PERSONAL MEANINGS OF DEATH AND RELIGIOSITY AS PREDICTORS OF DEATH ANXIETY AND DEATH FEAR OF UNIVERSITY STUDENTS

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ABSTRACT

PERSONAL MEANINGS OF DEATH AND RELIGIOSITY AS PREDICTORS OF DEATH ANXIETY AND DEATH FEAR OF UNIVERSITY STUDENTS

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This study had four basic purposes: The first purpose was to examine the dimensions of personal meanings of death (PMDS) perceived by university students. Secondly, understanding how these meanings and self reported religiosity contribute to predict death anxiety; third to predict death fear from PMDS and self reported religiosity. Lastly, to investigate gender differences between females and males in terms of personal meanings of death, death anxiety and death fear.

The sample consisted of 498 undergraduate students from METU, of whom 271 were male and 227 female. Three instruments—Personal Meanings of Death Scale (PMDS), Templer’s Death Anxiety (DAS) and Collet & Lester Fear of Death Scale (FDS)—and a demographic Data Form were administered to participants. Turkish versions of DAS (Ertufan, 2000) and FDS (Ertufan, 2000) were used. Factor analysis was employed to investigate
dimensions of Personal Meanings of Death Scale (PMDS) in Turkish university sample. Secondly, t-test was conducted to investigate gender differences in terms of personal meanings of death, death anxiety and death fear. A stepwise multiple regression analysis was conducted to evaluate how Personal Meanings of Death and self reported religiosity predicted death anxiety and death fear of Turkish University students.

Results of the factor analysis of PMDS revealed three factors, extinction, afterlife, motivation/legacy. Results indicated that there was significant gender differences in terms of “extinction” dimension of death, females had significantly higher mean scores on “extinction” dimension than males. Additionally, there was significant gender difference in terms of death anxiety and death fear, in that, females had higher scores on both death anxiety and death fear. Results of stepwise regression analysis indicated that extinction is the main predictor of both death anxiety and death fear.

Keywords: Personal Meanings of Death, Death Anxiety, Death Fear
ÖZ

ÖLÜME VERİLEN ANLAMLARIN VE DİNDARLIĞIN ÜNİVERSİTE ÖĞRENCİLERİNDEN ÖLÜM KAYGISI VE ÖLÜM KORKUSUNU YORDAMASI

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algılayışlarını belirlemek için Ölümün Anlamları Ölçeği (ÖAÖ) üzerinde faktör analizi işlemi uygulanmıştır. Kız ve erkek öğrencilerin ölüm yükledikleri anlam, ölüm kayıpları ve ölüm korkuları açısından bir fark olup olmadığını araştırmak için t-test analizi uygulanmıştır. Son olarak da ölüm yüklenilen anlam ve dindarlığın ölüm kaygısını ve ölüm korkusunu ne derece yordadığını değerlendirmek için çoklu regresyon analizi yöntemi uygulanmıştır.

Faktör analizi sonucu Ölümün Anlamları Ölçeğinde (ÖAÖ) yok olmuştur, ölüm sonrası hayat, ve motivasyon/geride anlamlı şeyler bırakmak olmak üzere üç faktör belirlenmiştir. T-test analizi sonucunda kızlar ve erkekler arasında ölümün “yok olmuş” boyutunda anlamlı fark olduğu ve kızların bu boyutta erkeklerden daha yüksek ortalama sahip olduğu belirlenmiştir. Ölüm kaygısı ve ölüm korkusu açısından da anlamlı bir fark olduğu, ve kızların ölüm korkuları ve kayıplarının erkeklerden daha fazla olduğu bulunmuştur. Çoklu regresyon analizi sonuçları Ölüm “yok olmuş” olarak algıamanın ölüm kaygısı ve ölüm korkusunu yordadaki en önemli yordayıcı olduğunu göstermiştir.

Anahtar Kelimeler: Ölümün Anlamları, Ölüm Kaygısı, Ölüm Korkusu
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CHAPTER I

INTRODUCTION

1.1. Background to the Study

Death is the only experience that can not be shared and has to be faced personally; and our existence can only be understood within this framework. Death is the key concept in understanding our existence and nature and in becoming more human (Koestenbaum, 1976). Birth is a source for celebration but death is a kind of avoidant and unexpected event, which is source for mourning (Kubler-Ross, 1975). There is distinction between biological death and symbolic/social death. Biological death is assessed by professionals and can be biological (organs cease to function) or clinical (consciousness cease means the individual cease to function). Symbolic death is when individual defines himself/herself as “dead” and psychological death is when professionals label him/her as “dead” (Vernan, 1970).

Indeed, people have tendency to assume that life is predictable, controllable and continuous and these assumptions give us a sense of security that helps to manage daily life stress and anxiety. However, this unrealistic tendency deteriorated or collapsed by death of a loved one or our
own nearing death, which makes people to realize the dissonance of their
own belief system and the experience (Vickio, 2000).

Additionally, people created both common and different attitudes toward
death, such as, some accept death passively, some of them deny, majority,
feel anxiety and bear the fear death (Langner, 2002). There is difference
between anxiety and fear, and therefore the distinction between death
anxiety and death fear needs to be clarified. Kierkegard is the first one who
has made this distinction in terms of death. He claimed that there is a
difference between fearing of something and of “nothing”, and unconsciously
people have tendency to modify their anxiety to fear so that coping becomes
more possible (Camus, 1990). Indeed, an individual can create some coping
mechanisms to protect himself/herself but s/he can not develop a coping
toward nonexistence (Geçtan, 1994). The basic difference is that anxiety has
no real source or threat, but fear has (Yörükan, 1980). Besides, anxiety is
less intense and lives longer, but fear is more intense and occurs in shorter
time. Also, fear is reaction to objective or real threat and anxiety is more
personal reaction to unknown threat. Inner conflicts are more crucial in
anxiety but fear is more rational (Cüceloğlu, 1991). This fear and anxiety may
become extreme and interrupt people’s daily life functioning, seriously
(Langner, 2002).

Feifel (1990) claims that, perspectives and fears concerning the nature
and meaning of death might influence our thoughts and behaviors. Therefore,
our approaches to death may influence the content and even perceived
quality of our lives. Emphasizing awareness of dying or temporality of our lives would make it easier to have values, goals or priorities in our lives (Fiefel, 1990). Beside, “the sooner we accept the reality of our own death, the sooner we can truly start living” (Kubler-Ross, 1974). Life and death are interdependent; they do not exist simultaneously but they are interwoven (Yalom, 1999).

Death is unique to an individual, that is, it is special for that particular person; no other individual can experience another one’s death. Human beings are the only ones known who are aware of their own mortality and its inevitability. This reality has led people to search for meaning in life. Besides, the way people live their lives influence people’s approaching death and the way they approach death effects their quality of life. Actually, even fear of death is a failure in living fully, that is, if death is perceived as suffering then death without really living is “unbearable” (Fromm, 1982).

Understanding the concept of death needs gradual development in various ages and stages; and how we understand and cope with life is very significant in our understanding of death (Pattison, 1977). In terms of developmental stages, understanding of death is changing. Children perceive death at preschool age as a kind of sleep and a reversible kind of temporary absence. The primary concern of those children is being loved and not being abandoned by their parents. School aged children are at concrete operational level of development, so they are aware of the finality of death. Children’s understanding of death begins around the age of 8-10 when they realize the
fact that this is not a temporary separation but an irreversible and inevitable fact. They usually have stages like perceiving death as a sleep and as the loss of life (Hökelekli, 1991).

Adolescents are also aware of finality and irreversibility of death but they can not personalize this, “death happens to other or old ones” is the common view among them. Adolescents have more abstract conceptions about death, such as, darkness, transition, light, nothingness; also, they have religious and philosophical views of death (Santrock, 1999). For adolescence and early adult period this is not the time for death but for full living, they have energy, motivation and plenty of plans to fulfill; therefore, the fact of “death” is very anxiety provoking (Geçtan, 1992). The time of young adulthood is the time for newly set plans, dreams, ideas, career, and relationships to experience; therefore, death is frustrating and disappointing. Therefore, in this era death is anger creating and perceived as unfairness (Pattison, 1977). The participants of this study are this latest age group, who are at the beginning of their life plans. In terms of death concept, young age people are found to be seemingly distant to this concept, “death is not supposed to happen at this age” (Newsome & Dickinson, 2000). Middle age is a transition period and the time for evaluating the rest of their lives, this period is the time for more realization of nearness of death (Geçtan, 1992). The last stage is old age and this is the one that is always associated to death, in modern cultures this is the time when death is supposed to happen (Santrock, 1999). Additionally, old people were found to show least death
anxiety related to their self concept, but middle aged and late middle aged were found to have significantly less death anxieties comparing to younger and older people (Keller, Sherry & Piotrowski, 1984).

The 20th century is the era of dramatic changes, especially advances in technology had very dramatic and amazing impacts on people’s lives. The issue of death and dying is one of them, in that, in the 1900s death and dying were part of daily lives, perceived to occur at any age at any time. However, today this perception has changed in the way that almost the issue of death is ignored; it is almost invisible now, occurring usually in medical places and at old ages. Kubler-Ross (1975) states that people need to understand death concept as part of their lives and should face it, not ignore or avoid it to have better understanding of their existence and to increase the quality of their lives. Additionally, it does not have to be catastrophic or destructive, but positive or constructive part of life, as well (Koestenbaum, 1976).

Culture is one component in determining people’s thoughts and behaviors, and it is the applicable to death approaching behaviors. People’s behaviors are mostly influenced by their culture and this is true for death as well. Pattison, (1977) claims that contrary to western cultures, in primitive cultures such as African, death is not an end or destruction of existence, but it is a part of continuum eternal process. There are four cultural attitudes toward death, which are death denying (like in western cultures), death defying (dying for ideology, cause), death desiring (suicidal thoughts or desire others’ death due to anger, frustration) and death accepting (Pattison,
The last one, death accepting, is perceiving death as a natural and an integral part of life. According to Pattison (1977) death became a taboo in western society, in that, even it is one of the major life events in life, although, it is usually ignored.

