety and tension. Individuals who consume alcohol in social situations, because it allows them to be less shy, can be thought of as displaying the assumptions of this theory. Use of alcohol to reduce tension can be thought of as providing an individual with negative reinforcement, thus increasing the possibility the individual will continue to use alcohol

in tension producing situations.

Hundelby and Forsyth (1989) studied how an individual's personality and situations can interact, leading to increased desire to drink. The results of the research done by Hundelby and Forsyth indicate individuals have a stronger desire to drink when they are anxious and in stressful, convivial, and boring situations.

The effect of alcoholism on the children raised in the alcoholic household has also received attention in the research realm. In a recent study, El Guebaly, Walker, Ross, and Currie (1990) investigated the impact of parental alcoholism on the adult children. Data indicated the adult children raised in alcoholic homes were more likely than children raised in nonalcoholic households to have drinking problems themselves, including heavy consumption patterns. In addition, the adult children who were raised in alcoholic homes and who also developed alcohol use-related problems were more likely to come from homes in which divorce, and marital separation were frequent factors and these subjects tended to have a greater amount of marital discord than the other participants in the study. El



Guebaly et al. also noted that subjects in the adult children of alcoholics group reported seeking professional help for stress and anxiety problems more frequently than the subjects reared in nonalcoholic homes.

Alcoholic households are characterized by chaos. Children reared in these households are frequently placed in situations of family distress. The chance of an individual becoming a substance abuser has been significantly correlated to distress events occurring within the family system (Zimmerman-Tansella, Donini, Cionmei, & Siciliani, 1988).

The connection between anxiety and substance abuse is firmly rooted in research, leaving little doubt as to the existence of a relationship between these two factors. Research also supports the co-existence of generalized anxiety disorders and depression in individuals reporting high death anxiety (Wesner, 1990).

Investigations into the personality correlates of death anxiety have been conducted for the past 60 years. Consequently, the relationship between death anxiety and several personality constructs, including

locus of control (Hayslip & Stewart-Bussey, 1987), self-esteem (Buzzanga, Miller, Perne, Sander, & Davis, 1989), generalized anxiety (Gilliland & Templer, 1985-86), depression (Gilliland & Templer, 1985-86) and need for sensation seeking (Schafer, 1976) has been addressed. In addition, the relationships between age, gender, socioeconomic status, and occupation (Pollak, 1979-80) to fear of death have been studied. Behaviors such as smoking and risk taking have also received attention in past research on death anxiety (Berman, 1973). The instrument which has been used most extensively in the research on death anxiety is the Death Anxiety Scale (DAS). Templer (1970) developed this self-report inventory which consists of 15 true/false questions. The procedures employed in construction of this instrument indicate it is a valid and reliable instrument.

With regard to gender and level of death anxiety, researchers (Thornson & Powell, 1988) have found women have higher death anxiety than men. Other studies have substantiated this finding (Dattel & Neimeyer, 1990; Hickson, Housely, & Boyle, 1988; Pollack, 1979-80). Hickson et al. found that not only did women have a

higher fear of death, but the higher the death anxiety was, the lower the life satisfaction was. Stillion (1985) attributes high female death anxiety to the emotional expressiveness hypothesis. This hypothesis attributes high death anxiety in women to the willingness of women to admit to their fears. Women are more likely to express troubling feelings while men are less inclined to share their fears. Dattel and Neimeyer controlled for self-disclosure in their experiment, but the results still indicated females have a higher death anxiety than males. Dattel and Neimeyer concluded data collected in their study negated the emotional expressive hypothesis.

Oranchak and Smith (1988-89) found death anxiety scores can be used as predictors of how an individual will react, in terms of displayed mood, when presented with real-life death situations. They also found the relationship between death anxiety and mood is bi-directional. Depression was found to predict high death anxiety and high death anxiety predicted depression and generalized anxiety. People who are anxious, tense, and have a tendency to worry also score high on death anxiety (Frazier & Foss-Goodman, 1988-

89). The DAS has been found to correlate well with instruments measuring the subjective states of depression and anxiety, including the MMPI, Taylor's Manifest Anxiety Scale, State Trait Anxiety Inventory, and the Beck Depression Inventory (Gilliland & Templer, 1985-86).

