

PARENTAL GRIEF REACTIONS AFTER AN INFANT DEATH

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ABSTRACT**PARENTAL GRIEF REACTIONS AFTER AN INFANT DEATH**

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The aim of the present study was to examine whether there was a significant difference within each spouse's reports on grief reactions after an infant death. It was also aimed to investigate whether demographic variables including gender, age, education of grieved parents, gender and age of deceased infant, presence of other children were predictors of parental grief reactions after an infant death. The sample of the present study consisted of 55 couples experiencing an infant death within the last 2 years. Sample was recruited through death records kept in hospital and municipalities of Ankara by the researcher. To test the hypotheses of the study paired samples t-test and stepwise regression analyses were performed. According to the results

of the study, it was found that there was a significant difference within each spouse's reports on despair, panic behavior, blame and anger, detachment, and disorganization as separate dimensions of grief. Mothers experienced higher levels of despair, panic behavior, blame and anger, detachment, and disorganization than fathers. There was no significant difference within each spouse's score on personal growth. It was found that being a mother and having lost boy infant were proved as the predictors of parents' higher levels of grief reactions. Age and education of grieved parents, age of deceased infant, presence of other children were not associated with parental grief reactions. It was found that younger age of deceased infant and presence of other children were proved as predictors of grieved parents' higher levels of personal growth. The findings of the study were discussed with related literature.

Keywords: Infant Death, Parental Grief Reactions, Grief, Personal Growth, Gender Differences, Demographic Variables

ÖZ

BEBEK ÖLÜMÜ SONRASI ANNE BABA YAS TEPKİLERİ

Yıldırım, Şehnaz

Yüksek Lisans, Psikoloji Bölümü

Tez Yöneticisi: Doç. Dr. Hürol Fıfılođlu

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Bu alıřmada bebeđini kaybeden anne babaların, ift olarak kendi aralarındaki yas tepkileri farkına bakılması amalanmıřtır. Bu alıřmada ayrıca, bazı demografik deđiřkenlerin bebek lümü sonrası anne baba yas tepkileri ile iliřkilerinin belirlenmesi de amalanmıřtır. Anne babaların yařı, cinsiyeti, eđitim durumu, yařayan ocuđunun olup olmaması, len bebeđin yařı ve cinsiyeti alıřmaya katılan demografik deđiřkenlerdir. alıřmanın rneklemini son iki yıl ierisinde bebeđini kaybeden 55 anne baba ifti oluřturmaktadır. Arařtırmada anne babaların yas tepkilerini lmek iin Hogan Yas Tepkileri Tarama Listesi kullanılmıř ve ncelikle leđin geerlik ve gvenirlik alıřması yapılmıřtır. alıřmanın rneklemini oluřturmak iin, arařtırmacı tarafından Ankara Belediye ve Hastanelerindeki lm kayıtları

incelenmiştir. Çalışmanın hipotezlerini test etmek için bağımlı gruplar için t-testi, aşamalı regresyon analizleri kullanılmıştır. Araştırma sonuçlarına göre bebeğini kaybeden anne ve babaların yas tepkileri olarak ele alınan umutsuzluk, panik davranış, suçlama/kızgınlık, kopma ve dağınıklık puanlarında anlamlı bir fark olduğu belirlenmiştir. Buna göre bebek ölümü sonrası anneler babalardan daha fazla yas tepkisi göstermektedir. Çiftlerin kişisel gelişim puanları arasında ise anlamlı bir fark bulunmamıştır. Araştırmadan elde edilen sonuçlara göre anne olmak ve erkek bebeğini kaybetmek bebek ölümü sonrası anne babaların yas tepkileri düzeyinin yüksekliğini yordamaktadır. Demografik değişkenlerden anne babaların yaş ve eğitim düzeyi, bebeğin yaşı ve yaşayan çocuğunun olup olmaması ile anne baba yas tepkileri arasında anlamlı ilişkiler bulunamamıştır. Ölen bebeğin daha küçük yaşta olması ve anne babaların yaşayan başka çocuğunun olması, bebek ölümü sonrası anne babaların kişisel gelişim düzeyinin yüksekliğini yordamaktadır. Araştırma bulguları ilgili literatür paralelinde tartışılmıştır.

Anahtar Kelimeler: Bebek Ölümü, Anne Baba Yas Tepkileri, Yas, Kişisel Gelişim, Cinsiyet Farklılığı, Demografik Değişkenler

To My Family

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I hereby declare that all information in this document has been obtained and presented in accordance with academic rules and ethical conduct. I also declare that, as required by these rules and conduct, I have fully cited and referenced all material and results that are not original to this work.

Date: 02.12.2003

Signature:

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CHAPTER 1

INTRODUCTION

Grief is described as the emotional response to state of loss (Neil, 1990; Santrock, 1997; Weiss, 2001; Aranda, & Milne, 2000). In grief literature several approaches tried to conceptualize grief (Freud, 1917; as cited in Aranda, & Milne, 2000; Parkes, 1972; Bowlby, 1980; as cited in Kaunonen, 2000; Kübler-Ross, 1969; Kübler Ross, 1974). Psychoanalytic approaches to grief emphasized that in order to successfully re-engage in life, grieved person need to grieve adaptively (Freud, 1917; as cited in Aranda, & Milne, 2000). Parkes (1972) concluded that grieved person go through four stages including numbness, pining, depression and recovery. Similarly, from the attachment theory, Bowlby (1980; as cited in Kaunonen, 2000) suggested phases of numbing, yearning and searching for the lost figure, disorganization, despair, and re-organization. Kübler-Ross (1969) presented a conceptualization of the dying process. She divided the behavior and thinking of dying persons into five stages including denial and isolation, anger, bargaining, depression, and acceptance. Although Kübler Ross (1974) recognized the importance of individual differences in facing

with death, she suggested that way to face with death be in stages suggested by her. Hogan, Greenfield, & Schmidt, (2001) suggested that grief has multidimensions including despair, panic behavior, personal growth, blame and anger, detachment and disorganization. Although intensity of these dimensions lessens over time, they appear to occur linearly, they may overlap and recur.

Although death is thought as occurring in old age, death can occur at any point in the human life span. The death of some people seems more tragic than others. The death of a 90 year old woman is considered to be normal, since she has lived a long, full life, whereas the death of an infant is considered to be tragic because a life has ended before it has barely begun (Santrock, 1997). Death of an infant is contrary to the natural order of events. Children are supposed to carry on their family name to outlive their parents and to perpetuate their parents' dreams (Scully, 1985). Infant death includes deaths occurring in one year after live birth has taken place. In other words, infant death is occurring before completing one year of age (Death Statistics, 2000).

Cause of infant death includes congenital (e.g. cardiac, metabolic, central nervous system disorders), sudden infant death syndrome and acquired (e.g. infection, trauma) diseases of an infant (Nelson, & Waldo, 1996). It was stated that intrauterine exposure to cigarette smoking

increased the risk of SIDS (Gomelia, Cunningham, Eyal, & Zenk; 1999). Phibbs (1996) declared that respiratory distress, intracranial hemorrhage, necrotizing enterocolitis, nosocomial infections bronchopulmonary dysplasia, congenital anomalies, perinatal infections, intrapartum asphyxia, birth trauma, and other obstetric factors were the most common cause of newborn infant mortality.

Congenital anomalies, placenta deficiencies, infections (eg. respiratory system infections, gastroenteritis) and accidents (eg. falls, poisoning, asphyxiation) are the most common reasons for infant mortality in Turkey (Neyzi, & Ertuğrul, 1989). In Yaşamış's study (1991), anoxia, hypoxia, perinatal complications, bacterial diseases, respiratory problems, blood circulation problems and enteritis found as the most common causes of infant death in Turkey. According to Yaşamış (1991) environmental causes such as tetanus, under-nourishment and gastroenteritis are main reasons for infant death in underdeveloped regions while congenital and prenatal causes are more predominant reasons for infant death in the developed regions. Tüysüz (1988) found that sepsis, pneumonia, and gastroenteritis was the most common causes of death occurring between 0-1 year of age. Wegman, (1992; as cited in Carver et al., 1993) found that in 1989 cause of 17.6 % of all infant deaths in USA was respiratory distress syndrome and other disease of respiratory system. Besides short gestation

was cause of 10.2 % of all infant death in USA in 1990 (Wegman, 1992; as cited in Carver et al., 1993).

Infant mortality rates reflect the socioeconomic development of societies. North America and Europe have the lowest rates, 7 and 10 infants per 1.000 live births. In Latin America countries the rate is 36 infants per 1.000 live births. In African countries the rate is 91 infant deaths per 1.000 live births (Population Reference Bureau, 1988; as cited in Amonker, & Brinker; 1997). Turkey's rate of infant mortality has been gradually declining since 1960s. In Turkey 1 in 3 deaths is an infant death and 1 out of 10 infants does not survive to its first birthday (Tunçbilek, 1986).

In his review Oliver, (1999) concluded that parental grief is the one of most severe, long lasting, and exhausting forms of grief. The death of a child of any age is a profoundly painful and difficult experience (Bohannon, 1990-1991; Martinson, Davies, & McClowry, 1991, Sanders, 1979-1980; as cited in Wing, Burge-Callaway, Clance, & Armistead, 2001). It has been recognized that the loss of a fetus, a newborn or a child is one of traumatic events that both mother and father may experience as well (Feeley, & Gottlieb, 1988-1989).

It was emphasized that parents experienced crisis of meaning after a child death (Braun, & Berg, 1994; Wheeler, 2001, Neimeyer, 2000). Parents

try to make meaning of death and their lives after the death (Wheeler, 2001). Some parents found meaning in values and beliefs such as valuing life, living more fully, finding new religious beliefs (Wheeler, 2001; Dyregrov, & Dyregrov, 1999). Bohannon (1991) found that increased religious activities of grieved mothers more likely to experience lower levels of grief reactions. In Turkish literature, Güzel's (1995) and Özçetin's (1995) studies concluded with similar findings. Religious belief helped the individual in grief to give meaning to the death and to accept the death reality.

When a child dies, the parents' world is useless and a part of the self is missing (Klass, & Marwit, 1988-1989). Parents spend emotional, financial, and physical resources for the benefit of their children. They experience it as a giving to the self (Rubin, & Malkinson, 2001). After an infant death, parents experience loss of hopes for future, loss of their safety in the world, loss of desire raising a child (Wing, Burge-Callaway, Clance, & Armistead, 2001).

It was stated that parents experience immediate grief reaction, which were shock, unreality, confusion, disbelief, and feelings of unreality after an infant death (Smialek, 1978; Kavanaugh, 1997; Tudehope, Iredell, Rodgers, & Gunn, 1986). Parkes, (1972) reported that initial reaction of shock was appeared to serve as an adaptive function by insulating parents from the full impact of their child's death. After-reactions are varied and spread over several different life spheres (Dyregrov & Dyregrov, 1999).