Religion is another complex concept in dying process because some research has found that it has positive effects, whereas some has found negative, some has found no relationship between religion and the dying process. According to religions, death is not an end but the beginning of a new and real life, which influences the way people perceive death and life simultaneously (Yıldız, 1994). A study with dying people showed that philosophy and theology are not that significant in dying process but daily life coping strategies are more important in coping with death (Pattison, 1977). In one study, religious people were found to be less anxious about death, and young adults were more worried about their future, indicating the religion component as a factor to overcome death anxiety. However, older adults, even non-religious ones passed through some life stages, which in turn lessened their anxieties and fears about death (Richardson, Berman & Piwowarski, 1983). Cüceloğlu (1991) claims that people who have strong religious commitments have more tendency to accept their own and significant others’ death. Kubler-Ross (1974) claims that it is not important what people believe but how genuinely they believe, in understanding and going through the appropriate stages of dying, which are denial, anger / frustration and acceptance.
Meaning is something that individual himself imposes and also relates to social variables; so, it differentiates accordingly. Vernan (1970) claims that “the meaning of death is largely related to meaning of birth”, and any meaning exists in a larger system of meaning configuration. People’s perception of events is very influential and crucial as this directs their behaviors. Meanings of death are also much correlated to religious or spiritual aspects as well, and death has a very profound role in religious theories. Meanings of death functions as the key element in how to behave in death related issues. Both empirical and non-empirical (non-physical) characteristics are important in shaping meanings of death. However, only human kind is aware of past-present dimension and therefore meanings of death are very much influenced from what happened to that individual and other people in the past. This is the subjective reality of that particular person and may not refer to another individual. Different individuals and different groups have different conceptions and meanings of death (Vernan, 1970).

Having established some important variables, age, culture, religion, are seem to be influential in death anxiety and death fear; however, considering predicting effects some other predictors are valuable to be mentioned. For instance, some research report that, self rating (reported) religiosity was the major predictor of death anxiety (Feifel & Branscomb, 1973) Another study summarized predictors of death anxiety in a meta analytic study and reported that lower ego integrity, having more physical and psychological problems, and again religiosity were main significant predictors.
of death anxiety (Fortner & Neimeyer, 1999). Additionally, having negative attitude toward or meaning of death was reported to be a good predictor of having higher death anxiety among young adults (Neimeyer, Holcomb & Moore, 1993).

Most of the studies concentrate on only perceptions or attitudes about death, comparing age and gender (Abdel-Khalek, 1999; 2000-2001; Schumaker, Barraclough & Vagg, 1988), and others only on negative emotions about the concept of death, like fear and anxiety of death (Holcomb Moore & Neimeyer, 1993). However, related to theoretical background and some research findings we need to study both cognition and feelings together, as they are very interdependent in nature (Cicirelli, 1998; 2001).

1.2. Purpose of the Study

This study had four basic purposes: The first purpose was to examine the dimensions of personal meanings of death perceived by university students. Secondly understanding how these meanings and self reported religiosity contribute to predict death anxiety and, thirdly to predict death fear. Lastly, to investigate gender differences between females and males in terms of personal meanings of death, death anxiety and death fear.
1.3. Significance of the Study

The significance of this study could be explained in terms of five aspects. The first one is in terms of educational setting, that is, students who lost their intimate ones or significant others are very vulnerable to have behavioral changes. This loss could inhibit the learning process and therefore by understanding how young people view the concept of death teachers and school staff could be informed and even trained to help them to adjust better and lessen problems about school tasks (Evans & Walters, 1999). Besides, it is found that, young adults need more open conversation with their families during the time of significant loss, but they do not receive enough support from them (DeMinco, 1995). Therefore, this study would contribute to understanding of how to support young adults in the time of loss of loved ones. It is very valuable to understand personal meanings of death to clarify misrepresentations, misconceptions and unrealistic attitudes toward death (Weller, Florian & Tenenbaum, 1988). People share similar attitudes or beliefs when death occurs, however if they learn to help each other in those times and be really interested in “why” people behave in such manners in crisis time, they can have more authentic and complete lives, and can also have more constructive and positive attitudes toward death (Kubler-Ross, 1975).

Studies on death issue in Turkey in terms of age group and including both cognitions and feelings together are limited and focusing on different
dimensions of death in a comprehensive manner, would take interests of researchers to this subject. Another significance of the study is being first to establish personal meanings and fear and anxiety about death together, by having contribution of religion component in Turkish context.

The fifth significant part of the study is that data could be source for suicide preventive programs. Research findings indicate that significant death anxiety contributes to individuals’ psychopathology (Fanos & Nickerson, 1991; Reimer & Templer, 1995). Research indicates that attitudes toward life and death influence suicide thoughts and behaviors of young adults (Payne & Range, 1995). This study could contribute as valid data in understanding Turkish students and young people’s tendencies toward death and therefore in developing some preventive programs and methods for suicidal acts.

1.4. Definition of Terms

Death: “Cessation of all bodily functions” and this cessation require biological, emotional and cognitive functions’ cessation. It is irreversible, inevitable and universal for all people (Feifel, 1990).

Thanatology: The study of death, dying and grief. (www.thanatology.com)

Meaning : Meaning is the pattern or way in which human being selectively attend to a thing (Vernan, 1970).
**Death as Legacy:** Perceiving death as “one’s achievements, noble death, triumph over adversaries and provision for heirs can be recognized for posterity” (Cicirelli, 1998).

**Death as extinction:** Perceiving death as “loss of earthly pleasures like loved ones, dreams, health, existence itself” (Cicirelli, 1998).

**Anxiety:** “emotional response to an unknown threat or emotional reaction without any real reason” (Erkuş, 1994)

**Fear:** “emotional response to a known or real threat” (Erkuş, 1994).

**Death Anxiety:** “the thoughts, fears and emotions about that final event of living that we experience under more normal conditions of life” (Nizamie, Singh & Singh, 2003).
CHAPTER II

LITERATURE REVIEW

This chapter, which consists of five sections, devoted to the theories and previous studies related to death issue. The first section presents theoretical background on anxiety and fear of death. The second section provides information about the relationship between religion and death. The third section reveals research studies related to death meanings. The fourth section overviews the research on death anxiety and death fear; and the last section consists of studies on death anxiety and death fear conducted in Turkey.

2.1. Theoretical Background

There are three main approaches to analyze death anxiety and death fear, but before presenting them some other views need to be mentioned. Kubler-Ross (1975) claims that, it is not the death itself, but the death to our own imminent being or to the ones that we love that is anxiety provoking. There are several ways to respond to death such as, depression or showing psychotic reaction or investing oneself to religion. Indeed, being more involved with others is a way to respond to this anxiety, as human beings are social beings, and losing relationship with a significant one in adulthood is
more crucial than losing the life itself (Kubler-Ross, 1975). According to Rank (1929), there is the basic feeling of “fear” in people and this fear sometimes appears as death fear and sometimes as the fear of living. Indeed, the fear of death is a fear of being extinct or disappearing both physically and psychologically. According to Becker (1973), life is unpredictable and chaotic, and in order to survive people need to repress their vulnerability and suppress their own mortality. As a matter of fact, this process leads to a kind of existence mythology which is rationally constructed; therefore, reality is our own construction in order to exist. Besides, Becker (1973) claims that fear of death is innate and all people have this fear; this fear influences all other fears in turn. There is consensus on the thought of “death fear is universal and no man could ever been able to escape from this fear” (Feifel, 1959).

As mentioned before, people develop different perceptions of death concept according to their developmental stage, and the ultimate goal is to reach emotional maturity, which is a kind of ability to utilize and tolerate the ambivalence of our feelings. This maturation goes through life cycle beginning with child’s grasping the meaning of identity. A person, who has little sense of being, or is less aware of personal identity, would not have any sense of non-being, such as, children or mentally retarded people. (Pattison, 1977).

One of the important theoretical approaches in understanding death anxiety and fear is Freudian approach, which claims that unconscious feelings are immortal, and the fear of death comes from this unconscious part
of an individual (Freud, 1925a). Freudian approach claims that anxiety of death is due to separation and being castrated. According to Freud the aim of life is death, so the war between two polar (life and death instinct) shapes the individual and motivates behaviors. Indeed, from this perspective everything that is left from sexual or libido part is under the “death instinct”, which is an unconscious will to go back to non-being stage. The death instinct shows itself in the forms of, violence, destructiveness, sadism-masochism (Freud, 1925b). Psychoanalytic view is crucial in analyzing death anxiety and death fear because it has integrated “death” concept into its framework in a very comprehensive structure. According to this approach, anxiety has its roots in unconsciousness and fear from conscious, which is really perceived threat. Fear of death represents that the situation of life is being valued more than death, and therefore one of the main reasons for death fear is the will to live (Freud, 1936). Fear of being unloved is another dimension of Freudian approach to death fear. This is a process which occurs unconsciously and represents itself as the fear of death in conscious level. This resembles the attachment theory, which claims that the separation of child from parents or being abandoned means death for a helpless child. This process represents itself in adult life, when the need for protection and love is associated with fear of death. Therefore, “death instinct” can be interpreted by the state of being abandoned and/or not being loved during childhood. However, not only parents but also external world has responsibility for this fear, in that, external world itself is anxiety creating to some degree. Indeed, unconscious has
some hostility, guilt, fear of birth and parents are there for lessening and
creating a confident place for ego. On the other hand, anxiety is a kind of
signal for a “flight” response. Not only external danger but also internal one,
is a threat to satisfaction of one’s wishes; or potential injury is anxiety
provoking and motivates people to repress this anxiety.

According to Freud, all beliefs in afterlife are a kind of “denial” of
death, simply meaning that the knowledge of the death can not be the end of
life. However, defensive reaction is different, that is, people ignore death or
thoughts about death due to too much anxiety. This is called “defense” as
they are still aware of what happens when someone dies (Freud, 1946).
Psychoanalytic approach emphasizes biological factors, like instincts, in
death anxiety. Freud claimed that death instinct (thanatos) is universal and is
the opposite side to life instinct (eros). Life instinct is not limited to sexual
drive, but also includes love and life; on the other hand, death drive is
sadistic and destructive. For instance, suicide is a kind of event which occurs
under the process of self destructive forces, which overcomes the self
preservation or libido forces (Freud, 1925b).