Individuals who operate motor vehicles while under the influence of alcohol can be viewed as engaging in risk taking behavior. DUI offenders risk their lives, as well as the lives of other individuals, when they choose to drive intoxicated. In a previous study, Thornson and Powell (1990) found no correlation between desire to engage in lethal behaviors and high death anxiety. However, other research (Schafer, 1976) has shown individuals who are bored and see themselves as alienated have high death anxiety scores. These results have been associated with the optimal stimulation theory. According to this theory, all organisms need some stimulation and each organism has an optimal level, or level at which it functions best. Being bored, and thus feeling alone and alienated from society, motivates individuals to seek out situations that meet their sensation seeking needs. Risk taking

behaviors, such as driving while intoxicated, may be attempts to achieve optimal stimulation. If this is the case, DUI offenders could be expected to have higher death anxiety than "normal" individuals.

Cigarette smoking can be viewed as a form of substance abuse and self-destructive behavior. Templer (1972) found a negative correlation between scores on the DAS and the amount of cigarettes an individual reported smoking. This interpretation of this data was that death anxiety may have a limiting effect on the number of cigarettes an individual smokes. Templer's (1972) interpretation leads one to hypothesize that death anxiety may have a limiting effect on self-destructive behavior. Contrary to this finding, research by Berman (1973) found death anxiety scores were unrelated to number of cigarettes individuals reported smoking.

The literature on smoking behaviors suggests alcohol abusers would not have high fear of death. After all, dependence on alcohol is a self-destructive behavior that can be viewed as being as severe as cigarette smoking in terms of the long term consequences to health, and no correlation was found by

Berman (1973) between high death anxiety and smoking behavior.

Alcoholism is a progressive disease culminating in death if allowed to run its course. Research into the relationship between death anxiety scores and alcohol use is extremely limited. However, Sillman (1981) conducted a study that measured death anxiety in an alcoholic population. The results indicated alcoholics have a higher reported death anxiety than previous results for "normal" and psychiatric patients. In addition, the female participants in Sillman's study reported higher death anxiety than the male subjects.

#### Summary

A review of the literature on death anxiety and alcoholism suggests personality characteristics of these constructs overlap. Both anxiety and depression have been identified to be underlying characteristics of both constructs, leading to a hypothesis that a relationship exists between high levels of death anxiety and alcohol dependence. Because higher BACs are indicative of alcohol tolerance, a characteristic of alcohol dependence, persons arrested for DUI who have high BAC levels (above .15) are expected to have

higher scores on the DAS. In addition, females who have BACs falling within the high category are expected to have the highest overall death anxiety. Research that leads to a better understanding of substance abuse and the symptoms associated with the diseases of addiction can be of beneficial use to all treatment programs. After all, in order for treatment to be effective, one must first know what one is treating. The success rate of current treatment programs for alcohol and other substance abuse implies there is more to be known about this population. This study is an attempt to shorten the gap between what is known about this population and what is left to be learned.

Since the passing of legislature in 1982, sentencing for alcohol and drug related crimes has become more strict. It is interesting to note it is not only the drug and alcohol therapist who assesses the severity of the alcohol problem based, to a degree, on the individual's BAC level at time of arrest. Findings of an experimental study done by Lange and Greene (1990) in which these investigators examined how judges decide on sentencing for individuals arrested for DUI indicate BAC level to be one of the determiners

in sentence severity, with those individuals with higher BACs receiving more severe sentences.

The remaining chapters provide the details of methodology used in this study, the results which were obtained, and a discussion of the results, including possible applications for mental health professionals.