Depression (Vance et al., 1991) and anxiety (Dyregrov & Matthiesen, 1987a; Dyregrov, & Matthiesen, 1987b; Dyregrov, & Matthiesen, 1991; Vance et al., 1991; Lang, & Gottlieb, 1993) was very common in parents after an infant death. Grieved parents generally had an intense preoccupation with thoughts and images of the dead baby (De-Frain, Martens, Stork, & Stork, 1990-1991; Tudehope, Iredell, Rodgers, & Gunn, 1986). They had somatic symptoms (Dyregrov, & Matthiesen, 1987b), anger (Lang & Gottlieb, 1993), and withdraw from social life and relations as well (Lang, & Gottlieb, 1993). It was also found that parents experienced guilt and shame after an infant death (Lang & Gottlieb, 1993; De-Frain, Martens, Stork, & Stork, 1990-1991). However in one study from a Turkish literature found that parents report low guilt after loss of their adult children (Olgun, 1999).

It was stated that both parents are markedly affected but their reactions are different after an infant death (Cordell & Thomas, 1997; Carrol & Shaefer, 1994). Previous studies found that mothers showed more severe and long-lasting grief reactions than fathers (Dyregrov, & Dyregrov, 1999; Bohannon, 1990-1991; Dyregrov & Matthiesen, 1987a; Lang & Gottlieb, 1993; Lang, Gottlieb, & Amsel, 1996). It was also found that mothers experienced more anxiety (Dyregrov & Matthiesen, 1987b, Vance et al., 1991) and more depression than fathers (Vance et al., 1991). Mothers tend to show higher levels of preoccupation, intrusive thinking and yearning

(Bohannon, 1990-1991; Dyregrov, & Matthiesen, 1987a; Dyregrov, & Matthiesen, 1991; Lang, & Gottlieb, 1993; Lang, Gottlieb, & Amsel, 1996) and depersonalization (Lang & Gottlieb, 1993; Bohannon, 1990-1991; Lang, Gottlieb, & Amsel, 1996) than fathers as well. Grieved mothers experience higher guilt and shame (Dyregrov & Matthiesen, 1987a; Lang, Gottlieb, & Amsel, 1996) and anger than fathers (Lang & Gottlieb, 1993). Fathers control their emotions (Schwab, 1990), suppress their feelings (Hughes, & Page-Lieberman, 1989) and use denial more often than women for denying the impact of infant's death (Bohannon, 1990-1991).

Vance, Boyle, Najman, & Thearle, (1995) found that mothers have significantly more psychological distress than fathers and control mothers after the 30 months following an infant loss. However when they included the increased heavy alcohol ingestion as an additional reaction to psychological distress, the difference between men and women became much smaller or non-existent. It was proposed that increased alcohol use and less psychological distress in fathers might be a different way of coping with stress.

In their study Cordell & Thomas (1997) found that reactions of fathers to the death of an infant seem to be more immediate and intense while mothers tend to move from a state of shock into a more prolonged grief. It is found that fathers cry less than mothers, as well as seek less emotional

support outside marriage or relationship. Fathers often ask “why is my wife still crying”, while mothers say “he doesn’t really care” (Cordell, & Thomas, 1997; p.298). Fathers feel an obligation to be strong for their partners, and can not break down and cry. It has been proposed that fathers appear to recover quicker than mothers do, because this is the role of fathers in society. Therefore father must appear healed (DeFrain, Martens, Stork, & Stork, 1990-1991).

In their study, Dyregrov & Matthiesen (1991) found that grief, as measured by different inventories which was Impact of Event Scale (IES), General Health Questionnaire (GHQ), State Version (STAI-X1) of the State Trait Anxiety Inventory, The Bodily Symptom Scale (BSS), short form of the Beck Depression Inventory (BDI) showed decrease over time. This decrease was most prominent in women. There was a gender difference but after 12-15 years follow-up this difference was diminished.

Association between the parental grief reactions and the demographic characteristics including age and education of parent, gender and age of an infant and presence of other children has not obvious conclusion in the grief literature. Some of the studies concluded that less education was associated with distressing reactions to infant death (Boyle, 1993; as cited in Murray & Terry 1999; Lasker, 1990; as cited in Murray & Terry 1999). On the other hand, some of the studies concluded that there was no association between

parental grief reactions and education (Nicolas, & Lewin, 1986; Lasker, & Toedler, 1991). Similarly there was no conclusion about an association between age and parental grief reactions after an infant death. Some of the studies found no association between age and parental grief reactions (Littlefield, Rushton, 1986; Elder, & Laurence, 1991; Nicol, Tompkins, Campbell, & Syme, 1986; Hazzard, Weston, & Gutterres, 1992, Lasker, & Toedler, 1991) some of them found an association between them (Fish, 1986; as cited in Moss, Moss, & Hansson, 2001; Dyregrov & Matthiesen, 1987b; Janssen, Cuisinieri, Graauw, & Hoogduin, 1997).

For the infant's characteristics the same indecisiveness were present. In some research it was found that there was an association between infant's gender (Hazzard, Weston, & Gutterres, 1992; Littlefield, Rushton, 1986) and parental grief reactions whereas in some studies it was not (Spinetta, Swarner, & Sheposh, 1981; as cited in Hazzard, Weston, & Gutterres, 1992, Feeley, & Gottlieb, 1988-1989; Nicolas, & Lewin, 1986). There was no clear evidence about the relation between infants' age and parental grief reaction as well. Some research found no association between infant's age and parental grief reactions (Roskin, 1984; as cited in Hazzard, Weston, & Gutterres, 1992; Littlefield, & Rushton, 1986; Hazzard, Weston, & Gutterres, 1992, Peppers, & Knapp, 1980 as cited in Lang, Gottlieb, & Amsel, 1996, Smith, & Borgers, 1989, 1989 ; as cited in Lang, Gottlieb, & Amsel, 1996) but some studies found an association between infant's age

and parental grief reactions(Janssen, Cuisinieri, Graauw, & Hoogduin, 1997; Kirkley-Best ,1981; as cited in Franche, & Bulow, 1999; Lasker, & Toedler 1991; Goldbach, Dunn,Toedter, Lasker, 1991).

Association between the presence of surviving children and the grief reactions of parents is not clear as well. Some studies found a relationship between presence of other child and parental reactions (Boyle, 1993; as cited in Murray, & Terry, 1999, Janssen, Cuisinieri, Graauw, & Hoogduin, 1997, Lasker, 1990; as cited in Murray, & Terry, 1999) and others reporting no influence of the presence of surviving children (Kennell, Slyter, Klaus, 1970 as cited in Murray, & Terry, 1999; Tudehope, Iredell, Rodgers, & Gunn, 1986; Nicol, Tompkins, Campbell, & Syme, 1986, Rowe et al. 1978; as cited in Murray, & Terry, 1999).

Basically studies focused on negative aspects of the grief such as depression, anxiety since most of them use psychiatric measurements for assessing grief reactions (Neimeyer,& Hogan, 2001). However, it was stated that grieved persons might experience positive changes as an outcome of the grief process (Calhoun & Tedeschi, 1990; Trockova, 1996). It was found that grieved persons suffered from deep introspection and existential questioning during the despair and detachment periods and out of that suffering they sensed they had become different than they had been before death. Grieved persons were transformed by the grief (Hogan, Greenfield, &

Schmidt, 2001). Grieved persons may meet a sense of well being and a higher level of health by attributing meaning to their experience, changing what they believe as well as achieving self-actualisation and a sense of personal growth (Lang et al., 2001).

Hogan, Greenfield & Schmith (2001) underlined the importance of personal growth as a vital component of grieving process. However reliance on psychiatric scales prevents assessment of theoretically and practically important outcomes such as personal growth (Hogan, Greenfield & Schmith, 2001; Lang et al., 2001), or a process of 'meaning reconstructions' (Neimeyer, 2000; Neimeyer, 2001).

As mentioned before grief is a multidimensional process (Hogan, Greenfield, & Schmidt, 2001). Despite the considerable amount of research that has been conducted with grieved parents, a clear understanding of the grief process has been blocked by a lack of psychometrically sound instruments available to study grief as a process (Hogan, Greenfield, & Schmidt, 2001). Early studies have tried to measure parental grief after an infant death by measuring psychiatric dysfunction related to grief such as depression and anxiety (e.g; Dyregrov, & Dyregrov, 1999; Vance et al., 1991; Vance, Boyle, Najman, & Thearle, 1995; Dyregrov & Matthiesen, 1987b; Dyregrov & Matthiesen, 1991). By developing the measures focused directly on the grief process, specific grief measures were used in grief

research. A few grief research about parental grief reactions after an infant death used these instruments for measuring grief (Lang, & Gottlieb, 1993; Lang, Gottlieb, & Amsel, 1996). However, these measures were not included personal growth as a reaction following loss and then there was no empirical finding about gender differences in positive changes or personal growth of grieved parents after an infant death as well.

In the light of literature, the main purpose of the present study was to examine whether there was a significant difference within each spouse's reports on grief reactions after an infant death. It was also aimed to investigate whether demographic variables including gender, age, education of parents, gender and age of deceased infant, presence of other child were the predictors of parental grief reactions after an infant death. In order to measure parental grief reactions, Hogan Grief Reaction Checklist (HGRC; Hogan, Greenfield, & Schmidt, 2001) translated into Turkish Language and its reliability and validity were determined. Parental grief reactions after an infant death were investigated by six dimensions, which were subscale of HGRC. Five of six dimensions were grief misery (Gamino, Sewell, & Easterling, 2000). These were despair (separation stress, hopelessness, sadness, and missing the loved one), panic behaviour (physiological characteristics including autonomic nervous system arousal associated with fear and several somatic characteristics including fatigue, headaches, stomachaches, and backaches), blame and anger (emotions of bitterness,

hostility, and vengeful feelings) detachment (avoidance of tenderlessness, withdrawal from others, and change in identity), and disorganization (difficulty with concentration and problems with learning new information and recalling familiar previously remembered information). Sixth dimension was positive aspect of grief called personal growth (spiritual and existential awareness, sense of becoming more forgiving, caring, compassionate, hopeful, and tolerant of self and others) as well (Hogan, Greenfield, & Schmidt, 2001).

1.1 Hypotheses of the study

In the light of the literature, hypotheses of the study were:

1. Wives experience more despair, panic behaviour, personal growth, blame and anger, detachment, and disorganization than their husbands.
2. Demographic characteristics of gender, age, education of grieved parents, gender and age of infants and presence of other children would be associated with the levels of grief.

1.2 Importance of the Study

This research would be the first study in Turkish grief literature

investigating an association between parental grief reactions after an infant death and demographic characteristics. No such specific investigation could be found in Turkish literature.

Similarly this research would be the first study in Turkish grief literature investigating difference of parental grief reactions within grieved couple. No such specific investigation could be found in Turkish literature.