According to existentialist approach, there are existentialist
psychodynamics, which are the conflicts of the nature of existing. This side of
existence has four ways: loneliness, time, freedom from daily life and
salience; but they usually happen after some extreme experiences, like death
of a loved one. If those four phases are managed successfully then four
basic anxieties appear, which are freedom, isolation, meaninglessness and
death (Yalom, 1999). The reason for existentialist conflict is awareness of one's own death and its inevitability, and the will to exist (Yalom, 1999). Besides, Yalom (1999) puts forward that death anxiety is a result of the dynamic between "awareness of inevitability of death and wish to continue to be". Existentialist philosophers were very interested in this subject, such as, Socrates, Heidegger, Kierkegaard, and Sartre. For Socrates, death is "blessing" by ending the pain of life. If afterlife is true (existentialists do not accept afterlife) then a man can express his ideas without any fear of execution (Olson, 1962). Sartre was influenced by the views of Heidegger and claimed that "death is the only thing that nobody can do for me". Existentialist approach breaths from death, and insists on the idea that life is only meaningful in the shadow of death; for this approach, death fear or anxiety is due to resistance toward death, not consciousness about it (Olson, 1962). There are three claims of phenomenological existential analysis first, people can develop understanding of meaning of both being and individual, second, our consciousness is free to choose among world views and take full and free responsibility in being individual and overcoming death; third, people have freedom to choose individualistic or religious world views or both at the same time (Koestenbaum, 1976).

Existential view concentrates firstly on subjective inward of person and then on values, meanings and existence of human being. This is the reason behind the focus of existentialists on the issue of death. Facing and thinking of one's own death leads to understand the totality of life. Therefore, the fear
of death is mainly brought about by separation anxiety, in which a child is afraid of being abandoned by the mother; similar to an individual who is afraid of separation from life (Olson, 1962). Anxiety here is not an emotion, psychopathology or ego defense but a “cognitive and informing phenomenon”. It helps people to gain insight into consciousness structure. Fear of death in existential approach also relates to whether existing is authentic or not. Indeed, a person who can not achieve belongingness to others and exists as being dependent on others feels angry and hostile; therefore, there is strict relationship between not being able to exist and fear of death (Geçtan, 1994). Terror Management Theory, based on existentialism, is a more recent theory claiming that human beings have basic anxiety of death; however, people as all species do, have a tendency to self preservation. This tendency and awareness of one’s own death creates a situation of terror, which turns out to be death anxiety and death fear (Greenberg, Arndt, Simon, Pyszczynki & Solomon, 2000).

Kelly (1955) proposes that “People actively construct their worlds”. This perspective claims that as people construct their worlds they can reconstruct it, called “constructive alternativism”. According to Niemeyer, “the attempt to reconstruct the world of meaning is the central process in the experience of grieving” (cited in, Vickio, 2000). There are five assumptions of constructivism a) people are active agency b) people constantly organize their experiences by “tacit”, emotional meaning making process. c) People are self focused d) People are socially and symbolically related to their
Meaning making process is lifespan (Mahoney, 2003). People are like scientists, they formulate and test hypotheses and if needed, they can change them, or modify those hypotheses. Kelly (1955) claims that there is hierarchical organization of constructs, ones of which are superordinate constructs and they are more resistant to change. Those constructs are all at different cognitive awareness levels. People tend to have or create meanings which can be either positive or negative. Therefore, reality is our own construction and in order to survive we construct a kind of existence mythology (Pattison, 1977). In constructivism organism is more proactive, there is unconscious ordering process, and thoughts, feelings and behaviors are interdependent expressions of individual in life span process; and there is interaction between self and social systems (Mahoney, 1995).

Becker (1973) suggests that to have or find a meaning in death, people need to live heroically, that is, facing with the concept of death. “Reality can not be totally known” is accepted by all recent epistemic controversies. As we can not construct reality so we can not construct the truth. However, we can construct theories about what particular events mean to us. Indeed, having or giving specific meaning to an event, concept or experience might have a causal result. This “meaning giving” is not the cause itself but a way of interpreting events, which may include casual aspect of death anxiety and death fear (Becker, 1973).

People tend to have plans about future but there is no predictability in such an ambiguous world; this tendency is a kind of tendency to have control
over their lives. However, the issue of death is the only powerful one to remind people of that illusion of predictability, controllability and continuity of our lives (Vickio, 2000). The dissonance between what we believe and what we experience brings people to construct new systems of beliefs. Constructivists believe that reality is out of reach, and people impose their individual or collective thoughts, beliefs and ideologies on our world, so what we live is all human construction (Niemeyer & Mahoney, 1999). Considering negative approaches toward death, constructivist approach is the most profound one in helping professionals and people to approach death authentically and cope with death anxiety and fear.

2.2. Religion and Death

Religion has always become a major source of release and a kind of shelter from the reality of death. Religion is a complex phenomenon including the content of belief or theology, intensity, frequency of participation in religious life and personal meaning of religion (Pattison, 1977). Meaning studies conducted on dying people show that there is no consensus of religious effect on attitudes and behaviors of those people toward dying. All religious traditions have strong meanings given to life and death, and therefore anxiety resulted from the inevitability and preoccupation with death has strong correlation with religiosity (Kastenbaum & Costa, 1977).
Religiosity can be defined as “commitment to religious feeling and sentiment” and religious orientation can be differentiated as intrinsic and extrinsic, the former one reflects “centrality of faith to one’s life” and the latter one is “utilitarian view of religion” (Neimeyer, Wittokowski & Moser, 2004). Interestingly intrinsic religiosity was found to have negative correlation with death anxiety, and the latter one is positively correlated. (Thorson- Powell, Abdel-Khalek & Beshai, 1997). Religion, religiosity and belief in afterlife were found to be negatively correlated with death anxiety (Alvarado, Templer, Bresler & Thomas- Dobson, 1995). Allport (1950) distinguished between extrinsic and intrinsic religiosity, and defined the former one as being involved in religion for the sake of others or just for relief from personal problems; and the latter one as applying religion for the sake of religion itself, or for God. Intrinsically religious people were found to have less death anxiety than extrinsically religious ones. Also, people who commit the religious rituals more were found to show less death anxiety (Templer, 1972). Alvarado (1995) reports that people who are more involved in religion or who show higher self reported religiosity are less anxious about death than less religious people.

Religious or spiritual aspect can be taken inside the concept of “continuation of soul”, that is, all religious beliefs have some type of afterlife/existence mythology, reject belief in finality; their future concerns are also “about” and “after grave”. Religions also help the men to protect himself from destructive part of death, and adjust to death and they are usually
promising the immortality of person, which is comforting and relaxing (Vernan, 1970). Indeed, man himself created or developed the idea of afterlife to protect himself from the terror of unexplainable and inevitable fact of death (Vernan, 1970). Freud is somehow agreeing with the idea that “soul” and “afterlife” are created by man due to the terror of death and lack of understanding. This is the main reason of religion to exist, as religious doctrine claims that afterlife is more desired than this life on earth (Freud, 1918). Lester (1970) reports that, people who had higher religious orientation were found to have less fear of death.

2.3. Research Studies Related to Death Meanings

The meaning or interpretation of death can vary from person to person, and from culture to culture with usually negative cognitions attached (Abdel-Khalek, 2004). The basic step in understanding and analyzing people’s attitudes and behaviors toward any issue or concept is to understand how they perceive it. Personal meanings given to death may have impact on how a person reacts to death, lives his/her life, “preparation for death” and fears about death (Cicirelli, 2001). Perception or meanings can be defined as mental representations of people’s cognitive constructs (Nadaeau & Winchester, 1998). Meanings include schemas or structure about death and these schemas change by maturation and experience, like
greater exposure to death through media, more discussion about death issues or increasing experience with death (Noppe & Noppe, 1997). Perceiving death as extinction or afterlife are the two most commonly appearing meanings about death in literature (Durlak et al., 1993; Holcomb et al., 1990). Cicirelli (1998) reported four meanings (extinction, afterlife, motivator, legacy) given by young and older adults to death. Noppe and Noppe (1997) have found that death means separation for younger adolescents and older adolescents worry about the losses. Cognitions and meanings can not be detached from emotional aspect, especially in such cases which lead to intensive affect, like death. Additionally, in another study death constructs or meanings of death were investigated with 504 students from mid-south universities in the U.S., and content analysis of free response narratives was applied. Results showed that 60% of the students perceived death as purposeful or involving continued existence (kind of afterlife). The rest 40% were found to have tendency to see death as non existence and associated with negative emotions; females were more likely to have that kind of meaning and feeling toward death. Respondents with negative feelings had more death fear in general (Neimeyer, Holcomb & Moore, 1993).
2.4. Research Studies Related to Death Anxiety and Death Fear

Fear of death is natural because this is a kind of sleep without dreams, no any conversation with others, and which is endless (Kubler-Ross, 1975). Gender is the first factor in predicting, or significantly related to, death anxiety and death fear; females usually have higher scores on these negative emotions (Cicirelli, 1998; 2001). A study with college aged and old aged people showed that females have significantly higher scores on death anxiety especially about afterlife factor (Keller, Sherry & Piotrowski, 1984). This study also showed that old age people have less anxiety about death than younger and middle aged people (Keller et al., 1984). Most research state that there is significant difference between genders, females showing higher death anxiety than males (Abdel-Khalek, 1998; 2000; 2000-2001; Rasmussen & Johnson, 1994). Schumaker et al. (1988) reported that Australian university students have higher death anxiety on DAS scores than Malaysian students; and in terms of gender, females had significantly higher death anxiety scores in both samples.

Age, gender, SES, recent experience with death of personal acquaintances, marital status and number of children, religious self rating, were all employed to predict death anxiety and self rating religiosity was the only powerful one to predict death anxiety (Feifel & Branscomb, 1973). Additionally, research shows that general anxiety is highly correlated with death anxiety (Abdel Khalek, 1997; 1998; 2000-2001; Templer et al., 1990).
Similarly many studies were conducted to explore possible correlates and predictors of death anxiety and they were summarized with the conclusion that lower ego integrity, more physical and psychological problems, and religiosity are the main factors in predicting high death anxiety in old people (Fortner & Neimeyer, 1999)

Death anxiety is also related to different aspects, such as, the dying process, the consequences of death or the fact of death itself (Beg & Zilli, 1982). Indeed, for the Islamic sample the “afterlife” or “punishment in afterlife” has found to be more correlated to fear of death, and it is not surprising as Islam is the religion of focusing and accepting afterlife as a fact and as immortal (Abdel-Khalek, 2002). Sterling and Horn (1989) reported in a study that there is relationship between Marcia’s four ego stages and Templer’s Death Anxiety Scale (DAS), and also college male students who were at the moratorium stage of ego status had higher scores on DAS than males on other ego status.