## CHAPTER 2

## METHOD

This chapter discusses the sampling procedures, methodology, research design, and instruments used in this study. In addition, the method by which data was analyzed is discussed and ramifications of potential results are examined.

Subjects

The population investigated in this study was composed of individuals arrested for driving-under-the-influence (DUI) and, consequently, referred to a rural midwestern mental health center for evaluation of the severity of their alcohol use problem. More specifically, subjects for this study were group testing participants at the Mental Health Center of East Central Kansas, located in Emporia, Kansas. This mental health center serves the client needs of seven Kansas counties: Lyon, Chase, Wabaunsee, Coffey, Morris, Greenwood, and Osage. Fifty-nine individuals who participated in group testing between May and November of 1993, served as subjects in this study. Of those 59 individuals, 9 were females and 50 were males. The method of sampling used in this study was what is

termed causal sampling. Because the population of DUI offenders is an extremely large and diverse group, inclusion of all participants attending the testing procedure should provide data representative of all individuals who have in the past and will in the future be seen at the Mental Health Center of East Central Kansas for DUI group testing. It can be assumed that the 59 subjects who participated in this study represent all the unclassified and unidentified DUI offenders who have been or will be referred to that institution.

### Materials

Individuals attending group testing at a rural mental health center for purposes related to DUI evaluation were asked to participate in this study. Each participant completed three forms. Subjects read and completed a consent form (see Appendix A) which addressed issues of confidentiality, purpose of the study, and client rights. They also completed a demographic questionnaire form (see Appendix B). This form asked for information about gender, age, marital status of parents, highest education level completed, blood alcohol content (BAC) level at the time of

arrest, and past alcohol use-related legal offenses. The Death Anxiety Scale (DAS) was also included in the materials (see Appendix C). The DAS is a 15 item, forced choice questionnaire. Handal, Peal, Napoli, and Austrin (1984-85) provide the following information regarding the DAS.

This scale was designed to be appropriate for a number of different populations and consists of fifteen true/false type questions. Scores range from 0 to 15, with 0 indicating no death anxiety and 15 indicating high death anxiety. Average scores generally range from 4.5 to 7.0 with a standard deviation slightly more than 3.0. The test-retest reliability coefficient was found to be .83 and a considerable amount of validity data has been provided by Templer (p. 247).

The DAS has also been shown to possess construct and criterion validity (Frazier & Foss-Goodman, 1988-89). Research by Templer (1970) indicates internal consistency of the DAS is .76.

#### Steps and Procedures

The first step, once approval was given by the director of the mental health center, was to train the

individuals in charge of the group testing program. The administrators were informed that the questionnaires used in this study were to be administered before other testing materials. When subjects arrived for group testing, DUI offenders were asked to participate in a research study. The instructors informed the subjects that their participation was optional and would have no influence on the results of their evaluation. Clients were assured by the instructors that all information they provided would be held confidential and no information that could be used by others would be included in the report. Clients were informed that participation in the study would take approximately 10 minutes.

Clients indicating a willingness to participate in the study were then given the research materials. Participants were instructed to answer all questions on each form. The first form completed was the consent form (See Appendix A). Signature of the subject on that form indicated the subject's willingness to participate. After completing the consent form, subjects completed the demographic information form (See Appendix B). The final form completed was the DAS

(See Appendix C). Templer's (1970) DAS was used to measure an individual's self-reported death anxiety. Templer (1970) developed the DAS as a measure of an individual's reactions to death and dying situations. This instrument has been widely researched and data suggests it provides valid scores relative to the death anxiety construct. Both the demographic information questionnaire and the DAS were numbered to protect client confidentiality and to keep the questionnaires from becoming separated. These two forms provided the data to be analyzed. All materials included in this study were kept securely locked in a file cabinet to insure protection of client rights.

#### Statistical Design

Individuals referred to a rural mental health center after receiving DUIs between May and November, 1993, were the subjects included in the sample of this study. Causal sampling procedures were employed because a gender bias was expected to result if the sample size was not adequate for inclusion of gender differentiation. The variable measured was self-reported death anxiety. The independent variables were BAC level, gender, and family structure.