By taking into consideration of the grief literature related with an association between parental grief and demographic characteristics, it can be stated that there is no definite conclusion about an association between parental grief and demographic characteristics, which were used as predictors of parental grief reactions in this research.

This research would be the first empirical study investigating difference of personal growth within grieved couple. Similarly this study would be the first to examine the association between personal growth and demographic characteristics after an infant death since no such specific investigation could be found in grief literature.

In Turkey, there is no specific grief instrument. Therefore translation and adaptation of HGRC into Turkish is very important. It could be thought that, availability of HGRC in Turkish Language and also establishing the

reliability and validity of HGRC could encourage the researchers to make further studies about grief.

CHAPTER 2

REVIEW OF THE LITERATURE

In this chapter grief, infant death, parental grief, and connection with the literature review and the hypothesis of the study were presented respectively.

2.1 Grief

In this section, definitions of grief, bereavement and mourning, approaches to grief, assessment of grief, grief and personal growth, abnormal grief, and interventions for grief were presented separately.

2.1.1 Definitions

Although the term's grief, bereavement, and mourning have different meanings, in grief literature sometimes they are used interchangeably. It is helpful to know the definitions of grief, bereavement, and mourning separately.

Neil (1990) described grief as the emotional response to state of loss. Similarly Santrock, (1997) state that “grief is emotional numbness, disbelief, separation anxiety, despair, sadness, and loneliness that accompany the loss of loved someone.” (p.606). It is the physical, emotional, social, spiritual, philosophical and cognitive reactions to the state of loss (Aranda, & Milne, 2000). Weiss (2001) defines grief as “the severe and prolonged distress that is a response to the loss of an emotionally important figure” (p.47). Hogan, Greenfield, & Schmidt, (2001) conclude that grief is a multidimensional process. It is emphasized that grief is not a simple emotional state but a complex, evolving process with multiple dimensions including despair, panic behavior, personal growth, blame and anger, detachment and disorganization. Cordell & Thomas (1997) define grief as “an individual journey that should not be expected to follow time limits or a specific path.” (p.302). In his study, Lindemann (1944) defines grief work as “emancipation from the bondage to the deceased, readjustment to the environment in which the deceased is missing, and the formation of new relationship.” (p.143). Grieving is the anticipated and socially approved response from the survivor (Scott, 2000). Feifel, (1983) defines grieving “as an individual dynamic process characterised by peaks and valleys rather than a by distinct stages.” (p.111).

Bereavement is related with grief. The term bereavement refers to the state of loss, whereas grief is the emotional response to state of loss or

bereavement (Neil, 1990). Herkert (2000) defines bereavement as “the period of time following a death that an individual grieves or time that an individual suffers from the emotional loss of another person.” (p.93) Similarly bereavement is the situation of anyone who has lost a person to whom they are attached as well (Aranda, & Milne, 2000).

Mourning refers to the culturally prescribed behaviours associated with the period of loss (Neil, 1990). Aranda, & Milne, (2000) describes mourning as “the public expression of grief, which is a lifelong adaptive process that is returned to again and again whenever loss is experienced.” (p.31). Todd, & Baker (1998) state that mourning is influenced by both the cultural and social background of an individual.

2.1.2. Approaches to Grief

A number of approaches to grief can be identified in the literature (Freud, 1917; as cited in Kaunonen, 2000; Lindemann, 1944; Bowlby, 1969; Kübler-Ross, 1969; Hogan et al., 1996; as cited in Kaunonen, 2000). Knowing the theoretical base is important because each theory emphasises a different process of grief and provides a model that has been developed to systematically describe the grief process. In this section different approaches to grief were explained.

The psychoanalytic theory believes that intrapsychic process dictates the course of grief. Freud (1917; as cited in Kaunonen, 2000) defines mourning to be “a regular reaction to the loss of a loved person, or to the loss of some abstraction which has taken the place of one, such as one’s country, liberty, and ideal, and so on” (p.243). Internalisation of the dead is part of grief work. It is the preliminary stage of letting go of the deceased as well. When a person realises that an object is gone for ever, she/he has to work through a review of the nature and the value of the relationship in order to be detached emotionally from the person. Detachment from the death person is difficult and resisted. Accomplishing of detachment from the dead person, grieved person re-arranges more fully in life again. Psychoanalytic approaches to grief emphasised that a bereaved person needs to grieve adaptively, before being able to successfully re-arrange in life. Review of past and present relationships is at the center of the psychodynamic approach to grief (Freud, 1917; as cited in Aranda, & Milne, 2000). When the grieved person experience relative detachment from the deceased person, grief process is successfully completed (Freud, 1957; as cited in Guttman, 1991). When a person accomplishes these steps, grieved individual is engaged in analytic grief work including verbalising feelings of guilt, expressing a sense of loss, and dealing with feelings of hostility. The grief work involves taking the heat out of the loss (Volkan & Zintl, 1993).

According to attachment theory (Bowlby, 1969), attachment behaviour

serves to commit one person to another. It is goal directed, and common to many species. It functions to aid survival. One of the first attachment relationships experienced by most people is between mother and child. From the attachment theory (Bowlby, 1980; as cited in Kaunonen, 2000; Aranda, & Milne, 2000) grief is a separation anxiety caused by involuntary separation from an attachment figure. Grief is characterized by protest and then searching, followed by despair and depression. Resolution of grief emphasizes the need for detachment from the deceased with re-organizations including cognitive re-structuring of the situation. Observations of how individuals respond to loss showed that their responses usually move through succession of phases. These phases are not clear-cut. One of the phases is numbing. It usually exists in few hours to a week. Experiencing of extremely intense distress and danger may interrupt it. Another phase is yearning and searching for the lost figure. It lasts some months and sometimes for years. Phase of disorganization and despair follows it. After that person experience a re-organization phase. It is necessary to eliminate old patterns of thinking, feeling and acting, before new ones can be fashioned.

Kübler-Ross (1969) proposed that grieved individuals experience phases of denial, anger, bargaining, depression and acceptance. The phase of denial protects the grieved individuals from experiencing the extent of the reality. Denial and shock are considered to be normal responses as long as

they are not prolonged. As the grieved individuals comes out of denial, he or she start to grapple with loss experience. They recognize their lack of control over the loss and become angry. Expression of anger is a healthy response. However repressing emotions during anger phase is not seen as normal response. After an anger stage, the grieved often bargain for the return of the deceased person. When this effort is seen as useless, grieved person experiences the hopelessness of the situation. After that, people experience a period of depression or despair. They express feeling sad and empty in this stage. In last phase, the grieved person accepts the loss. They can remember the deceased person without extreme emotional change. When the grieved person start to reinvest in social activities and have an expectations for the future, signs of resolutions are existent.

Hogan et al. (1996; as cited in Kaunonen, 2000), introduced their experiential theory of grief. The theory states that regardless of the cause of death, the timeliness of the person's death, or the relationship of the survivor to the deceased, the grief follows consistent overall patterns. Dimensions of grief include despair, detachment, personal growth, blame and anger, and disorganization. Although the components may appear to occur linearly, many of the phases overlap and reoccur. Grief may experience indefinitely. However, its intensity lessens over time. Throughout the grief process, cycles of grief occur either associated with special occasions related to the deceased person, such as birthday or family celebrations, or grief occurs

without notice, triggered by music, sound or something else familiar. Personal growth is encompassed as a vital component of grieving process occurring to some degree across all phases of the bereavement process. Besides that Hogan et al. (1996; as cited in Herkert, 2000) concluded that emotional and social withdrawal which is necessary part of the grieving is common among grievers. Detachment and isolation from others occurs because grieved person needs to conserve energy for personal coping as well.

2.1.3. Assessment of Grief

Although the human experience of grief has been studied frequently, it has not been studied well because of measurements used in these studies. Grief literature generally based on two kinds of study: qualitative and quantitative. In this section quantitative and qualitative studies of grief are presented.

Quantitative studies of grief consist of psychiatric scales and grief instruments. Researches about grief mostly are relied on generic measures of psychiatric symptomatology. Studies frequently use psychiatric measurements or scales focusing on prominent symptom scales for assessing grief reactions such as Symptom Checklist (SCL-90; Gilliss, Moore, & Martinson, 1997), Beck Depression Inventory (BDI; Franche, &

Bulow, 1999), State-Trait Anxiety Scale (STAI; Dyregrov, & Matthiesen, 1987b), Hamilton Depression Scale (HAM-D; Olgun, 1999). Psychiatric scales have no problems in reliability and validity and these scales have pertinence in assessing some outcomes of loss as well. However there are some limitations to use psychiatric scales. They are assessing only phenomena shared by bereaved individuals and psychiatric reference groups. As mentioned before grief is normal response to the loss. By using psychiatric measures for assessing grief, grief reactions are determined according to the degree of psychopathology (Neimeyer, & Hogan, 2001). Depending on scales of psychiatric symptomatology precludes assessment of theoretically and practically important outcomes such as process of meaning reconstructions (Neimeyer, 2000; Neimeyer, 2001), posttraumatic growth (Tedeschi, Park, Calhoun, 1998), positive psychological changes (Yalom, & Lieberman, 1991) or personal growth (Hogan, Greenfield & Schmidh, 2001; Lang et al., 2001; Hogan, & Schmidt, 2002) following loss.

Besides psychiatric measures there was some grief research using grief instrument such as Grief Experience Inventory (GEI; Sidmore, 1999-2000; Hazzard, & Weston, & Gutterres, 1992), Hogan Grief Reaction Checklist (HGRC; Hogan, & Schmidt, 2002). Some of grief studies used special grief instrument as well, such as Perinatal Grief Scale (PGS; Cuisinier, Janssen, Graauw, Bakker, & Hoogduin, 1996; Hunfeld, Wladimiroff, & Passchier, 1997; Puddifoot, & Johnson, 1999). These

measures are very helpful for understanding grief in its own trajectory. However in these instruments one point is very important which is development process of the instruments. Hogan, Greenfield & Schmidh, (2001) stated that empirically developed instrument measures what is intend to measure. Therefore validity of the instrument is higher than the instrument developed by rational means.

Qualitative methods can provide a useful counterbalance to atheoretical, objectivistic, and superficial study of grieving (Neimeyer, & Hogan, 2001). Kadzin, (1998) defined the qualitative research as “ is an approach to the subject matter of human experience and focuses on narrative accounts, description, interpretation, context, and meaning.” (p. 248). After the Kübler Ross’s (1969) interviews of dying patients there is a tendency to use qualitative methods in grief research such as Braun, & Berg (1994); De-Frain, Martens, Stork, & Stork, (1990-1991).

It was suggested that both qualitative and quantitative methods used together (Neimeyer, & Hogan, 2001; Kadzin, 1998). For example Dyregrov, & Dyregrov (1999) in their study used both qualitative and quantitative methods together. This is more eclectic approach. Studying like this makes it possible to test and confirm outcome of the study by two methods (Dyregrov, & Dyregrov ,1999).