Traumatic experience was found to be another significant factor in influencing people’s feelings toward death, and the study investigating this difference showed that there is a significant difference between normal populations not experienced any war and significant loss from their family and those who did. Indeed, Bosnian people who lived through the war and especially those who lost their significant others were found to have lower death anxiety than participants in İzmir, who did not experience any of these (Yıldız, 1999)
Studies on death anxiety are limited to western cultures usually and insufficient studies have been conducted to understand determinants of death anxiety. Suhail and Akram (2002) conducted a study with Muslim Pakistan participants and they found that females, older people and less religiously oriented ones have greater death anxiety. According to Yalom (1999), death anxiety is somewhat related to life satisfaction; so, living it fully with less regrets is very determining in decreasing death anxiety.

2.5. Research Studies Related to Death Anxiety and Death Fear conducted in Turkey

The literature of death is limited in Turkey, and especially meanings of death and fear were not studied together. The first research “Feelings of Istanbul citizens about death” was the first research about death from psychological perspective conducted in Turkey, in 1938 (cited in, Karaca, 2001). The results were interesting; in that, Turkish people were found to have less or almost no fear from death and accepting death as faith or resignation.

Research investigating the effects of SES, gender, age and religiousness on approaching death among Turkish people shows that young males who have lower religiousness had more belongingness to life; and lower SES people showed more dependence on religion in approaching death (Ebirı, 1971). Akpınar (1988) conducted a similar study to understand
how particular gender and SES level is influential in understanding death concept among children, and it was found out that among primary school students SES level is significantly contributing to their conceptualization. Indeed, there was a significant difference between medium-high SES students and low SES students in the understanding of “universality” dimension of death. SES level was a significant correlate of death anxiety among old people, as well.

Studies exploring the effect of religiosity on death anxiety and death fear in Turkish context do not have consensus on their results. Hökelekli (1991b) reports that fear of death and death anxiety correlated with personality factors, which reflects psychological aspect not religious. However, Hökelekli (1992) as opposed to his first study found that religious oriented people had more positive thoughts on death issues, and there were no gender differences on this. Additionally, there was a strong relationship between fear of death and religious belief in a study conducted with Thorson Powell Death Anxiety scale (Karaca, 2000). Yıldız (1998) conducted a PhD dissertation with 555 university students on death anxiety and its relationship with religiosity, having four dimensions of emotion, knowledge, belief and behavior of religion, and results were striking that positive correlation was found between death anxiety and religiousness.

Özkan (1984) reported that the most common anxiety between the ages of 15-17 is death anxiety. Besides, it was found out that 40% of those young people have specific fears of painful death in a world war and anxiety
about afterlife issues. Şenol (1989) conducted a study to investigate some variables influencing death anxiety and death fear among 120 old people and it was reported that females show more death anxiety than males, and those who were in lower SES level and have serious health problems appeared to have higher death anxiety and death fear.

Some studies investigated the reliability and validity of death anxiety, death fear and death depression scales. Yaparel and Yıldız (1998) conducted a study to investigate reliability and validity of Templer’s Death Depression Scale (TDDS) in a Turkish sample. This scale was applied together with Templer’s Death Anxiety Scale (DAS) and “Beck Depression Inventory” and “State –Trait Anxiety Inventory” among 100 participants. Results showed that TDDS is reliable and valid enough to be used in studies with “normal population”, people who were not diagnosed as mentally ill. Another similar study investigated the reliability and validity values of Templer’s Death Anxiety Scale (DAS) and Collet and Lester’s Fear of Death Scale’s (FDS) dimension of “fear of one own death” (Ertufan, 2000).

Yıldız (1999) also conducted a research revealing the impact of experiencing war and traumatic significant others’ loss on death anxiety, and concluded that those who experienced war, had lower death anxiety than normal population, not experienced any war. Additionally, cross-cultural comparison between western and Turkish culture revealed that there is significant difference between those two cultures in terms of meanings given to death and attitudes, and even in tradition of grieving. However, it is also
stated that rapid changes in culture in Turkey is in the process of being western, therefore, those major differences will probably diminish in the near future (Karaca, 1999).

Another study conducted in Turkey was a meta-analysis on the issue of death, a comprehensive study analyzing studies conducted on death and attitudes toward death. This study showed that, religiousness, age, gender, job, SES level were most commonly investigated independent variables in death topic. All these variables, except age, were found to be significantly correlated with death anxiety and death fear, in most studies (Yıldız, 1994).

Having established literature on death anxiety and death fear in Turkey, it is clear that studies on both research unifying meanings given to death and feelings toward death issue are limited. Therefore, this study is valuable in investigating both cognition (meanings) and feelings about death together.
CHAPTER III

METHOD

This chapter presents the details of methodological issues in six sections. Firstly, research questions of the study were identified. The second section contains students’ characteristics participated in this study. Third section presents the data collection instruments and the fourth part deals with procedure followed. Fifth part provided data analysis procedure employed to data and finally limitations of the study were presented.

3.1. Overall Design of the Study

The study had four basic purposes: The first purpose was to investigate the dimensions of personal meanings of death scale perceived by university students. Secondly, understanding how these meanings and self reported religiosity contribute to predict death anxiety. Third purpose was to show how those predictors contribute to predict death fear. Lastly, to investigate gender differences between females and males in terms of personal meanings of death, death anxiety and death fear. Four instruments – Demographic Data Form, Personal Meanings of Death Scale (PMDS), Death Anxiety Scale (DAS) and Collet & Lester Fear of Death Scale (FDS) - were administered to 500 students, based on convenient random sampling.
Factor analysis was conducted to investigate reliability and validity of PMDS in Turkish sample; t-test and stepwise regression analysis were carried out to analyze the data.

3.2. Research Questions

1) What are the dimensions of personal meanings of death scale perceived by the students?
2) Is there a significant difference between female and male students in terms of personal meanings of death, death anxiety and death fear?
3) To what extent personal meanings of death, religiosity and “frequency of applying religious rituals” predict death anxiety?
4) To what extent personal meanings of death, religiosity and “frequency of applying religious rituals” predict death fear?

3.3. Participants

Firstly, five faculties and thirty seven departments of Middle East Technical University were listed from the METU General Catalog (2003). The total number of students at undergraduate level was about 11.770 and four percent of them were selected, which is about 470 students. However, in order to minimize the missing value effects the data was collected from 500 students, and by excluding two of them with empty responses, four hundred
and ninety eight participants were left. They were all METU undergraduate students, whom of 271 were male and 227 were female, selected by the method of convenient random sampling. The mean age is 21.09, age ranging from 17- to- 29. The present study was carried out with a sample of 498 undergraduate university students who were freshmen, sophomore, junior, and senior grades from 5 faculties (Faculty of Education, Faculty of Art and Sciences, Faculty of Architecture, Faculty of Economic and Administrative Sciences, and Faculty of Engineering) of METU. The numbers and the proportion of the sample were shown on the Table 3.1

Table 3.1. Percentages and the number of the students in each grade participated in the study

<table>
<thead>
<tr>
<th>Faculty</th>
<th>Fresh.</th>
<th>Sopho</th>
<th>Junior</th>
<th>Senior</th>
<th>Total</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Faculty of Architecture</td>
<td>-</td>
<td>-</td>
<td>27</td>
<td>1</td>
<td>28</td>
<td>5.6</td>
</tr>
<tr>
<td>Faculty of Art and Science</td>
<td>19</td>
<td>10</td>
<td>24</td>
<td>23</td>
<td>76</td>
<td>15.3</td>
</tr>
<tr>
<td>Faculty of Economics and</td>
<td>18</td>
<td>20</td>
<td>24</td>
<td>22</td>
<td>84</td>
<td>16.9</td>
</tr>
<tr>
<td>Administrative Sciences</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Faculty of Education</td>
<td>6</td>
<td>27</td>
<td>2</td>
<td>27</td>
<td>62</td>
<td>12.4</td>
</tr>
<tr>
<td>Faculty of Engineering</td>
<td>65</td>
<td>46</td>
<td>64</td>
<td>73</td>
<td>248</td>
<td>49.8</td>
</tr>
<tr>
<td>Total</td>
<td>108</td>
<td>103</td>
<td>141</td>
<td>146</td>
<td>498</td>
<td>100</td>
</tr>
</tbody>
</table>

31
3.4. Instruments

Four instruments were used in this study. First instrument was Demographic Data Form including questions about gender, age, department, faculty, grade level; self reported religiosity and frequency of applying religious rituals (see appendix A). Second instrument was the Personal Meanings of Death Scale (PMDS) developed to determine meanings given to their own death developed by Cicirelli (1998) (See appendix B). Turkish version of PMDS was conducted in the present study. Third instrument was Turkish version of Templer’s Death Anxiety Scale (DAS) (Ertufan, 2000) (See Appendix C) to have anxiety scores; and the fourth instrument was Turkish version of Collet and Lester’s Fear of Death Scale (FODS) (Ertufan, 2000) (See Appendix D) to measure university students’ fear levels regarding their own death.