Information about gender, BAC level, and family structure was collected through administration of the demographic information form. Self-reported death anxiety scores were collected by administering the DAS to subjects.

The data collected on the independent variables was categorical. Scores on the DAS were continuous. A 2 x 2 factorial analysis of variance statistical procedure was used to analyze the DAS scores by gender and BAC level. A t test for independent samples was conducted to determine if the family structure variable produced a significant difference in the self-reported death anxiety of the research participants. The alpha level was set at .05 for both statistical analyses.

### Summary

This study focuses on the amount of death anxiety DUI offenders report. Persons with alcohol use-related problems and individuals who score high on the DAS tend to exhibit symptoms of anxiety and depression. The presence of these characteristics in both populations implied that there may be a relationship between death anxiety and alcohol use-related difficulties. It was hypothesized that individuals with high BACs, an

indication alcohol tolerance has developed, would have higher death anxiety scores than individuals who had low BACs.

Past research substantiated females have higher death anxiety scores. Therefore, it was hypothesized females with high BACs would report higher scores on the DAS than males with high BACs.

In addition, individuals reared in homes in which marital separation occurred tend to report more stress and anxiety related problems. These lead to the hypothesis that subjects reared in intact families would have less death anxiety than individuals raised in homes in which marital separation occurred.

The study was conducted by following the steps and procedures previously discussed in this chapter. The results were analyzed using the factorial analysis of variance and t test for independent samples statistical techniques with alpha level set at .05 for both analyses.

The purpose of this study was to gain information about individuals with alcohol use-related problems. Despite the abundance of information available on the personality characteristics of this population,

treatment programs for alcohol abuse/dependence have a poor rate of success, an indication further research into the underlying characteristics of this population was necessary.



## CHAPTER 3

## RESULTS

The dependent variable in this study was self-reported death anxiety as scored on the Death Anxiety Scale (DAS). The independent measures were gender (male or female), blood alcohol level (BAC) of the individual at the time of arrest (BAC  $\leq$  .15 or BAC  $>$ .15), and family structure (intact or divorced). Fifty-nine subjects (9 females and 50 males) participated in the study.

A 2 x 2 factorial analysis of variance statistical procedure was utilized to determine if the independent variables of gender and BAC produced differential DAS scores. Alpha level was set at .05. No significant or main effect interactions occurred between those independent variables and scores on the DAS (see Table 1). The means and standard deviations for males and females by BAC group are shown in Table 2. The mean differences varied slightly, with means ranging from 4.522 to 5.0. The standard deviations range from 1.732 to 3.098, with the greatest variation noted between females who fell in the BAC group .15 or less versus females with a BAC of greater than .15.

Table 1  
Analysis of Variance for DAS Scores  
by Gender and BAC Level

Source of Variation	<u>SS</u>	<u>df</u>	<u>MS</u>	<u>F</u>	<u>p</u>
Gender	.60	1	.60	.09	.760
Bac	.23	1	.23	.04	.849
Gender by BAC	.23	1	.23	.04	.849
Error	350.41	55	6.37		
Total	351.47	58	7.43		

Table 2

Means and Standard Deviations for DAS Scores by Gender  
and BAC Level

---

	<u>Mean</u>	<u>STD. DEV.</u>	<u>N</u>
<b>Female</b>			
BAC < .15	5.000	1.732	3
BAC > .15	5.000	3.098	6
<b>Male</b>			
BAC =<.15	4.522	2.502	23
BAC > .15	4.889	2.470	27
Entire Sample	4.763	2.466	59

---

A t test for independent samples was conducted to compare the DAS scores of DUI offenders from intact families to those from divorced families. Alpha level was set at .05. The t test value of .39 was insignificant indicating the DAS scores of the two groups were essentially equivalent.