2.1.4. Grief and Personal Growth

Research on grief and personal growth is a developing field. It was concluded that grieved parents may experience positive changes as an outcome or a part of grief process (Calhoun & Tedeschi, 1989-1990; Trockova, 1996; Kessler, 1987; Yalom, & Lieberman, 1991; Lang et al., 2001; Schaefer, & Moss, 1998; Hogan et al., 1996; as cited in Kaunonen, 2000).

Personal growth is encompassed as a vital component of grieving process occurring to some degree across all phases of the bereavement process (Hogan et al., 1996; as cited in Kaunonen, 2000). Hogan et al. (1996; as cited in Kaunonen, 2000) stated that grieved person engaged in a search for meaning and purpose. Associated with that grieved person become less judgemental, more caring, tolerant, and compassionate. Hogan & Schmidt (2002) emphasized that rather than returning to normal functioning, grieved person becomes transformed by the grief experience. Grieved person creates new identity and revises their worldview. Similarly, Nerken (1993) suggested that growth following grief exist when person grieved actively, confront their loss, and try to understand it through self-reflection. Growth experienced by increased empathy, self-awareness, and self-confidence. These positive changes reflect grieved individuals becoming transformed by the grief. Grieved person had suffered from deep

introspection and existential questioning during the despair and detachment periods. As a result of suffering they sensed they had become different than they had been before death (Hogan, Greenfield, & Schmidt, 2001)

Calhoun, & Tedeschi (1989-1990) identified important changes in grieved individuals' personal resources. These persons saw themselves as more mature, independent, wise, and better able to cope with future crises. Their religious beliefs deepened. They were more accepting of their mortality.

Kessler (1987) in her interviews with grieved people noted several themes suggesting personal growth. These were: "(a) caring more about loving relationships with friends and family; (b) accepting personal mortality; (c) savoring the present moment; (d) investing in the future; (e) taking more responsibility; (f) feeling freer to risk new ways of living." (p.242).

She noted that many of grieved person showed improved personal resources. Grieved people discovered new individual strengths. They become more independent, emotionally stronger, compassionate, and more purposeful. They realized fragility of life, and their vulnerability. They understood that they could not predict the future. They recognized that life could serve an opportunity at any moment and they reported necessity of living more fully as well.

Lang et al., (2001), in their study with parents experienced prenatal loss, concluded that grieved individuals experience a sense of well being, high level of health, self-actualisation, and sense of personal growth. They stated that when a person learn to use own personal resources, they have more capacity to optimise their level of health and well being in other situations. Moreover, in their study with widows, Yalom & Lieberman (1991) concluded that grieved person experiences many challenges but the most important one was about existence. They challenged with questions about their responsibility, independence, finitude, loneliness and meaning in life. Yalom & Lieberman (1991) suggested that grieved person experienced “the presence of personal growth- a positive outcome of bereavement-” (p.345).

2.1.5. Abnormal Grief

Although there was different explanations for abnormal grief in grief literature, distinctions between normal versus abnormal grief are difficult to make. In this section different explanations for abnormal grief were presented.

Grief is a normal and an expected reaction to the death of a loved one (Stroebe, Hansson, Stroebe, & Schut, 2001; Jansen, 1985; Aranda, & Milne, 2000). Grieved person would be expected to feel sad about the loss and miss the deceased (Prigerson, & Jacobs, 2001). Stroebe, & Schut (1999)

emphasized the importance of confrontation with loss for adaptive grieving. Lindemann (1944) and Bowlby (1980; as cited in Lasker, & Toedler, 1991) agreed that a lack of evidence of grieving after loss is a good indication of pathology and likely to result in more severe distress namely delayed or distorted grief. However, Worthman & Silver (1989) in their review of the grief studies, they found no evidence that distress following a loss is necessary to future mental or physical health and also lack of distress is indicative of pathology.

Besides the experience of grief reactions, duration of grief was thought as an criteria for abnormal grief. Parkes (1972) used the term prolonged grief. Prolonged grief refers to an excessive length of time in which symptoms of grief or seperation stress continue. Middleton, Raphael, Martinek, & Misso (1993; as cited in Aranda, & Milne, 2000) characterised chronic grief by symptoms look like depression, and by excessive in time period without coming to satisfactory resolution. However, in grief literature, there was no clear conclusion about normal duration of recovery from loss. Lindemann (1944), stated that it was possible to settle an uncomplicated grief reactions in 4 to 6 weeks. On the other hand, Lehman, Worthman, & Williams, (1987) and Hazzard, Weston, & Gutterres, (1992) suggested that recovery from loss may take longer time.

Traumatic, and complicated grief were commonly used terms in grief

literature. Prigerson & Jacobs (2001) conceptualised the traumatic grief symptoms as (a) symptoms of separation distress (preoccupation with thoughts of the deceased, upsetting memories of the deceased, longing and searching for the deceased, loneliness following loss); (b) symptoms of traumatic distress (feeling disbelief about the death, mistrust, anger, and detachment from others, feeling shocked by the death, and the experience of somatic symptoms).

They stated that the term traumatic grief does not refer to traumatic mode of death such as murder but refers to a separation trauma. The separation resulting from death leads to extreme feelings of distress. In their research approximately 20 % of grieved individuals continue to experience significant and lasting results in terms of their own identity and coping capacity as a result of being grieved. Furthermore, Horowitz et al., (1997) suggested the criteria for complicated grief disorder including current experience of intrusive thoughts, distressing yearnings, feeling alone, loss of interest, avoiding reminders of the deceased and sleep disturbances. (Horowitz et al.,1997). Horowitz et al., (1997) suggested that a diagnosis of complicated grief could not be made less than 14 months after the death. In contrast Prigerson, & Jacobs, (2001) suggested that a diagnosis could be made after two months although this time frame is not to be empirically tested.

Stroebe, Hanson, Stroebe, & Schut, (2001) stated that definition of abnormal grief have been empirically derived rather than theoretically. They pointed that setting a certain cut off point between normal and abnormal is not possible because of cultural and individual differences in manifestations of grief. They define pathological grief as a deviation from the cultural norm. in the time course or intensity of specific or general symptoms of grief.

2.1.6. Interventions for Grief

As mentioned in the definitions, grief is anticipated and expected reaction to the death of a family member or close friend. It is a normal response, accompanied by distress for almost everyone who experiences a significant loss (Jansen, 1985; Aranda, & Milne, 2000). Therefore intervention for grieved persons is necessary or not still unclear. (Raphael, Minkov, & Dobson, 2001). Stroebe, Hansson, Stroebe, & Schut, (2001) stated that the majority of grieved people had no pathological indications and only in a minority of cases, there was a need for professional help.

Although there was an indefinite thought about necessity of intervention, there were some suggestions about interventions for grief. One of them was prevention interventions for whole populations including educate about or support for normal grief (Raphael, Minkov, & Dobson, 2001). In their study Oliver, Strurtevant, Scheetz, & Fallat, (2001) found that

informing the grieved individuals about grief process has a positive effect on grief outcome. They concluded that hospital and trauma service personnel could positively impact the grieving process with special training. Similarly Elder, & Laurence (1991) stated that support and consultation after loss played an important role in lessening grieved individuals distress. Werth, (1999) found that with the proper psychological and sometimes pharmacological intervention, grieved individuals have experienced more positive coping in their later grieving process as well.

To educate grieving person and professionals about importance of grieve successfully plays an important role for returning normal functioning (Brabant, Forsyth, Mcfarlain, 1997). The same is possible for therapeutic conditions. Allumbaough, & Hoyt, (1999) stated that treatment for normal grief is focused on normal developmental process of grief work and aimed to return normal functioning. Emotional expression is helpful and should be encouraged (Lindemann, 1944; Parkes, 1972). Full expression of emotional reactions in a grieving person is necessary for optimal resolution of the grief reaction. It was found that individuals who are open to emotions and experiences might be able to resolve feelings of grief more effectively (Parkes, 1972; Wortman, & Silver, 1989; Hinton, 1967). Sanders (1989; as cited in Allumbaough & Hoyt, 1999) inspired from the psychoanalytic approaches, emphasized the importance of grief work for resolution of grief. Sanders (1989; as cited in Allumbaough & Hoyt, 1999) stated that in grief

therapy, grieved person would attribute his/her unfinished business to the therapist as a substitute for the deceased. Therefore grieved person have a chance for complete his/her unfinished business related with deceased or grief process and complete his/her grief work.

There was no clear evidence concerning the effectiveness of grief counselling in clinical conditions (Parkes, 1972; Kato & Mann, 1999; Allumbaugh & Hoyt, 1999; Videka-Sherman, & Lieberman, 1985). Kato & Mann (1999) presented a qualitative review of grief intervention studies and assessed the overall effectiveness of grief interventions. They concluded that interventions for grieved person would have no function in relieving the symptoms of grief. Similarly Lieberman, & Yalom, (1992) in their study with grieved spouses tried to determine effects of group therapy on grieved persons psychological states. They didn't find support for "powerful effect" (p.128) of group therapy on grieved spouses. However, Schut, Keuser, Bout, & Stroebe (1996) found significant recession in grieved person's symptoms after giving a treatment. Kato & Mann, (1999), Allumbaugh & Hoyt, (1999) stated that symptoms of grief would be relieved by time. Therefore, whether recession on symptoms of grieved person is a result of treatment or time was not clear.

2.2. Infant death

Infant Death includes deaths occurring in one year after live birth has taken place. In other words, infant death is occurring before completing one year of age (Death Statistics, 2000). In this section, causes and prevalence of infant death were presented.

Nelson & Waldo (1996) stated that cause of infant death consisted of 3 parts including explained-congenital, unexplained-sudden infant death syndrome (SIDS) and explained-acquired. Congenital cause of infant death include cardiac (arrhythmia, congenital heart disease), metabolic (fatty acid disorder, others), and central nervous system disorders. Acquired cause of infant death include infection (pneumonia, sepsis, and meningitis) and trauma (accidental and homicide)(Nelson, & Waldo, 1996).

From a recent statistics in Turkey, pneumonia (48.4 %), diarrhoea (23.7 %), and infections of respiratory system (10.8 %) were the most common causes of infant death (T.C Başbakanlık Kadın Statüsü ve Sorunları Genel Müdürlüğü, 2001). Tüysüz (1988) found that sepsis, pneumonia, and gastroenteritis was the most common causes of death occurring between 0-1 year of age. Yaşa (1994) examined the cause of prenatal mortality. He found that immaturity and prematurity were the most important cause of perinatal mortality (42.8 %). Özkan (2000) found that

prematurity (39,5 %), sepsis (23.6 %) and prenatal asphyxia (10.4 %) were most common causes of infant death. Kolata (1989) found that birth defects (20.5 %); low birth weight, prematurity, and respiratory distress syndrome (17.7 %); sudden infant death syndrome (13.6 %); maternal complications including premature labour (3.7 %); shortage of oxygen around time of birth (2.5 %); infections (2.4 %); injuries (2.3 %) were the most common cause of infant death in USA in 1986.