3.4.1. Personal Meanings of Death Scale (PMDS)

The original Personal Meanings of Death Scale was constructed among university students age ranging from 19-53; and the preliminary 30 statements were chosen regarding the classic death and dying literature (Cicirelli, 1998). A 5 point Likert-type scale was used ranging from 1 (strongly disagree) and 5 (strongly agree) measuring to what extent each of the statement represents meaning of death personally. First, preliminary analysis
of the original scale was conducted to 150 participants and eigenvalues greater than 1 were extracted, with 17 items explaining 64% of the total variance in meanings statements. Using varimax rotation, four factors (Extinction, Afterlife, Motivator and Legacy) were included in further analysis of study (Cicirelli, 1998). Internal consistency reliabilities were .72 for Legacy, .73 for Afterlife, .70 for Extinction and .66 for Motivator dimension and to have the sub scores for each dimension summing the related items was applied (Cicirelli, 1998). Higher scores on each subscale reflect having that particular personal meaning toward death. Item two was reverse coded and so reversed before computing subscales scores (See Appendix B). Having established reliability and validity of PMDS, this scale was applied to 256 college students, age ranging from 19 to 55 and compared between two sub age groups, younger (19-25) and older (26-55). Additionally, confirmatory factor analysis was carried out and it was found out that GF = .90 and Adjusted GF = .87 and all three factors were loading similar to preliminary analysis, except Motivator dimension and so this dimension is excluded from further analysis (Cicirelli, 1998)

3.4.1.1. Pilot Study of PMDS

First, translation study of PMDS was carried out. The original PMDS was translated from English to Turkish language by 10 judges from different fields. These judges have knowledge in the area of psychology and also with
a good command in both Turkish and English. Two of them were English teachers, six of them were graduate students at METU, four of them from Psychology and two of them from Psychological Counseling departments. Lastly, two judges were interpreters working in the field for 5 years. Two of the graduate students were from other departments and the rest four from.

After translations five assistants from department of Psychological Counseling and Guidance were chosen to decide which item of which translation is best representing the original item; and by the method of computing the items with highest preferences were chosen to be tested in Turkish version of Personal Meanings of Death. Back translation was avoided due to the possibility of concept and item bias threat (Van de Vijer & Hambleton, 1996). In the pilot study of the Turkish version of PMDS, the scale was administered in classroom settings to 102 undergraduate students from different departments. Considering social desirability participants completed the scale anonymously, in a classroom setting.

### 3.4.1.2. Factor Analysis of PMDS in the pilot study

Factor analysis was conducted using SPSS 11.0 and the results are presented in Table 3.2. The factor analysis with the principal component analysis showed 5 factors with eigenvalues over 1 but the fifth factor had only one item, item 5 “Death provides the opportunity for others to recognize our
accomplishments” (ölgüm başkalarına başarlıklarımız farketme olanağı verir) with loading .97. However, as the original scale consisted of 4 factors and with the rule of one item can not be taken as a factor, researcher decided to reduce factors to four with the maximum likelihood with varimax rotation, in which results were as following: Factor loadings for factor I (afterlife) were .62, .93 and .89 for items 7, 12 and 14 respectively. Loadings for factor II (motivator) were .48, .35, .46, .65, .69, .68, and .43 for items 4, 5, 9, 13, 15, 16 and 17 respectively. The third factor (extinction) had loadings as .39, -.52, .74, .59 and .69 for items 1, 2, 3, 6 and 11 respectively. The reason for negative loading of item 2 is the reverse coding as the original study had coded (Cicirelli, 1998). The last factor (legacy) had loadings .52 and .65 for items 8 and 10 respectively.

Table 3.2. Rotated Factor Analysis of PMDS in the pilot study

<table>
<thead>
<tr>
<th>Items</th>
<th>Factor Loadings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Death means pain and suffering.</td>
<td>.39</td>
</tr>
<tr>
<td>Death means personal extinction.</td>
<td>-.52</td>
</tr>
<tr>
<td>Death means the end of one’s dreams.</td>
<td>.74</td>
</tr>
<tr>
<td>Having to die makes life seem more important.</td>
<td>.48</td>
</tr>
<tr>
<td>Death provides the opportunity for others to recognize our accomplishments.</td>
<td>.35</td>
</tr>
<tr>
<td>Death means separation from our loved ones.</td>
<td>.59</td>
</tr>
<tr>
<td>Death means reunion with our loved ones.</td>
<td>.62</td>
</tr>
</tbody>
</table>
Internal consistency of the Scale showed that Cronbach’s alpha for overall scale was .63. Internal consistency for each factor was as following: Afterlife .88, Extinction .60, Motivator/ Life quality enhancing .74 and Legacy .60. Indeed, the reliability scores are modest but satisfactory enough to be used in the original study. However, the item 10 “Death means the opportunity to outlive one’s competitors” was very confounding for participants and the researcher had to explain this item in each administering, individually. This was both time consuming and not appropriate for further research because the original study planned to be
applied to 500 participants. Therefore, even though the loading was good enough (.65), the researcher decided to eliminate this item from the main study.

### 3.4.1.3 Factor Analysis of PMDS in the Main study

As it was mentioned in the pilot study part, the item 10 “Death means the opportunity to outlive one's competitors” (Ölüm rakiplerinden daha uzun yaşamı fırsatıdır) was eliminated for the main study. Therefore, a separate factor analysis was conducted with principal component analysis and without rotation which was resulted in four factor, explaining 57 % of variation and results are presented in Table 3.3.

Table 3.3. Factor Loadings of PMDS in the main study without item 10

<table>
<thead>
<tr>
<th>Items</th>
<th>Factor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Death means pain and suffering.</td>
<td>.53</td>
</tr>
<tr>
<td>Death means personal extinction.</td>
<td>-.66</td>
</tr>
<tr>
<td>Death means the end of one’s dreams.</td>
<td>.72</td>
</tr>
<tr>
<td>Having to die makes life seem more important.</td>
<td>.34</td>
</tr>
<tr>
<td>Death provides the opportunity for others to recognize our accomplishments.</td>
<td>.38</td>
</tr>
<tr>
<td>Death means separation from our loved ones.</td>
<td>.62</td>
</tr>
</tbody>
</table>
As was shown in the Table 3.3. item 8 “Death means the opportunity to leave a legacy (money, material goods, and ideas) to others” had loading .21, which is too low to be accepted. This item was excluded from last analysis and the factor analysis was carried out without item 8. The results of this analysis explained 42 % of variance and the factor loadings were shown on Table 3.4.
Table 3.4. Rotated Factor Loadings of PMDS without item 10 and 8

<table>
<thead>
<tr>
<th>Item no</th>
<th>Items of PMDS</th>
<th>Loadings</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>I</td>
</tr>
<tr>
<td>3</td>
<td>Death means the end of one’s dreams.</td>
<td>.73</td>
</tr>
<tr>
<td>2</td>
<td>Death means personal extinction.</td>
<td>-.66</td>
</tr>
<tr>
<td>6</td>
<td>Death means separation from our loved ones.</td>
<td>.62</td>
</tr>
<tr>
<td>11</td>
<td>Death means the loss of everything.</td>
<td>.60</td>
</tr>
<tr>
<td>1</td>
<td>Death means pain and suffering.</td>
<td>.53</td>
</tr>
<tr>
<td>15</td>
<td>Death motivates us to achieve.</td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>Death stimulates one to set goals.</td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>Death is an opportunity to be praised for what we have accomplished.</td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>Life gives death meaning</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Death provides the opportunity for others to recognize our accomplishments.</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Having to die makes life seem more important.</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Death means the opportunity to die with honor and glory for a cause.</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>Death means the beginning of something beyond life on earth.</td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>Death is the beginning of a new adventure in the afterlife.</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Death means reunion with our loved ones.</td>
<td></td>
</tr>
</tbody>
</table>
The overall reliability for PMDS was $r = .67$ and coefficient alphas for three subscales were .78 for factor I (extinction), .72 for factor II (motivation/legacy), and .82 for factor III (afterlife) dimension. Beside, correlations between “extinction and afterlife” and “afterlife and motivation/legacy” were .17, and .38 ($p< .001$), respectively.

### 3.4.2. Templer’s Death Anxiety Scale (DAS)

Templer’s Death Anxiety Scale (DAS) was developed to measure general anxiety about death by Templer (1970). Original DAS consists of 15 items with True/False response type of scale, and has test-retest product-moment correlation .83, reliability, and Kuder Richardson internal consistency .76 (Templer, 1970). Mc. Mordie (1979) reported reliability as .76 for DAS, and after converting the DAS to Likert type of scale the internal consistencies was .84, and with test re-test reliability as .84. The original DAS had been used in many researches (Abdel-Khalek, 1986, 1997a-1997b; Abdel –Khalek & Omar, 1988; Elkins, 1980; Templer, 1971; Schumaker, 1991; Suhail & Akram, 2002; Swanson & Byrd, 1998).

The item reliability and validity study with Turkish version was completed by Ertufan (2000). The response style had been changed from “true-false” to Likert type of scale, in order to have more reliable and comprehensive scores (Mc Mordie, 1979). Responses range from 1 (totally disagree) to 7 (totally agree), and in the middle “neutral “, and there is distinct
choice for the ones who are undecided about the item. This “undecided” choice has a value of zero (0). The score range is from 7 to 105, and the mean score for a person is computed by extracting the number of “undecided” responses from total items and the rest of items are divided to total score of a person. Having higher score on total indicated having higher death anxiety on death. Reliability scores for the Turkish version were .72 (N = 453), and test re-test reliability .80, p<.01; and with better standardized group (N = 326) the alpha .74. In terms of validity there is positive moderate relationship (r = .57, p<.01) between death anxiety scale and fear of death scale (Ertufan, 2000). The reliability coefficient of DAS estimated by Cronbach’s alpha for the present study was .78.

3.4.3. Collet and Lester Fear of Death Scale (FDS)

Collet and Lester’ Fear of Death Scale (FDS) developed by Lester to measure measuring multiple aspects of fear about death (1969). This scale consists of four subgroups with each having 8 items about person’s own death, one’s own dying (the moment of dying), others’ death, others’ dying. Many studies conducted with this scale (Lester, 2004; Suhail & Akram, 2002) and the last revision of this scale showed that Cronbach’s Alpha reliability for this particular factor (fear of own death) was .91 (Abdel-Khalek & Lester 2003).
Ertufan (2000) conducted reliability and validity study on only one factor, which is “fear own death”. Present study investigated only one aspect, “person’s own death” and participants were asked about “how anxious they feel when thinking about different aspects of their own death”. Likert type of scale was used ranging from 1 (very anxious) to 3 (not anxious), and “0” for responses for “undecided” participants; having higher scores indicating higher death fear about their own death.

In this scale person can have scores ranging from 8 to 24, and here “undecided” responses were subtracted from each category (8 items) and then the total score of a person is divided into rest of items, which then result in person’s total score. Reliability values of the Turkish version were .74, and test-retest = .81, (p<.01) (Ertufan, 2000).