### Summary

The present study investigated self-reported death anxiety in DUI offenders. Death anxiety was measured by scores on the DAS. The independent measures were gender, BAC level, and family structure. A 2 x 2 factorial analysis of variance was conducted to determine if the gender and BAC level of the participants produced differential scores on the DAS. A t test was utilized to compare the DAS scores of the two family structure groups. Alpha level was set at .05 for both statistical techniques. Both statistical techniques produced insignificant results.

## CHAPTER 4

## DISCUSSION

In the present study, the self-reported death anxiety of driving-under-the-influence (DUI) offenders was measured using the Death Anxiety Scale (DAS). Subject scores were differentiated by gender, blood alcohol level (BAC), and family structure. The subjects included in this study were 59 DUI offenders (50 males and 9 females) referred to a rural midwestern mental health center group testing program as part of that facility's evaluation procedure for substance related arrest referrals. A factorial analysis of variance statistical technique was utilized to determine if gender and BAC level produced differential scores on the DAS. A t test was applied to determine if family structure generated differences in the participant's self-reported death anxiety scores.

The data from the present study indicates no significant differences in the DAS scores of DUI offenders. The independent variables of gender, family structure, and BAC level did not produce a significant difference in the scores on the DAS.

The results obtained in this study are not

surprising as indicated by the minimal variance of the mean DAS scores for each group. The mean score for females from divorced families of origin, with BACs below or equal to .15 was 5.0 and the mean for females from divorced families, with BACs above .15, was 4.5. No female participants fell within the intact, low BAC group, an indication that a larger sample size should be considered in future research. The overall mean was 4.763. All means of the participants in this study fell within the average range of 4.5 to 7.0 (Handal, Peal, Napoli, & Austrin, 1984-85).

The subjects were representative of those individuals who have received DUIs within a rural midwestern area. Consequently, the results of this study are only generalizable to individuals who reside within that limited area. Therefore, it can be concluded that the results obtained are not representative of all DUI offenders and are only applicable to persons residing within the seven county catchment area of the Mental Health Center of East Central Kansas, the facility at which participation took place.

It is reasonable to hypothesize the lack of

significance denoted in the results of this study may be directly related to the minimal number of female subjects, as indicated by extensive evidence from previous research indicating that females report higher death anxiety than males ( Dattell & Neimeyer, 1990; Hickson et al., 1988; Pollack, 1979-80; Thorson & Powell, 1988). Conducting a similar study that incorporates a larger female sample may result in different findings. However, the results obtained do coincide with Berman's (1973) findings, in which cigarette smoking, a form of substance abuse\dependence, was found to be unrelated to death anxiety scores.

Research into the self-reported death anxiety of DUI offenders is not extensive. While this study suggests no significant differences exist in the death anxiety of DUI offenders, regardless of their gender, family structure, and BAC level, future implications for additional research into this area includes use of a more diverse area for subject selection and studies comprised of a larger female sample.

## REFERENCES

- Berman, A. L. (1973). Smoking behavior: How is it related to locus of control, death anxiety, and belief in afterlife? Omega, 4(2), 149-155.
- Buzzanga, V. L., Miller, H. R., Perne, S. E., Sander J.A., & Davis, S. F. (1989). The relationship between death anxiety and level of self-esteem: A reassessment. Bulletin of the Psychonomic Society, 27(6), 570-572.
- Conger, J. J. (1956). Reinforcement theory and dynamics of alcoholism. Quarterly Journal of Studies on Alcohol, 17, 296-305.
- Cox, B. J., Norton, G. R., Swinson, R. P., & Endler, N. S. (1990). Substance abuse and panic-related anxiety: A critique review. Behavior Research and Therapy, 28(5), 385-393.
- Dattel, A. R., & Neimeyer, B. A. (1990). Sex differences in death anxiety: Testing the emotional expressiveness hypothesis. Death Studies, 14, 1-11.
- El Guebaly, N. A., Walker, J. R., Ross, C. A., & Currie, R. F. (1990). Adult children of problem drinkers in an urban community. British Journal of



Psychiatry, 156, 249-255.