In Turkey, mother's education, existence of health security affected infant mortality. The higher the level of the educational status of the women, the lower the infant mortality (Erdal, 1994; Yaşamış, 1991). In Erdal's (1994) study it was found that there was no relation between mother's-father's age, father's education, mother's-father's employment status and infant mortality. It was also found that the ratio of male infant deaths was higher than that of the female infants (Yaşamış, 1991; Erdal, 1994; Tüysüz, 1988).

Yaşamış (1991) identified the risk groups and factors affecting infant mortality in Turkey. These were spatial and physical development of the area in which the family is residing, mothers less than 20 years old, fathers less than 30 years old, couples whose marital age is less than 25 were explained as risk group. In that study risk groups were determined as consanguineous marriages, educational status of parents, fathers employment type and status, level of family income, the quality of the house

in which the family is living, the type of families social security system and environmental pollution and nuisances.

Infant mortality rates demonstrate the socioeconomic development of societies (Population Reference Bureau, 1988; as cited in Amonker, & Brinker; 1997). Higher the socioeconomic status, lower the infant mortality rates. According to the Population Reference Bureau's, (1988; as cited in Amonker, & Brinker 1997) statistics North America and Europe have the lowest rates of infant mortality (7 and 10 infants per 1.000 live births). In Latin America countries the rate is 36 infants per 1.000 live births and in African countries the rate is 91 infant deaths per 1.000 live births (Population Reference Bureau, 1988; as cited in Amonker, & Brinker; 1997). Turkey has a high infant mortality rate. Most of the infants have died before completing one month (Death Statistics, 2000). Turkey's rate of infant mortality has been gradually declining since 1960s. In Turkey 1 in 3 deaths is an infant death and 1 out of 10 infants does not survive to its first birthday (Tunçbilek, 1986). In Dogan's (1993) study, infant mortality rate was found 25\1000 in Etimesgut district and 38\1000 in Kayseri district.

2.3. Parental Grief

In this section, parental grief reactions after an infant death, resolution of parental grief, association between some demographic characteristics and

parental grief reactions were explained separately.

2.3.1. Parental Grief Reactions after an Infant Death

Parents experience acute crisis reactions following the loss of an infant child (Lehman, Wortman, Williams, 1987; Martinson, Davies, & McClowry, 1991). Mothers' and fathers' most immediate response following the death of their infant baby is usually a shock state. It consists of numbness, confusion, disbelief, and feelings of unreality (Smialek, 1978; Kavanaugh, 1997; Tudehope, Iredell, Rodgers, & Gunn, 1986). Parkes (1972) stated that the initial reaction of shock appears to serve as an adaptive function by insulating parents from the full impact of their child's death. Lang, Gottlieb, & Amsel, (1996) found that grieved parents reported significantly greater feelings of depersonalization than non-bereaved parents up to 3 years after the death of their infant.

Depression was very common in parents after an infant death (Vance et al., 1991; Dyegrov, & Matthiesen, 1991). Lindemann (1944) proposed that absence of depression after the loss of a meaningful relationship was viewed as abnormal as well. Murray & Callan (1988) found that bereaved parents were significantly more depressed than the normal group but significantly less depressed than depressed patients 27 months after the loss.

Similarly anxiety was very common in parents after the death of their infant (Dyregrov & Matthiesen, 1987a; Dyregrov, & Matthiesen, 1987b; Dyregrov, & Matthiesen, 1991; Vance et al., 1991; Lang, & Gottlieb, 1993). Dyregrov & Matthiesen (1987b) stated that after the loss of an infant, anxiety experienced by parents looked like the reactions of other traumatic life events. Anxiety in grieved parents might be related to problems of communication among spouses or perception of others as unsupportive as well.

Vance, Boyle, Najman, & Thearle, (1995) found that grieved mothers have higher score on depression and anxiety measure than nongrieved control groups after 2, 8, 15 and 30 months following loss. Similar results were obtained for fathers only at 2 months after loss. However heavy alcohol drinking was added as an additional psychological reaction to stress, this difference between grieved fathers and control groups consistent at 2, 8, 15 and 30 months after loss.

It was reported that grieved parents withdraw from social life and relations (Lang, & Gottlieb, 1993). They live with so many exhausting feelings. Because of that, they have less energy to devote to others. Their emotions are less acceptable for society. They are sensitive to being misunderstood so they may withdraw themselves to avoid being hurt (Wing, Burge-Callaway, Clance, & Armistead, 2001). Wilson, Fenton, Stewens, &

Soule, (1982) state that grieved parents felt misunderstood by family and friends after an infant loss. The death of an infant may not be acknowledged by others as the death of an old child so it may not be seen as a reason for intense mourning. Family and friends having opinion like this may feel uncomfortable, when meeting intense mourning, and become less valuable. Parents isolate themselves from having relationship with them (Wing, Burge-Callaway, Clance, & Armistead, 2001; Leon, 1990).

After an infant death, parents' physical health negatively effected as well. It was found that grieved parents have poorer physical health than non-grieved parents (Znoj, Keller, 2000; Miles, 1985; Vance, Boyle, Najman, & Thearle, 1995). Dyregrov, & Matthiesen (1987b) found that grieved parents had somatic symptoms including sleep disturbances, appetite problems, fatigue, gastrointestinal problems, headaches, chest pain, and dizziness. However, Birebaoum, Steward & Philips (1996) found that physical health of grieved parents was significantly better than nongrieved parents. Similarly in their study Murphy et al., (1999) found that 81 % of grieved mothers and 85 % of grieved fathers rated their health good to excellent. Perkins, & Harris (1990) found that there was no differences between physical health of grieved parents and non grieved parents.

Guilt and anger were found to be very common among grieved parents (Lang & Gottlieb, 1993; De-Frain, Martens, Stork, & Stork, 1990-

1991). In De-Frain, Martens, Stork, & Stork's (1990-1991) study some of the grieved parents stated that God punished them. In their study some of the parents reported that their infant died because of their failure of parenting, protecting as well. De-Frain, Martens, Stork, & Stork, (1990-1991) found that anger in grieved parents might be directed toward self. Aiken, (1990) stated that anger in grieved parents might be directed anyone who seems to bear responsibility for example medical staff (Aiken, 1990). Similarly in De-Frain, Martens, Stork, & Stork's (1990-1991) study most of the parents tended to blame medical staff and they experienced anger to medical staff.

2.3.2 Resolution of Parental Grief

Death of a child is a painful and untimely life tragedy (Lehman, Wortman, & Williams, 1987) and viewed as being wrong (Santrock, 1997; Braun & Berg, 1994). Grieved parents often experience a grief that is unexpectedly pervasive, intense, complex, enduring and complicated (Wing, Burge-Callaway, Clance, & Armistead, 2001; Parkes, 1998). Death of a child at any age is a strongly distressing and difficult experience (Bohannon, 1990-1991; Martinson, Davies, & McCowry, 1991; Sanders, 1979-1980; as cited in Wing, Burge-Callaway, Clance, & Armistead, 2001). Sanders (1979-1980; as cited in Wing, Burge-Callaway, Clance, & Armistead, 2001) compared the grief reactions of adults after a spouse, parent and child loss.

It was found that losing a child was reason for higher intensities of grief reactions.

The parental attachment bond to children is a result of powerful biological, evolutionary, and psychological forces. Parents believe that children will come into the world and be cared for (Anthony, & Benedek, 1970). Therefore parents spend their emotional, financial, physical resources for the benefit of their children. They experience it as a giving to the self (Rubin, & Malkinson, 2001). Children are intimately linked to parental expectations for the future, play a pivotal role in family life, and parents rarely consider the possibility of out living their children (Parkes, 1998).

After an infant death, parents experience crisis emotion, which is devastating for parents. (Lehman, Wortman, & Williams, 1987). The parent's world is become meaningless and a part of their self is missing as well (Klass, & Marwit, 1988-1989). Significant portion of the parent's life energy dies with their child (Rubin, 1993; as cited in Rubin, & Malkinson, 2001). After an infant death, parents experience loss of hopes for future, loss of their safety in the world and loss of desire raising a child as well (Wing, Burge-Callaway, Clance, & Armistead, 2001). It creates an 'empty space' for parents (Cordell, & Thomas, 1997).

Loss of a child represents not only the loss of a family member but

also the loss of future expectations (Parkes, 1998). Therefore parental grief is a crisis of meaning, and it is central to the process of readjustment after the death of a child (Braun, & Berg, 1994; Wheeler, 2001; Neimeyer, 2000). Wheeler (2001) looked at two aspects of the search for meaning in parental grief. The grieved parents participating that study reported experiencing a shattering of their assumptive world. As a result of this experience, they feel intense emotional disturbance. They have difficulty in understand the death, and try to make meaning of death and their lives after the death. During early grief, they try to understand cognitive mastery of the traumatic event by asking 'Why' and 'How' questions. The reality of death is denied. Later, the intensity of the protest is diminished but parents still have difficulty in the meaning and acceptance of death. Braun & Berg (1994) stated that if the explanation of death did not fit into the prior meaning structure, which is the parents' descriptions of the collection of beliefs, assumptions, values and norms, disorientation occurred. Parents' existing beliefs, assumptions, values, and norms are shattered as well.

Besides making meaning of death, grieved parents have to find meaning in their ongoing lives (Wheeler, 2001; Dyregrov, & Dyregrov, 1999). They contact with surviving children, spouse, children etc (Wheeler, 2001). They engage in activities such as helping other grieved parents or helping people in general. Some parents found meaning in values and beliefs such as valuing life and living more fully or personal growth, which is feeling better

about oneself or becoming a better person (Wheeler, 2001; Dyregrov, & Dyregrov, 1999).

De-Frain, Martens, Stork, & Stork, (1990-1991) and Tuhedope, Iredell, Rodgers, & Gunn, (1986) found that grieved parents had an intense preoccupation with thoughts and images of the dead baby. In De-Frain, Martens, Stork, & Stork's (1990-1991) study parents reported that they believe that their child was alive. It was not unusual for them to experience illusions that their child was still living. They had heard their baby's cry, believed in their baby's presence. Lehman, Worthman, & Williams (1987) found that 96% of the bereaved parents said that memories, thoughts or mental pictures of their child had come to their mind. Interaction with the inner representation of the deceased child is a sense of presence, hallucinations, and belief that the child is alive. Klass, (1993) found that parents might keep the inner representation of the child by religious devotion and memories. By using them, the child remains immortal in the parents' inner and social world. Klass, & Marwit, (1988-1989) stated that losing a child would be a failure in parenting for parents. Inner representation of the death child would be helpful for parents for compensating their failure of parenting as well.