The reliability coefficient of FDS estimated by Cronbach’s alpha for the present study was .72. The correlation between death anxiety and death fear for the present study was .48, which shows moderate correlation.

3.5. Data Collection Procedure

Before application of the study, necessary permissions were taken from the departments and teachers. Data were collected in the Spring semester of 2005 in classroom settings. Sampling was planned as convenient random sampling because scales were applied in classroom settings. The instruments administered to voluntary participants were
Demographic Data Form, Personal Meanings of Death Scale (PMDS), Death Anxiety Scale (DAS) and Fear of Death Scale (FDS). Before administering the instruments the researcher explained the purpose of the study and those who voluntarily accepted to participate were asked to fill instruments without as any missing response as possible. Filling out the instruments took approximately 20 minutes.

3.6. Data Analysis Procedure

SPSS (Statistical Package for Social Sciences) for Windows (version 11.00) was used to perform data analysis. The answers of participants were checked and after elimination of uncompleted and faulty ones 498 of 500 were taken into evaluation. Data analysis was conducted with total scores of three scales. For the PMDS by summing up appropriate subscale items total scores for each subscale were gained, and having higher scores in each subscale indicated having that kind of particular personal meaning of death. Similarly, DAS and FDS scores were obtained by total scores after reversing necessary items, and having higher scores indicated having higher death anxiety and death fear.

In order to assess the gender differences in terms of personal meanings of death, death anxiety and death fear independent samples t-test was conducted. To investigate predictors of death anxiety and death fear two multiple regression analysis were conducted with the predictor variables,
self reported religiosity, frequency of applying religious rituals and personal meanings of death. R square and R square change were reported.

3.7. Limitations of the Study

The sample of the study consisted of only METU students, and this would limit the generalizability of the study. Besides, the age group is only young adults age between 17-25, however, some literature suggest that death perception or meanings could be better understood by comparing age groups, young, middle and old. Cicirelli (1998, 2001) reported that there is a significant difference between young adults and old adults, in the way of former ones perceive death as more motivating than the latter age group; and young age group had more fear of death than older ones. Another limitation is not investigating the dimensions of fear and anxiety but focusing on general or total part of these negative emotions. Future research needs to be conducted in order to have better understanding of what dimension of death is feared, such as, very elders fear the dying process but not death itself (Tomer & Eliason, 1996). Furthermore, religiousness factor was self reported which means do not measured by multidimensional valid scale and this might be another limitation of the study, and further research should use more comprehensive scales in measuring religiosity. This might be another reason of not having significant contribution of religiosity in predicting death anxiety and death fear.
CHAPTER IV

RESULTS

The results of the study are presented in this chapter. The chapter contains three main sections. Firstly, factor analysis for the study employed to the Personal Meanings of Death Scale (PMDS) was given. Secondly, the differences between male and female students in terms of personal meanings of death, death anxiety and death fear are presented. Finally, the results of two stepwise regression analyses were reported.

4.1. Results Regarding the Gender Differences in terms of Personal Meanings of Death, Death Anxiety and Death Fear

Results of t-test analysis investigating gender differences between males and females in terms of personal meanings of death, death anxiety and death fear will be presented in the following section.

4.1.1. Gender Differences in terms of Personal Meanings of Death

Independent samples t-test was conducted to have the gender difference in terms of Personal Meanings of Death Scale (PMDS) and the
means and standard deviations of three dimensions of PMDS are presented in Table 4.1.

Table 4.1. Gender Differences in terms of Personal Meanings of Death

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>Gender</th>
<th>M</th>
<th>SD</th>
<th>n</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extinction</td>
<td>Male</td>
<td>13.67</td>
<td>3.12</td>
<td>271</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>14.86</td>
<td>3.04</td>
<td>227</td>
</tr>
<tr>
<td>Afterlife</td>
<td>Male</td>
<td>9.53</td>
<td>3.57</td>
<td>271</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>9.56</td>
<td>2.96</td>
<td>227</td>
</tr>
<tr>
<td>Motiv/legacy</td>
<td>Male</td>
<td>21.92</td>
<td>5.05</td>
<td>271</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>21.12</td>
<td>5.09</td>
<td>227</td>
</tr>
</tbody>
</table>

The results indicated that there was a significant difference between males and females in terms of extinction factor, $t (496) = 4.29 \ p < 0.05$. Female had higher scores ($M = 14.86$) on extinction factor than male participants ($M = 13.67$). There were no significant gender differences among other two factors, afterlife $t (496) = .12 \ p > .05$, and motivation/legacy $t (496) = 1.76 \ p > .05$.

4.1.2. Gender Differences in terms of Death Anxiety

The results indicating means, standard deviations and number of participants on death anxiety are presented in Table 4.2.
Table 4.2. Gender Differences in terms of Death Anxiety

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>Gender</th>
<th>M</th>
<th>SD</th>
<th>n</th>
</tr>
</thead>
<tbody>
<tr>
<td>Death anxiety</td>
<td>Male</td>
<td>55.74</td>
<td>14.25</td>
<td>271</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>66.46</td>
<td>12.29</td>
<td>227</td>
</tr>
</tbody>
</table>

As it is presented in Table 4.2, females had higher scores ($M = 66.46$) on total anxiety than male participants ($M = 55.75$). There was a significant difference on total death anxiety between males and females, $t(496) = 8.85$, $p<.05$.

4.1.3. Gender Differences in terms of Death Fear

The results indicating means, standard deviations and number of participants on death anxiety are presented in Table 4.5.

Table 4.3. Gender Differences in terms of Death Fear

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>Gender</th>
<th>M</th>
<th>SD</th>
<th>n</th>
</tr>
</thead>
<tbody>
<tr>
<td>Death Fear</td>
<td>Male</td>
<td>12.61</td>
<td>3.68</td>
<td>269</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>15.03</td>
<td>4.43</td>
<td>225</td>
</tr>
</tbody>
</table>

As is presented in Table 4.3, females had higher scores ($M = 15.03$) on fear than male participants ($M = 12.61$). There was a significant difference in terms of fear of death between males and females $t(492) = 6.61$, $p<.05$. 
4.2. Predicting Death Anxiety and Death Fear

The results of stepwise regression analysis in predicting death anxiety and death fear will be presented in the following section.

4.2.1. Predicting Death Anxiety

Before conducting stepwise multiple regression analyses, assumptions were tested and there was no violation in normality, linearity, homoscedasticity, multicollinearity and singularity assumptions. A stepwise multiple regression analysis was conducted in order to show how “religious commitment”, “the frequency of applying religious rituals” and personal meanings of death scores predict death anxiety of university students.

The means and standard deviations of the quantitative predictor variables are presented on Table 4.4.

Table 4.4. Means and Standard Deviations of the Quantitative Predictor Variables

<table>
<thead>
<tr>
<th>Variables</th>
<th>n</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Religiosity</td>
<td>498</td>
<td>2.51</td>
<td>1.20</td>
</tr>
<tr>
<td>Freq. of rituals</td>
<td>498</td>
<td>2.33</td>
<td>1.06</td>
</tr>
<tr>
<td>Motiv/legacy</td>
<td>498</td>
<td>21.55</td>
<td>5.07</td>
</tr>
<tr>
<td>Extinction</td>
<td>498</td>
<td>14.21</td>
<td>3.13</td>
</tr>
</tbody>
</table>
Table 4.4. continued

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>Std. Dev</th>
</tr>
</thead>
<tbody>
<tr>
<td>Afterlife</td>
<td>498</td>
<td>9.54</td>
</tr>
<tr>
<td>Anxiety level</td>
<td>498</td>
<td>60.63</td>
</tr>
</tbody>
</table>

The correlations among predictor and criterion variables are presented on Table 4.5.

Table 4.5. Correlation Coefficients among Quantitative Predictor Variables

<table>
<thead>
<tr>
<th>Predictors</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Total Anxiety</td>
<td>1.00</td>
<td>-.06</td>
<td>-.04</td>
<td>*.42</td>
<td>.00</td>
<td>.08</td>
</tr>
<tr>
<td>2. Religiosity</td>
<td></td>
<td>*.68</td>
<td>-.15</td>
<td>*.52</td>
<td>.16</td>
<td></td>
</tr>
<tr>
<td>3. Freq. of Rituals</td>
<td></td>
<td></td>
<td>-.18</td>
<td>*.55</td>
<td>.24</td>
<td></td>
</tr>
<tr>
<td>4. Extinction</td>
<td></td>
<td></td>
<td></td>
<td>-.17</td>
<td>.08</td>
<td></td>
</tr>
<tr>
<td>5. Afterlife</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.37</td>
<td></td>
</tr>
<tr>
<td>6. Motivation/Legacy</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1.00</td>
</tr>
</tbody>
</table>

*p<.05

Results indicated moderate correlations among predictor and criterion (predicted variables). As shown in Table 4.5, there are significant moderate correlations between afterlife, frequency of applying the rituals (r = .52) and religiosity (r = .68). The stepwise regression equation showed that religiosity and frequency of applying the rituals were not significant. They are correlated moderately to afterlife dimension of PMDS and therefore afterlife has been included in the equation. The correlation between death anxiety and death
fear was .48. Additionally, motivation dimension was excluded from the
equation.

Table 4.6 presents the summary of the stepwise regression analysis
predicting total death anxiety scores.

Table 4.6. Stepwise Regression with Death Anxiety as Criterion Variable

<table>
<thead>
<tr>
<th>Step Predictor</th>
<th>Unstandardized</th>
<th>Standardized</th>
<th>Sign.</th>
<th>n</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>St. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>Extinction</td>
<td>2.03</td>
<td>.19</td>
<td>.44</td>
<td>.000</td>
</tr>
<tr>
<td>Afterlife</td>
<td>.37</td>
<td>.18</td>
<td>.08</td>
<td>.037</td>
</tr>
</tbody>
</table>

Note. R² change = .18 for extinction, .007 for afterlife.

As indicated in Table 4.6. Extinction and Afterlife dimensions of PMDS
appeared to be significant predictors of Death Anxiety, explaining 18 % of the
total variance in death anxiety of university students.

The variable that was entered first to the equation was extinction
dimension and the regression equation with the extinction dimension was
significant, R² = .18, adjusted R² = .179; F (1,496) = 109.213 p<.001. This
variable alone accounted for 18 % of the variance in death anxiety.