Erekson, M. T., & Perkins, S. A. (1989). Systems dynamics in alcoholic families. Alcoholism Treatment Quarterly, 6(1), 59-74.

Frazier, P. H., & Foss-Goodman, D. (1988-89). Death anxiety and personality: Are they truly related? Omega, 7(1), 45-50.

Gilliland, J. C., & Templer, D. I. (1985-86). Relationship of death anxiety scale factors to subjective states. Omega, 16(2), 155-167.

Handall, P. J., Peal, R. L., Napoli, J. G., & Austrin, H. R. (1984-85). The relationship between direct and indirect measures of death anxiety. Omega, 15(3), 245-262.

Hayslip, B., Jr., & Stewart-Bussey, D. (1987). Locus of control levels of death anxiety relationships. Omega, 17(4), 327-341.

Hickson, J., Housley, W. F., & Boyle, C. (1988). The relationship of locus of control, age, and sex to life satisfaction and death anxiety in older persons. International Journal of Aging and Human Development, 26(3), 191-199.

Himle, J. A., & Hill, E. M. (1991). Alcohol abuse and

the anxiety disorders: Evidence from the epidemiologic catchment area survey. Journal of Anxiety Disorders, 5, 237-245.

Hundelby, J. D., & Forsyth, G. N. (1989). Personality and situation as determiners of desire to drink among problem drinkers. The International Journal of Addictions, 24(8), 755-763.

Kushner, M. G., Sher, K. J., & Beitman, B. D. (1990). The relation between alcohol problems and the anxiety disorders. American Journal of Psychiatry, 147(6), 685-695.

Lange, T. J., & Greene, E. (1990). How judges sentence DUI offenders: An experimental study. The American Journal of Drug and Alcohol Abuse, 16,(1,2), 125-133.

Marku, I. L. (1989). Anxiety and alcoholism. Journal of Clinical Psychiatry, 50(Suppl. 11), 26-29.

Mulder, R. T., Sellman, J. D., & Joyce, P. R. (1991). The comorbidity of anxiety disorders with personality, depressive, alcohol and drug disorders. International Review of Psychiatry, 3, 253-263.

Oranchak, E., & Smith, T. (1988-89). Death anxiety as a predictor of mood change in response to a death

- stimulus. Omega, 19(2), 155-161.
- Pollack, J. M. (1979-80). Correlates of death anxiety: A review of empirical studies. Omega, 10(2), 97-121.
- Ray, O., & Ksir, C., (1990). Drugs, society, and human behavior (5th ed.). St. Louis: Times Mirror/Mosby.
- Schafer, R. (1976). Fascination with death as a function of need for novel stimulation. Omega, 7(1), 45-50.
- Schuckit, M. A., & Monteiro, M. G. (1988). Alcoholism, anxiety, and depression. British Journal of Addiction, 83(12), 1373-1380.
- Stillion, J. M. (1985). Death and the sexes, Washington, DC: Hemisphere/McGraw-Hill.
- Sillman, C. L. (1981). Death anxiety, self-esteem, and locus of control in alcoholics. Unpublished masters thesis, Emporia State University, Emporia, Ks.
- Templer, D. I. (1970). The construction and validation of a death anxiety scale. The Journal of General Psychology, 82, 165-177.
- Templer, D. I. (1972). Death anxiety: Extraversion, neuroticism, and cigarette smoking. Omega, 3, 53-56.