There was no clear conclusion about whether inner representation of the death child is normal or pathological resolution of parental grief. To the

knowledge of the literature review, most of the approaches concluded that grieved parents/persons need to relinquish the lost object to form new attachment in the present (Freud, 1917; as cited in Kaunonen, 2000; Lindemann, 1944; Bowlby, 1980; as cited in Aranda, & Milne, 2000; Hogan et al., 1996; as cited in Kaunonen, 2000). Therefore inner representation of the death child was thought as a pathological resolution of grief. However, Klass (1989; 1993) emphasized that inner representation of the death child is accepted as a component of everyday world. It was stated that after a child death parents loosen their past and future. Inner representation of the death child could be thought as a solace for parents and would be maintain a bond between parents' past and the future life. Similarly, Rubin (1985; as cited in Klass, 1993) found that healthy resolution of grief could not measured by breaking bonds with the deceased person. In their review, Stroebe, Gergen, Gergen, & Stroebe (1992) stated that

The modernist approach to life is one that emphasizes goal directedness, efficiency, and rationality. In psychology, modernism has given rise to the machine metaphor of human functionality. When applied to grief, this view suggests that people need to recover from intense emotionality and return to normal functioning and effectiveness as quickly and efficiently as possible. (p.1206)

In this point of view inner representation of the death child could be thought as pathological. In their review, Stroebe, Gergen, Gergen, & Stroebe (1992) also explained the romanticist approach to grief, which was contrary to the modernist approach, as;

To grieve was to signal the significance of the relationship, and the depth of one's own spirit. Dissolving bonds with the deceased would not only define the relationship as superficial, but would deny as well one's own sense of profundity and self worth. (p.1208)

This could be concluded that representation of the death child was thought as normal resolution of parental grief according to the romanticist approach to grief.

Klass, (1993) concluded that resolution of parental grief was slow process of building a new social world and a new inner world. Klass (1989) stated that

It is not unusual for parents to take four to five years before they find their new equilibrium. But they do reach resolution. The lives they live after the death of a child are not the lives they lived before the death. There is an empty space in their world, which will not be filled. (p.175)

2.3.3 Demographic Characteristics and Parental Grief Reactions

In this section, relationship between demographic characteristics and parental grief reactions were presented. Firstly, relationship between gender and parental grief reactions was explained in separate headline because gender was the most studied demographic characteristic related with parental grief reactions. After that, relationship between parental grief and other demographic characteristics including age, education of grieved

parents, sex and age of deceased infant and presence of other children was presented.

2.3.3.1. Gender and Parental Grief Reactions after an Infant Death

Association between parental grief reaction and parents' gender studied more (Dyregrov, & Matthiesen, 1991; Goldbach, Dunn, Toedler, & Lasker, 1991; Lang, & Gottlieb, 1993; Dyregrov, & Matthiesen, 1987a; Dyregrov, & Matthiesen, 1987b; Lang & Gottlieb, 1993; Bohannon, 1990-1991; Lang & Gottlieb, 1996). In this section gender difference in parental grief reactions after an infant death was explained.

It was concluded that mothers were significantly more depressed than fathers within 6 months after loss (Dyregrov, & Matthiesen, 1991; Goldbach, Dunn, Toedler, & Lasker, 1991) and this differences exist within 12 to 15 months after loss (Dyregrov, & Matthiesen, 1991; Lang, & Gottlieb, 1993) and 4 years after loss (Dyregrov, & Matthiesen, 1987a; Bohannon, 1990-1991). However, Goldbach, Dunn, Toedler, & Lasker (1991) didn't find the same pattern of this difference. Difference between mothers and fathers found at 6 months but not at one year and 2 year. Wilson, Witzke, Fenton, & Soule, (1985) studied the depression of mothers and fathers following a perinatal loss. In that study in the first six weeks following their loss, differences were observed in responses of mothers and fathers, but 25

months after the death mothers' and fathers' difference in depression become less apparent.

Besides that it was found that mothers experienced more anxiety than fathers (Bohannon, 1990-1991; Dyregrov, & Matthiesen, 1987a; Dyregrov & Matthiesen, 1987b; Lang & Gottlieb, 1993). Mothers experienced more somatic symptoms than fathers as well (Dyregrov & Matthiesen, 1991; Bohannon, 1990-1991; Dyregrov & Matthiesen, 1987a; Lang & Gottlieb, 1993). It was also found that mothers tended to show higher preoccupation, intrusive thinking and yearning than father (Bohannon, 1990-1991; Dyregrov, & Matthiesen, 1987a; Dyregrov, & Matthiesen, 1991; Lang, & Gottlieb, 1993). Gender differences also exist in depersonalization as grief reaction. Mothers experienced more depersonalization than fathers (Lang & Gottlieb, 1993; Bohannon, 1990-1991; Fish, 1986; cited in Wing, Burge-Callaway, Clance, & Armistead, 2001).

Bohannon (1990-1991) found that grieved fathers use more denial for denying the impact of infant's death than grieved mothers during the first 2 years following the loss. Tuhedope, Iredell, Rodgers, & Gunn, (1986) found that 10 % of the fathers showed almost complete denial of the death of their newborn baby after 2 months postloss. However, in an another study Fish (1986; as cited in Wing, Burge-Callaway, Clance, & Armistead, 2001) found

that mothers and fathers did not show difference in the use of denial after 2 to 4 years after their loss.

Grieved mothers experience higher guilt and shame (Dyregrov & Matthiesen, 1987a; Lang & Gottlieb, 1993; Lang & Gottlieb, 1996) and anger (Fish, 1986; cited in Wing, Burge-Callaway, Clance, & Armistead, 2001; Lang & Gottlieb, 1993) than fathers. Dyregrov, & Matthiesen, (1987) found that mothers showed higher guilt and shame than fathers 2 months after death of an infant. Lang & Gottlieb (1993) found that mothers experienced more guilt and shame than fathers 3 years after loss as well. Because of societal expectations mothers carry primary caretaking responsibility for the well being of their families, they are more vulnerable to blame and guilt (Walsh, & McGoldrick, 1998). It was found that mothers experienced more anger than fathers as well (Fish, 1986; cited in Wing, Burge-Callaway, Clance, & Armistead, 2001; Lang & Gottlieb, 1993). However, Bohannon, (1990-1991) found that mothers and fathers experienced equal intensities of anger one year after loss.

Mothers experienced more isolation, interpersonal sensitivity, and withdrawal behaviours than fathers after an infant death (Lang, & Gottlieb, 1993). However Tuhedope, Iredell, Rodgers, & Gunn, (1986) found that mothers and fathers do not differ in experience of isolation or withdrawal.

Vance, Boyle, Najman, & Thearle, (1995) found that mothers experienced significantly more psychological distress than fathers and control mothers over the 30 months following infant loss. However, when they included the excessive use of alcohol as an additional reaction to stress, this difference between men and women became much smaller, or non-existent. In the study it was proposed that increased alcohol use and less psychological distress in fathers might be a demonstration of a different way of coping with such stress than in mothers.

Dyregrov & Dyregrov (1999) studied the long-term impact of sudden infant death. They used Impact of Event Scale (IES), General Health Questionnaire (GHQ), State Version (STAI-X1) of the State Trait Anxiety Inventory, The Bodily Symptom Scale (BSS), short form of the Beck Depression Inventory (BDI) as quantitative measure and semi-structured, in-depth-interviews as qualitative measures. In that study result of the qualitative and quantitative measures consistent in two phases of the study. In first phase of the study it was found that there was a clear gender difference. Mothers score higher on quantitative data than fathers. However differences between mothers and fathers decreased 12-15 years after the loss, which was found in the second phase of the study.

Women express feelings early after loss (Dyregrov, & Mattheisen, 1987b) whereas fathers control and suppress their feelings (Schwab, 1990;

Hughes, & Page-Lieberman, 1989). Schwab (1990) found that mothers reduced their emotional tension by crying much more than fathers. It was found that mothers used more writing and reading on loss and grief as well. Fathers have been socialized to manage instrumental tasks. For example they tend to take charge of the funeral, burial, financial and property arrangements. Fathers tended to remain more peripheral than mothers after an infant death (Walsh, & McGoldrick, 1998). Father is expected to be the supporter or the strong one (Smialek, 1978). He must undertake the task of informing his other children and grandparents of the death. Because of that he has no opportunity to grieve openly (Scully, 1985).

To sum up mother tended to experience more grief reactions than fathers after an infant death. Because of differences between fathers and mothers grief reactions marital problems might be occurred. Gilbert (1989) found that after an infant death difference in spouses' grief reactions caused marital problems. Schwab, (1990) stated that wives reported anger over husbands' lack of experiences of grief. Besides that spouses have a tendency to blame partners either for the loss, or care of the child. This might have negative effect on the marital relationship as well (Robert, 1991). Some parents get divorced within few years after the death of their child (Klass, 1986-1987; De-Frain, Martens, Stork, & Stork, 1990-1991). DeFrain (1991) suggested that when there was marital difficulties before the loss, there was an increased risk for family problems after the SIDS death. It was

found that parents of an infant who has died more likely to experience marital break up than parents whose infant survived. Similarly Najman, et al (1993) found that grieved parents was more likely to express dissatisfaction with the relationship with their partner than non grieved parents. Besides that it was emphasized that supportive relationship between the grieved spouses was important to their recovery (Feeley, & Gottlieb, 1988-1989; Gilbert, 1989). Spouses' ability to communicate about the loss of their infant is important to the maintenance of their relationship as well (Dyregrov, & Matthiesen, 1987b; Feeley, & Gottlieb, 1988-1989; Gilbert, 1989).

2.3.3.2. Other Demographic Characteristics and Parental Grief Reactions

In this section, relationship between parental grief reactions and demographic characteristics including education, age of grieved parents, age and gender of a deceased infant, presence of other children were presented respectively.

It was stated that less educated families was more likely to report prolonged, distressing reactions to infant death (Boyle, 1993; as cited in Murray & Terry 1999; Lasker, 1990; as cited in Murray & Terry 1999). Murray & Terry (1999) found that higher level of education were associated with less distress at 15 months after an infant death. They concluded that

higher education would lead to better parental adjustment to infant death but only in the longer time periods. On the other hand, Nicolas, & Lewin, (1986) and Lasker, & Toedler, (1991) found no association between parental grief reactions and education.

Association between age and parental grief reactions after an infant death was not clear. Some of the studies found no association between age and parental grief reactions (Littlefield, Rushton, 1986; Elder, & Laurence, 1991; Nicol, Tompkins, Campbell, & Syme, 1986; Hazzard, Weston, & Gutterres, 1992, Lasker, & Toedler, 1991). However Fish (1986; as cited in Moss, Moss, & Hansson, 2001) stated that older fathers (mean age 47) grieved more intensely than younger fathers (mean age 31). Dyregrov & Matthiesen, (1987b) also stated that older age has an association with higher anxiety after infant death. Janssen, Cuisinieri, Graauw, & Hoogduin, (1997) concluded that older mother experienced more intense grief reaction as well.