The variable that was entered secondly in to the equation was afterlife
dimension of PMDS score. The regression equation with the afterlife was
also significant, R² = .188, adjusted R² = .184, F (2, 495) = 57.16, p< .001.
This variable accounted for additional .007 % of the variance.
4.2.2. Predicting Death Fear

Stepwise regression analysis was conducted for assessing the predictors of death fear and results are presented in Table 4.7.

Table 4.7. Stepwise Regression with Death Fear as Criterion Variable

<table>
<thead>
<tr>
<th>Step Predictor</th>
<th>Unstandardized</th>
<th>Standardized</th>
<th>Sign.</th>
<th>n</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extinction</td>
<td>.51</td>
<td>.06</td>
<td>.38</td>
<td>.000</td>
</tr>
<tr>
<td>Afterlife</td>
<td>.15</td>
<td>.06</td>
<td>.12</td>
<td>.022</td>
</tr>
<tr>
<td>Freq. of rituals</td>
<td>.43</td>
<td>.20</td>
<td>.11</td>
<td>.033</td>
</tr>
</tbody>
</table>

Note. R² change = .12 for extinction, .03 for afterlife, .008 for freq. of applying religious rituals.

As indicated in the Table 4.7, extinction, afterlife and the frequency of applying the religious rituals scores appeared to be significant predictors of fear of death scores, explaining 15% of the total variance.

The predictors that were entered to the equation were religiosity, frequency of applying the rituals, and the dimensions of PMDS (extinction, afterlife and motivation/legacy). The results indicated that religiosity and motivation/legacy predictors were excluded from the equation; the results of those predictors were not significant.

The first variable that was entered to the equation was extinction dimension of PMDS scores, R² = .12, adjusted R² = .12, F (1, 492) = 65.913,
p<.001. The extinction variable alone accounted for 12% of the variance in total fear scores.

The second variable entered to the equation was afterlife dimension of PMDS scores, $R^2 = .14$, adjusted $R^2 = .14$, $F (2, 491) = 42.42$, p<.001. The afterlife dimension alone accounted for .03% of the variance in total fear scores.

The third dimension that was significant entered to the equation was frequency of applying the rituals, $R^2 = .15$, adjusted $R^2 = .15$, $F (3,490) = 30.01$; p<.001. This variable alone accounted for .008% of the variance in total fear scores.
CHAPTER V

CONCLUSIONS AND IMPLICATIONS

This study had four basic purposes: The first purpose was to examine the dimensions of personal meanings of death perceived by university students. Secondly understanding how these meanings and self reported religiosity contribute to predict death anxiety and, thirdly to predict death fear. Lastly, to investigate gender differences between females and males in terms of personal meanings of death, death anxiety and death fear.

Before investigating the possible predicting values of personal meanings of death and religiosity on death anxiety and death fear, the dimensions of PMDS will be discussed as perceived by university students. Secondly, gender differences in terms of PMDS, death anxiety and death fear will be mentioned. Lastly, PMDS and self reported religiosity will be discussed regarding their predictive values on death anxiety and death fear on young adults.
5.1. Dimensions of Personal Meanings of Death (PMDS)

Factor analysis was employed to investigate the meanings of death through examining the factor structure of PMDS. This analysis was conducted with 498 university students who were also the sample of the research. Maximum likelihood factor analysis was used for the dimensionality of 16 items of PMDS. The criteria for determining the number of factors were the hypothesis of 4 dimensionality of measure stemming from the previous original study (Cicirelli, 1998) and the scree plot and eigenvalues. The factor analysis provided three factors and this was inconsistent with the original scale, which had four factors (Cicirelli, 1998). Indeed, this was expected because as it was stated in the results section item 10 “Death means the opportunity to outlive one’s competitors” was extracted due to its confounding meaning after conducting pilot study with 102 participants. The major reason for excluding this item was the impossibility for the researcher to explain the meaning of this item individually to all 498 participants. This item emphasizes the value of competition and personal priorities, which is more correlated to individualistic cultures. The Turkish culture, from the collectivistic perspective, not valuing the competition as much as American one, was not able to understand the meaning of this item. The original PMDS was developed in the U.S., which is a more individualistic culture, emphasizing competition and personal priorities. On the other hand, Turkish society is in a transition period, and Turkish university students have been found to show both
interrelatedness aspects and individuation in general (İmamoğlu, 1998). İmamoğlu (1987) also, reported that higher SES level parents emphasize more emotional interdependence and also material independence in their children. Similarly, Karakatipoğlu (1996) found that METU students have different structure from Turkish sample and they hold relatively higher individualistic patterns. The original study was conducted with 498 university students and due to this item elimination factor analysis was conducted again. Four factors were revealed; however, the fourth factor had only one item “Death means the opportunity to leave a legacy (money, material goods, ideas) to others” and therefore factor analysis was replicated with maximum likelihood rotation and three factors. Results indicated that item 8: “Death means the opportunity to leave a legacy (money, material goods, ideas) to others” had a loading of .21, which is too low to be accepted, therefore, it was eliminated. The last factor analysis had three factors explaining 42 % of the variance. This is lower than the original scale, which was explaining 64 % of the variance (Cicirelli, 1998); however, considering the elimination of two items and cultural differences, having three factors and 42 % of variance seems reliable enough. Different from the PMDS developed in U.S., this study had three factors extinction, afterlife and motivaton/legacy. The third dimension was renamed as motivation/legacy due to having both types of items loading under the same factor. The possible explanations of this structure difference and having motivation and legacy factors under the same factor could be different structure of METU students. Karakatipoğlu (1996)
reported that METU sample has different structure than Turkish population, that is, METU students were found to have higher individualistic values and that might be another reason for not eliminating all individualistic items but eliminating some and keeping others. This might be interpreted as our participants’ perceiving legacy as a motivator, which means that being able to contribute and leaving something beyond is a kind of motivator of death. This combination of both factors and elimination of 2 items (emphasizing competition) Legacy factor could be related to being more exposed to Western life styles. Aydın (2000) claimed that changes in family structures, institutions, attitudes are mostly consequences of westernalization of Turkey and therefore independence, autonomy and competition becoming more valuable to Turkish people. However, collectivistic cultural patterns have not disappeared yet, like sharing, hospitality, friendship, kinship. This is the most crucial difference between Turkish culture and American culture where the original scale was developed (Cicirelli, 1998). Therefore such a change in factor structure was expected; meanings of death are changing in time and by culture (Hökelekli, 1991). As it has been stated above Turkey is in a transition period from collectivistic to individualistic society and the combination of Motivator and Legacy factors could be explained by Turkish university students’ interrelatedness and individuation characteristics, in general (İmamoğlu, 1998).
5.2. Gender Differences in Terms of Personal Meanings of Death, Death Anxiety and Death Fear

Sex is a classification of genetic factors but “gender” is learned through social interaction and changes over time (Wood, 1997). According to results considering gender differences in personal meaning of death, death anxiety and death fear, there are significant differences between two genders. In terms of personal meanings of death, similar to literature and also the same as the original study (Cicirelli, 1998), females had higher scores on “extinction” dimension than their male counterparts (Cicirelli, 1998; Durlak, Horn & Kass, 1990). There were no significant differences on other two dimensions (afterlife and motivator/legacy) between two genders. However, this gender difference has different results in another study where females were reported to perceive death in a kind of continuous or afterlife manner. Additionally, females associating death with negative emotions, and males in more cognitive general terms, like “death is something that happens to everyone” (Holcomb, Neimeyer & Moore, 1993).

Another aspect of this research is gender differences in terms of death anxiety and death fear. Results showed that females had higher scores on both fear and anxiety of death than male students. The results are consistent with the study of cross cultural comparison of Malaysian and Australian students, in that, females had higher death anxiety on both cultures (Schumaker, 1988). Besides Cicirelli (1998) reported that young female
students (age ranging from 19-25) had higher scores on death fear than male students. In general, most of the literature agrees upon that females (both university students and older adults) have or show higher fear of death than men (Cicirelli, 2001; Young & Daniels, 1980). In general there is consensus on literature that women show or have greater death anxiety than men (Dattel & Neimeyer, 1990; Lonetto, Mercer, Fleming, Bunting & Clare, 1980; Neimeyer, Bangley & Moore 1986; Şenol, 1989). Although, there is no consensus, a meta-analytic study conducted in Turkey reported that females had greater death anxiety than males (Yıldız, 1994). Therefore, it could be interpreted that this study contributes to this subject by having similar results, and implying that there is similarity between Turkish and other culture females’ death anxiety.

The higher scores on death anxiety and fear were usually explained by females being more sensitive and responsive to the needs of people who are under the threat of terminal illness or death. Indeed, girls from childhood are more encouraged to express their feelings than boys (Singh, Singh & Nizamie, 2003). Another explanation to this gender difference might be due to cultural expectancy from men to be stronger and achievement oriented, with encouragement to express his feelings less (Schumaker, Barraclough & Vagg, 1988). This is also similar to Bandura’s Social Learning Theory, claiming that child learns to behave in a particular way by modeling parents. For instance, females learn to express feelings and males to hide them (Helgeson, 2002). Indeed, this expression of feelings can also be interpreted
by the “gender schema theory”, meaning that making decisions appropriate to gender. The gender influences what to wear, what occupations to pursue and “what emotions to present to others” (Helgeson, 2002). Moreover, assigning different meanings to death could be another cause for females to have/show greater death anxiety (Schumaker, Warren & Groth-Marnat, 1991). Gender difference in this study might be more reliably explained or relevant to latest explanation, because in this study females had also higher scores on “extinction“ dimension of death, perceiving death as a kind of personal extinction in terms of body and soul. This differentiation in meaning could be the reason for showing greater death anxiety and fear.