- Thornson, J. A., & Powell, F. C. (1988). Elements of death anxiety and meanings of death. Journal of Clinical Psychology, 44(5), 691-701.
- Thornson, J. A., & Powell, F. C. (1990). To laugh in the face of death: The games that lethal people play. Omega, 21(3), 225-239.
- Wesner, R. B. (1990). Alcohol use and abuse secondary to anxiety. Psychiatric Clinics of North America, 13(4), 699-713.
- Zimmerman-Tansella, C., Donini, S., Cionmei, A. M., & Siciliani, O. (1988). Family factors associated with the use of psychotropic drugs, alcohol abuse, and, minor psychiatric morbidity in the community. Comprehensive Psychiatry, 29(5), 460-466.

APPENDIX A

PLEASE READ THE FOLLOWING STATEMENTS AND SIGN YOUR NAME AT THE BOTTOM OF THIS FORM IF YOU AGREE WITH THEM AND ARE WILLING TO PARTICIPATE IN THIS RESEARCH PROJECT.

I agree to participate in the study by Celeste Thomas. The purpose of this study is to investigate the relationship between demographic variables (gender, family structure, and blood alcohol content) and death anxiety. I understand that I may stop participating in this study at any time, should I choose to do so. I also understand that my confidentiality will be respected and that my name and any identifying information about myself will not be included in the report. I understand that I will be required to provide 15 minutes of my time if I participate in this study. My participation, or lack of participation, will have no effect on my evaluation.

I have read and understand the above information and I agree to participate in this study.

Signed \_\_\_\_\_

**APPENDIX B**

## Demographic Information

1. Date \_\_\_\_\_
2. Age \_\_\_\_\_
3. Sex: male ( ) female ( )
4. Marital status: married ( ) divorced ( )  
widowed ( ) single ( ) seperated ( )
5. Are your parents still married? yes ( ) no ( )
6. If your parents are divorced or seperated, what  
was your age at the time of your parent's divorce  
or seperation? \_\_\_\_\_
7. Are you here because of an alcohol use-related  
offense? yes ( ) no ( )
8. If you answered yes to question #8, are you here  
because of a DUI? yes ( ) no ( )

COMPLETE THE FOLLOWING INFORMATION IF YOU ANSWERED YES  
TO 8.

9. What was your blood alcohol level (BAC) at the  
time of your arrest? \_\_\_\_\_
10. Did you refuse the BAC test? yes ( ) no ( )
11. Have you had any prior alcohol related offenses?  
yes ( ) no ( )  
If yes, please list the charges. \_\_\_\_\_



- 
- 
- 
12. What is the highest educational level you have completed? grade school ( ) high school ( )  
some college ( ) college graduate ( )  
masters level or higher ( )

APPENDIX C

## Death Anxiety Scale

Please circle the following statements True or False as they apply to you.

1. I am very much afraid to die.

True False

2. The thought of death seldom enters my mind.

True False

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

True False

4. I dread to think about having an operation.

True False

5. I am not at all afraid to die.

True False

6. I am not particularly afraid of getting cancer.

True False

7. The thought of death never bothers me.

True False

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

True False

9. I fear dying a painful death.  
True False
10. The subject of life after death troubles me greatly.  
True False
11. I am really scared of having a heart attack.  
True False
12. I often think how short life really is.  
True False
13. I shudder when I hear people talking about a World War III.  
True False
14. The sight of a dead body is horrifying to me.  
True False
15. I feel that the future holds nothing for me to fear.  
True False

TO: All Graduate Students Who Submit a Thesis or Research Problem/ Project as Partial Fulfillment of the Requirements for an Advanced Degree.

FROM: Emporia State University Graduate School

I, Celeste Marie Thomas, hereby submit this thesis/report to Emporia State University as a partial fulfillment of the requirements for an advanced degree. I agree that the library of the University may make it available for use in accordance with it's regulations governing materials of this type. I further agree that quoting, photocopying, or other reproduction of this document is allowed for private study, scholarship (including teaching) and research purposes of a nonprofit nature. No copying which involves potential financial gain will be allowed without permission of the author.

Celeste M. Thomas  
Signature of Author

12/17/93  
Date

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Title of Thesis/Research Project

Doug Cooper  
Signature of Graduate Office Staff Member

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