In some research it was found that there was an association between infant's gender and parent grief reactions whereas in some studies it was not. Hazzard, Weston, & Gutterres, (1992) and Littlefield, Rushton, (1986) stated that parents experience more intense grief reactions for deceased boys than for deceased girls. Similarly Fish (1986; as cited in Hazzard, Weston, & Gutterres, 1992) reported that fathers grieved more intensely for

boys than daughters. However, Spinetta, Swarner, & Sheposh, (1981; as cited in Hazzard, Weston, & Gutterres, 1992), Feeley, & Gottlieb, (1988-1989); Nicolas, & Lewin, (1986) found no association between infant's gender and parental grief reactions. Similarly, Sidmore (1999-2000) studied the association between gender of the parent and gender of an infant. It was concluded that there is no certain association between genders.

Association between the presence of surviving children and the reactions of parents is not obvious. Some studies reporting the positive effects of having surviving children on parental reactions (Janssen, Cuisinieri, Graauw, & Hoogduin, 1997, Lasker, 1990; as cited in Murray, & Terry, 1999) and others reporting no influence of the presence of surviving children (Kennell, Slyter, Klaus, 1970 as cited in Murray, & Terry, 1999; Tudehope, Iredell, Rodgers, & Gunn, 1986; Nicol, Tompkins, Campbell, & Syme, 1986, Rowe et al. 1978; as cited in Murray, & Terry, 1999). Boyle (1993; as cited in Murray, & Terry, 1999) found that the presence of children caused to higher levels of anxiety and depression among mothers who had experienced an infant death.

Similarly there was no clear evidence about the relation between infants age and parental grief reaction. The most researchers found no association between infant's age and parental grief reactions (Roskin, 1984; as cited in Hazzard, Weston, & Gutterres, 1992; Littlefield, & Rushton, 1986;

Hazzard, Weston, & Gutterres, 1992, Peppers,& Knapp, 1980 as cited in Lang, Goulet, Aita, Giguere, Lamarre, & et al., 2001, Smith, & Borgers, 1989,1989 ; as cited in Lang, Goulet, Aita, Giguere, Lamarre, & et al., 2001). Rubin (1989-1990; as cited in Dyregrov & Dyregrov, 1999) stated that loss of an older child mean loss of already spent relation with the child whereas loss of a child in an early age mean the loss of future expectations about the child. Therefore Rubin (1989-1990; as cited in Dyregrov & Dyregrov, 1999) concluded that it was most likely to observe intense grief reaction after a loss of an older child. For pregnancy losses, loss at the later phases associated with more intense grief reactions as well (Janssen, Cuisinieri, Graauw, & Hoogduin, 1997; Kirkley-Best, 1981; as cited in Franche, & Bulow, 1999; Lasker, & Toedler 1991; Goldbach, Dunn,Toedter, & Lasker, 1991).

2.4 Connection between the Literature Review and Hypotheses of the Study

Grief is a multidimensional process. It is emphasized that grief is not a simple emotional state but it is a complex, evolving process with multiple dimensions such as despair, panic behavior, personal growth, blame and anger, detachment, disorganization (Hogan, Greenfield, & Schmidt, 2001). Early studies have tried to measure parental grief after an infant death by measuring psychiatric dysfunction related to grief such as depression and anxiety (e.g; Dyregrov, & Dyregrov, 1999; Vance et al., 1991; Vance, Boyle,

Najman, & Thearle, 1995; Dyregrov & Matthiesen, 1987b; Dyregrov & Matthiesen, 1991). However these measures assessing only phenomena (e.g: depression, anxiety) common in bereaved individuals and psychiatric groups. By using psychiatric measures for assessing grief reactions, grief reactions are determined according to the degree of psychopathology (Neimeyer, & Hogan, 2001). By developing the measures focused directly on the grief process, these new measures (e.g: GEI; Sidmore, 2000; Hazzard, & Weston, & Gutterres, 1992) used in grief research. However, studies about parental grief reactions and gender differences between parents used special grief instruments seldomly (e.g: Lang, & Gottlieb, 1993).

Besides that researchers who have studied gender differences in parental grief after an infant death have focused on negative aspects of grief. It can not be denied that loosing someone or experiencing an infant death is a negative life event. However it has also some positive aspect. These positive changes reflect grieved individuals becoming transformed by the grief (Hogan, Greenfield, & Schmidt, 2001; Lang, et al., 2001). Review of the general parental grief literature showed that there was no emperical information about gender and personal growth or positive aspects of grief.

As can be seen from the review of the parental grief literature, there was no clear conclusion about an association between parental grief reactions and demographic characteristics including age and education of

parent, gender and age of an infant, and presence of other children, which was mentioned in this research as well. Similarly there was no definite result about an association between personal growth (as one dimension of grief) and demographic characteristics including age and education of parent, gender and age of an infant, and presence of other children.

In grief literature it was concluded that mothers experienced more grief reactions than fathers, although most of the research used psychiatric scales for measuring grief. However, Turkish grief literature has no findings about both gender differences in parental grief reactions after an infant death and also an association between parental grief reactions and demographic variables including age and education of parent, gender and age of an infant, and presence of other children.

In the light of the grief literature, the aim of the present study was to investigate whether there was a significant difference within each spouse's reports on grief reactions. It was also aimed to investigate whether demographic variables including gender, age, education of parents, gender and age of deceased infant, presence of other child were the predictors of parental grief reactions after an infant death.

CHAPTER 3

METHOD

In this section, subjects, instruments, procedure of the study and analyses of the data were explained separately.

3.1. Subjects

The participants of the study were 55 couples (55 mothers and 55 fathers). The sample of the study was recruited through purposive sampling (Kumar, 1996). Experiencing of infant death between 6 months to 24 months will be criterions for inclusions of the study. Lower limit of 6 months was determined because parents would be in a acute grieving period during 6 months after an infant death (Feeley, & Gottlieb, 1988-1989). 24 months were selected as upper limit, because the impact of loss would be evident (Rubin, 1981). Cases experiencing infant death because of the congenital diseases were not included in this study. Subjects of the main study were participated in this study voluntarily. The age of the total sample ranged from 20 to 50 with a mean of 29.66 years ($SD= 6.24$). The mean age of the mothers was 27.46 years ($SD= 6.09$, range=20-46) and the mean age of

fathers was 31,86 years (SD= 5.62, range=24-50). Some demographic characteristics of the sample were presented in Table 1.

Table 1. Demographic Characteristics of the Sample

Variable	Percentage (n)	Mean (SD)	Range
Gender			
Female	50 (55)		
Male	50 (55)		
Age		29.66 (6.24)	20-50
Education level			
Illiterate	1,8 (2)		
Literate	0.9 (1)		
Primary school	54,5 (60)		
Secondary school	15.5 (17)		
High school	20.9 (23)		
University	5,5 (6)		
Master\doctorate	0.9 (1)		
Employment Status			
Employed	48.2 (53)		
Unemployed	51.8 (57)		
Length of Marriages (year)		8.6 (5.88)	2-27
Elapsed time since loss (month)		11.77(4.90)	6-24
Age of the deceased infant (month)		5.43(4.20)	1-12
Gender of the deceased infant			
Female	45.5 (25)		
Male	54.5(30)		
Having an another child			
Yes	72.7(40)		
No	27.3(15)		
Former loss experience			
Yes	65.5(72)		
No	34.5(38)		
Professional help			
Yes	4.5 (5)		
No	95.5(105)		

3.2. Instruments

Two instruments were used in this study. Participants were administered the Hogan Grief Reaction Checklist (HGRC; see Appendix A) for measuring the multidimensional nature of grief process and The Demographic Information Form (see Appendix B) for collecting the information related to the demographic characteristic of the participants.

3.2.1. Hogan Grief Reaction Checklist (HGRC)

The HGRC (Hogan, Greenfield, & Schmith, 2001) is a 5-point 61 item Likert-type scale. It was administered to assess the multidimensional nature of grief process. Hogan Grief Reaction Checklist (HGRC) was developed empirically from data collected from bereaved adults who had experienced the death of a loved one. Response options of the scale ranged from *does not describe me at all* to *describes me very well*. Factor analysis of the HGRC revealed 6 factors. These are despair, panic behaviour, blame and anger, detachment, disorganization, and personal growth. Hogan Grief Reaction Checklist subscale scores can not be totalled and reported as a single score ((Hogan, Greenfield, & Schmith, 2001). However, Gamino, Sewell & Easterling (2000) used sum of 5 subscales of HGRC (despair, panic behavior, blame and anger, detachment and disorganization) as a single score. They called these subscales as HGRC misery scales.

Reliability of HGRC was demonstrated by internal consistency and test-retest reliability. Cronbach coefficients for six factors were Despair .89, Panic behaviour: .90, Personal growth:.82, Blame and Anger: .79, Detachment: .87 and Disorganization: .84. Internal consistency for the total instrument was .90. The test-retest reliability of the HGRC subscales were Despair:.84, Panic Behaviour: .79, Personal growth:.81, Blame and Anger: .56, Detachment: .77 and Disorganization: .85 (Hogan, Greenfield, & Schmith, 2001).

The construct validity of the HGRC was supported by significant correlations with appropriate subscales of Texas Revised Inventory of Grief (TRIG; Fachingbauer, 1981; as cited in Hogan, Greenfield, & Schmith, 2001); Grief Experience Inventory (Sanders et al., 1985; as cited in Hogan, Greenfield, & Schmith, 2001); and the Impact of Event Scale (Horowitz et al., 1979; as cited in Hogan, Greenfield, & Schmith, 2001). The HGRC Despair subscale was moderately correlated with Grief Experience Inventory (GEI) Despair Subscale (.60) and the IES Intrusion Subscale (.62). The HGRC Panic Behaviour Subscale was correlated to the GEI despair (.56) and somatization (.48) subscale. The HGRC Panic Behavior subscale correlated with the Impact of Event Scale (IES) Intrusion subscale (.48) as well. The HGRC Personal Growth subscale was negatively correlated with other subscales of HGRC and all off the Texas Revised Inventory of Grief (TRIG), GEI, and IES subscales. The HGRC Blame and Anger subscale was

correlated with the GEI Anger and Hostility subscale (.57). The HGRC Detachment subscale was correlated to GEI Despair (.63) and Social Isolation (.52) subscales. The HGRC Detachment subscale was also correlated to the IES Intrusion subscale (.54). The HGRC Disorganisation subscale was correlated with GEI Depersonalization subscale (.49). These findings suggested that the HGRC was a valid and reliable instrument to measure multidimensional nature of the grief process (Hogan, Greenfield, & Schmith, 2001).