5.3. Predicting Death Anxiety and Death Fear with Predictor Variables of Personal Meanings of Death and Self Reported Religiosity

The results showed that “Extinction” and “Afterlife” dimensions of PMDS are significant predictors of death anxiety, explaining 18 % of the total variance in death anxiety of Turkish university students. Considering the results, it is striking that no significant predictor effect was found for “religious commitment” and “frequency of applying the religious rituals” in predicting death anxiety. Indeed, there is no consensus in literature on the effect of religiousness on death anxiety; such as, some research reported higher intrinsic religiousness decreases death anxiety (Donahue, 1985; Long & Elghanemi, 1987; Powell & Thorson, 1991; Rigdon & Epting, 1985; Thorson
& Powell, 1990). On the other hand, a study conducted in Turkey revealed that people who were high in religiosity had higher scores on death anxiety (Yıldız, 1998). The level of connectedness to religious orientation was found to be significantly correlated to less fear of death. Indeed, those who had high or low religious commitment were found to have less death fear than moderately committed ones (Dolnick, 1987). Swanson (1998) reports that fear of punishment is the best predictor of death anxiety in young adults. Besides, Cicirelli (2001) reports that “Afterlife” and “Extinction” dimensions have greatest relationship with fear of death, however, the other aspect which is not related to what happens after death were found to be less associated with the fear of death. However, as this study is conducted on regression analysis there is no distinction between extinction and afterlife but only their predictive values on death anxiety and death fear. Indeed, main predictor with the greatest value was “extinction” dimension in predicting death anxiety and death fear, which is similar to what the original study (Cicirelli, 1998, 2001) reported. Additionally, having negative attitude or feeling toward death was reported to be a good predictor of having higher death anxiety among young adults (Neimeyer, Holcomb & Moore, 1993). Hökelekli (1991b) reports that death fear and death anxiety is mostly related to psychological factors, like personality characteristics, defensive mechanisms rather than religious factors. However, Hökelekli (1992) found that religiously oriented people have more positive attitudes toward death and death related issues. Similarly, the relationship between religious
involvement and death anxiety showed inverse correlations, indicating that higher levels of religious commitment in Iranian Muslims correlate with lower death anxiety (Roshdieh, Templer, Cannon & Canfield, 1998-1999).

Afterlife dimension of personal meanings of death scale had modest correlations with self reported measures of religious commitment and the frequency of applying the religious rituals; therefore, the researcher expected them not to be significant all; at the same time, and stepwise regression analysis indicates that only afterlife is significantly correlated to death fear. The reason for having both self reported religious commitment and applying the rituals and “afterlife” dimension in the regression was just to check because the correlation between them was modest. Besides, this study includes self rating measures of religiousness and this might be another reason for not having significant effect on death anxiety and death fear. More multidimensional and reliable “religiosity” scales might show higher degree of predictive value on death anxiety and death fear. Predictors regarding death fear were found to be extinction, afterlife and “the frequency of applying the religious rituals” respectively, explaining 15 % of total variance in fear scores. The results of not having any significant contribution of self reported religiosity to predict death fear is contradicting to the study conducted by Karaca (2000) which shows strong relationship between these two variables,. Abdel-Khalek (2000) also reported similar findings indicating “afterlife” dimension as positively correlated to higher death fear in Islamic Culture.
As mentioned in the theoretical background psychodynamic, existentialist and constructivist theories were the three main approaches presented to explore dynamics of death anxiety and death fear. Among them constructivist approach could be helpful in further investigation of results, in that, this approach claims that reality is people’s own construction and therefore could be “reconstructed” or modified. Indeed, females’ perceiving death as “extinction” is the major source of their higher death anxiety and death fear, and having this information could be a good starting point to change their cognition to more positive constructs. This process is closer to constructivist approach, claiming that without understanding and having information about the construct or cognition (schema, meaning) of a person about an event, we can not change and lessen the negative feelings about it, like anxiety or fear (Winter, 1992).

It is striking that “the frequency of applying the religious rituals” had even small (.008 %) but significant predicting effect on death fear. This is reasonable in terms of the definition of fear, “what a living creature feels in the presence of real or assumed danger”. Different from anxiety, there is a real source, and “frequency of applying religious rituals” is related to a concrete real source. Indeed, self reported religiosity is an abstract perception but applying religious requirements is concrete; therefore, it might be a reason for being a significant predictor of “death fear”. In fact, the reason why people can not escape or get rid of their fears is that the feeling of fear precedes their being in a type of disguise (Overstreet, 1951).
5.4. Implications and Recommendations for Practice and Research

Several implications can be inferred from the results of the present study. Before mentioning any implications for further research in this subject, the researcher feels obligated to state that the results and conclusions of this study are ungeneralizable. This is caused by the sample being only from METU. It could be argued that the same study could be replicated by including other university students.

Coming to implications, firstly, the most crucial finding of this research was that perceiving death as “extinction” is the major source in predicting death anxiety and death fear. Indeed, this result implies that university students, who perceive death as a kind of “extinction” both physically and psychologically, are more vulnerable to have higher death anxiety than those who do not perceive death as extinction. Results also revealed that being a female is secondary crucial source for having or showing higher death anxiety and death fear. Since, females and males perceive death differently, counselors and other professionals interested in death or loss subject would develop different kind of intervention and preventive programs for two genders. Besides, being aware of these two predictors in increasing death anxiety and fear, professional could enhance their helping techniques with young adults having problems with death issues. Indeed, young adults experiencing a significant loss, like family member or a friend are in emergent
need of psychological help. Therefore, in order to help those young people, psychologists, counselors and even teachers need to be aware of what kind of mechanisms increase or decrease death anxiety and death fear. There is some vulnerability of some people about suicidal thoughts, such as, hopelessness, depression, family functioning, social support (Payne & Range, 1995). Payne and Range (1995) in their study found out that attitudes toward life and death are related to suicide, but because the correlation was small these factors could not be reported as direct measures of suicidal risk. Beside, females reported more suicidal vulnerability and attraction to death than men. Having similar results, it can be inferred that among young adults being female and perceiving death as "extinction" is a risky factor in death anxiety and death fear, and needs to be taken into account in preventive and intervention programs. Also, teachers could be informed about those risky factors, which in turn would be the first step in understanding students’ needs in the time of significant loss.

Comparing age groups, older aged people were found to have different reasons from younger ones in order not to commit suicide, which of most significant reasons were moral objections and child related concerns (Miller, Segal & Coolidge, 2001). This is very crucial in clinical implications and school settings, because if professionals have more information about how particular sample give meaning to death, then they can develop preventive intervention programs to help students to cope with death and dying issues, accordingly. The recent study does not have age comparison
and future studies could add this dimension to understand death anxiety and
depth fear more comprehensively. Additionally, this age is early adulthood,
the time of isolation and intimacy from the psychosocial perspective, and
therefore separation caused by death profoundly influence the adjustment
and learning to balance conflicting needs of that kind of developmental task
(DeMinco, 1995). For instance, one is about school or career, and
experiencing a loss of a loved one could diminish a young person’s
developmental progress in an irreversible traumatic manner. Therefore,
counselors and psychologists could integrate information about death anxiety
and death fear into university guidance services and may develop some
intervention programs, or even death education programs like in the U.S.

This study investigated total anxiety and fear of death, however, they
have different dimensions, like fear of own dying moment, fear of death of
significant other etc. Further research could integrate comparison of different
dimensions of death anxiety and death fear; and how these dimensions differ
between genders and ages. Finally, if this study could be enhanced with
more specific variables, like age, meaning perceived in life, history of
traumatic death experiences, then more comprehensive understanding of
death issue could be developed both academically and professionally.
REFERENCES


APPENDICES

APPENDIX A

BİLGİ FORMU

Bu çalışma, gençlerin genel olarak ölüm nasıl algılandığını ve bu algıların ölüm korkusunu ve ölüm kaygısını nasıl etkilediğini anlamaya yöneliktir. Ölümün çeşitli yönleriyle ilgili soruların bulunduğu her bölümün başında gerekli yönergeler verilmiştir. Sizden istenen, yanıtlarınızı açık uçlu sorularda kısa ve net olarak yazmanız, seçenekler sunan sorularda ise seçeneklerden fikrinize en yakın olan ifadenin kutucuğunun işaretleyerek belirtmeniz ve yanıtlanmamış soru bırakmamınız.


Araş.Gör. Aysel Koçanoğlu
Eğitim Bilimleri Bölümü
Tel: 0312 210 40 45

A) Aşağıdaki sorular kişisel bilgilerinizle ilgilidir.

Yaşınız : ...........

Cinsiyetiniz : Erkek ( ) Kadın ( )

Bölümünüz : ...........................................................................................................

Sınıfiniz : .............................................................................................................
B) Aşağıdaki soruları dini inançlarınızı göz önünde bulundurarak yanıtlayınız.

1) Genel olarak dini inançlarınızı değerlendirdiğinizde kendinizi dini inançlarınızı açısından nasıl görürsünüz?
   ● Hiç dindar değilim ( )
   ● Biraz dindarım ( )
   ● Kararsızım ( )
   ● Oldukça dindarım ( )
   ● Çok dindarım ( )

2) İnançınız için gerekli ibadetleri/gereklilikleri ne sıklıkta yerine getirirsiniz?
   ● Hiç bir zaman ( )
   ● Nadiren ( )
   ● Bazen ( )
   ● Sık sık ( )
   ● Her zaman ( )
APPENDIX B

ÖLÜMÜN ANLAMLARI ÖLÇEĞİ

Aşağıdaki her bir ifadede ölümün çeşitli anlamları verilmektedir. Lütfen bu ifadelerden sizin için en uygun olanı her bir ifadenin sağında yer alan “Kesinlikle Katıyorum” ve “Kesinlikle Katıyorum” seçenekleri arasında seçerek işaretleyiniz. Her bir ifade için lütfen sadece bir seçeneği işaretleyiniz.

<table>
<thead>
<tr>
<th>ÖLÜM ÜN ÇEŞİTLİ ANLAMLARI VERILMekteIR</th>
<th>Kesinlikle katıyorum</th>
<th>Katıyorum</th>
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<th>Katıyorum</th>
<th>Kesinlikle katıyorum</th>
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### APPENDIX C

#### ÖLÜM KAYGISI ÖLÇEĞİ


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<th>Hiç Katılmıyorum</th>
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| İnsanların III. Dünya Savaşı hakkında konuştuklarını duyduğumda ürperririm. |
| Ölü bir bedenin görüntüü beni dehşete düşürür. |
| Geleceğin benim için korkulacak hiçbir şeyi olmadığını hissediyorum. |
APPENDIX D

ÖLÜM KORKUSU ÖlÇEĞİ


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