The HGRC is a new measure in grief area. Other researchers using HGRC supported its reliability and validity. In one study, conducted in Finland, Cronbach's alpha coefficients of the HGRC subscales found between .65 and .82 (Kaunonen, et al., 2000). Laakso & Ilmonen (2002) found that Cronbach's alpha coefficients of the HGRC subscales ranged from .66 to .84. Gamino, Sewell & Easterling (2000) studied the adaptive model of grief. GEI and HGRC were used as a grief measure. They found significant correlation between related subscales of HGRC and GEI. The sum of five HGRC misery scores (HGRC Despair, Panic Behavior, Blame and Anger, Detachment and Disorganization Subscale) was highly correlated with the average of the GEI clinical scales (.79). The HGRC Blame and Anger subscale was strongly correlated with the GEI Anger Hostility subscale (.72). The HGRC Personal Growth Subscale was negatively correlated with each subscale of the GEI and every misery

subscales of HGRC. Their findings provided further support for validity of HGRC.

After getting permission to use Hogan Grief Reaction Checklist (Appendix-D), translation of the HGRC into Turkish was made using one-way translation qualitative method (Savaşır, 1994). Four translators translated the HGRC into Turkish. Translators were two psychologists, one psychiatrist, and one mine engineer. All of them were proficient in both languages. After that, different translations of the HGRC and original form were given to another four translators to compare Turkish translations of the items with the original ones. Two of them had a PhD degree in psychology and modern languages. The others were Turkish teacher and have a proficiency in English. This group investigated and modified translated items. After this step, four forms of the HGRC were compared in terms of their differences and similarities by the researcher and a psychologist having a Ph.D degree and then final forms of HGRC were determined.

The participants of the main study were also included in the reliability and validity study. The reliability of the scale was determined using internal consistency procedure. Item total correlations of the HGRC Subscales were performed. In order to evaluate the construct validity of HGRC, extreme group method was used. In Results Chapter, results of reliability and validity analyses were explained in detailed.

3.2.2 Demographic Information Form

The demographic information form was prepared to collect information about demographic characteristics of the participants and the deceased infant. It includes gender, age, education level, job, employment status, length of the marriage, history of psychological help at any point in their life, former loss experience, elapsed time since loss, age and gender of the deceased infant, cause of death.

3.3. Procedure

The population of the study was recruited through death records kept in hospital and municipalities of Ankara by the researcher. Death records in last two years were investigated from Ministry of Health Dr.Zekai Tahir Burak Women Illness and Delivery Hospital, and Funeral Services of Mamak, Altındağ and Çankaya Municipalities by the researcher. Addressess and telephone numbers of the cases compatible with the criterions for inclusions of the study were recorded. Having the records of cases lasted in two months (between February and March 2003). After that, parents were contacted by telephone by the researcher for their consent for the study. In the telephone interview, the identity of the researcher and aim of the study were explained to the participants by the researcher. Most of the parents asked question " How did you get our telephone number?". Researcher also

gave an information about process of getting records of parents. Telephone interview lasted 6-10 minutes. Some of participants said that they have had to ask their husbands\wives. In that occasion researcher called them again. If parents accepted to participate in the study, home or hospital meeting was arranged in appropriate time. Hospital meeting was arranged in Ministry of Health Ankara Training and Research Hospital. At the beginning of the meeting, verbal instructions were given to the parents by the researcher. In interviews the Information Form (Appendix C), the Demographic Information Form (Appendix B) and the Hogan Grief Reaction Checklist (Appendix A) were given to the parents and completed by themselves. If parents were illiterate, the researcher completed all of the instruments. Firstly information form was read. After that demographic information were completed and then instruction of HGRC were read until being certain about the participant's comprehending of instruction of HGRC. Total meeting time was approximately 30-40 minutes. All data were collected between April and July 2003 by the researcher.

3.4 Analysis of Data

The statistical tests used for reliability and validity study were item-total correlations for each subscale, Cronbach's alpha coefficients for total scale and for each subscale, t-test analysis, and correlations of subscales. Descriptive statistics were used for finding general characteristics of the

sample. To test the hypothesis of the study paired samples t-test and stepwise regression analyses were used. All the analysis were carried out by using the SPSS 9.0 (Noruesis, 1999).

CHAPTER 4

RESULTS

In the first section of this chapter, reliability and validity study of the Hogan Grief Reaction Checklist (HGRC) were presented. In the later sections, descriptive analysis of the study variables, results of paired sample t-test and stepwise regression analyses were presented respectively.

4.1 Reliability and Validity Study of Hogan Grief Reaction Checklist

The reliability of the HGRC was assessed by internal consistency. For internal consistency, Cronbach's alpha was computed for total scale and for each subscale. The Cronbach's alpha coefficient for total scale was .95, Despair Subscale .86, Panic Behavior Subscale .87, Personal Growth Subscale .86, Blame and Anger Subscale .74, Detachment Subscale .84, and Disorganization Subscale .76.

In order to determine discriminating power of items in each subscales; item total correlations of the HGRC Subscales were

performed (Table 2). Items in each subscale had an item total correlations above .20. These results support the validity of HGRC because it was stated that item total correlations give clue about the validity of a scale (Erkuş, 1999; Hovardaoğlu, 2000; Tezbaşaran, 1997).

Table 2. The Item Total Correlations of the HGRC Subscales

Subscales	Items	Item total Correlations
Despair	1	.49
	3	.61
	6	.49
	11	.45
	14	.53
	17	.46
	25	.46
	29	.60
	33	.40
	40	.56
	47	.62
	55	.61
59	.61	
Panic Behavior	4	.55
	7	.52
	13	.51
	16	.49
	18	.62
	21	.51
	27	.56
	31	.65
	34	.43
	38	.54
	44	.53
	50	.58
52	.28	
56	.52	
Personal Growth	2	.43
	10	.52
	12	.65
	19	.36
	24	.55
	30	.53
	36	.66

Table 2. Continued

Subscales	Items	Item Total correlations
Personal Growth	41	.51
	45	.61
	51	.48
	60	.60
	61	.61
Blame and Anger	5	.47
	8	.44
	15	.56
	37	.47
	42	.54
	48	.28
	58	.43
Detachment	9	.48
	22	.59
	23	.72
	28	.73
	35	.43
	43	.55
	53	.51
	54	.58
Disorganization	20	.42
	26	.40
	32	.63
	39	.59
	46	.41
	49	.57
	57	.39

In order to evaluate the construct validity of HGRC extreme group method was used. The data for each subscale of HGRC were divided into two subgroups as high and low groups. High group was included 27 % of participants having the highest score on each subscale (n=28). Low group was included 27 % of participants having the lowest score on each subscale (n=28). Data were subjected to the t-test analyses. There was significant differences between low (M= 18.96) and high (M=48.36) groups score on despair subscale ($t=27.57$, $df=54$, $p<.001$). There was a

significant difference between low (M=20.68) and high (M=53.07) groups score on panic behavior ($t=26.24$, $df=54$, $p<.001$). There was a significant difference between low (M=15.82) and high groups (M=41.25) score on personal growth ($t=25.54$, $df=54$, $p<.001$). There was a significant difference between low (M=9.79) and high (M=25.21) groups score on blame and anger ($t=21.12$, $df=54$, $p<.001$). It was also found that there was a significant difference between low (M=9.21) and high (M=27.61) groups score on detachment ($t=19.64$, $df=54$, $p<.001$). There was a significant difference between low (M=10) and high (M=25.54) groups score on disorganization as well ($t=22.36$, $df=54$, $p<.001$). These results were summarized in Table 3. Results of t-test analyses indicated that HGRC subscales could significantly differentiate the low and high group and supported the construct validity of HGRC.

Table 3. Results of T-Test Analysis

Subscales	Group	Mean	SD	t	df	Sig
Despair	Low	18.96	2.85	7.57	54	0.001
	High	48.36	4.87			
Panic Behavior	Low	20.68	4.07	26.24	54	0.001
	High	53.07	5.11			
Personal Growth	Low	15.82	2.41	25.54	54	0.001
	High	41.25	4.69			
Blame and Anger	Low	9.79	1.85	21.12	54	0.001
	High	25.21	3.39			
Detachment	Low	9.21	1.17	19.64	54	0.001
	High	27.61	4.82			
Disorganization	Low	10	1.85	22.36	54	0.001
	High	25.54	3.18			

It was found that despair, Panic Behavior, Blame and Anger, Detachment and Disorganization Subscales of HGRC had the significant

intercorrelations (Table 4). Consistent with the results of Hogan, Greenfield, & Schmith, (2001), and Gamino, Sewell & Easterling (2000), personal growth subscale of HGRC had negative correlations with HGRC misery subscale (despair, panic behavior, blame and anger, detachment, and disorganization). Results of correlations of HGRC subscales were summarized in Table-4 and these results give a further support for construct validity of HGRC.

Table 4. Correlations of the HGRC Subscales

	Despair	Panic Behavior	Personal Growth	Blame and Anger	Detachment	Disorganization
Despair	1.00					
Panic Behavior	0.80**	1.00				
Personal Growth	-0.21*	-0.18	1.00			
Blame and Anger	0.80**	0.70**	-0.25**	1.00		
Detachment	0.77**	0.72**	-0.24*	0.67**	1.00	
Disorganization	0.56**	0.71**	-0.02	0.46**	0.61**	1.00

*p<0.05 **p<0.01

4.2. Descriptive Analyses of the Study Variables

The mean and standart deviations of the variables were presented in Table-5. These variables were subscales of HGRC, which were despair, panic behavior, personal growth, blame and anger, detachment, disorganization and summation of HGRC 5 misery subscales (despair, panic behavior, blame and anger, detachment, disorganization) which were called HGRC misery scale.

Table 5. Means and Standard Deviations of the Study Variables

Variables	Sample	N	Mean	SD
Despair	Mother	55	37.27	11.31
	Father	55	28.47	9.91
	Total	110	32.87	12.53
Panic Behavior	Mother	55	41.53	12.38
	Father	55	31.31	10.51
	Total	110	36.42	12.53
Personal Growth	Mother	55	43.86	8.76
	Father	55	44.76	11.23
	Total	110	44.31	10.03
Blame and Anger	Mother	55	19.07	5.98
	Father	55	15.11	5.68
	Total	110	17.09	6.14
Detachment	Mother	55	19.87	8.42
	Father	55	13.93	4.95
	Total	110	16.90	7.49
Disorganization	Mother	55	18.96	6.28
	Father	55	15.60	5.72
	Total	110	17.28	6.21
HGRC Misery	Mother	55	136.71	38.95
	Father	55	104.42	30.65
	Total	110	120.56	38.47

4.3. Results of Paired Samples T-Test Analyses

In order to explore the first hypothesis of the study which were whether there were any difference within couples score on despair, panic behavior, personal growth, blame and anger, detachment and disorganization subscales of HGRC, paired sample t-test was used.

It was found that there was a significant difference in couple's score on despair subscale ($t=5.25$, $df=54$, $p<.001$). Mothers reported more despair ($M=37.27$) than fathers ($M=28.47$). There was a significant difference in couple's score on panic behavior ($t=5.44$, $df=54$, $p<.001$), indicating that mothers reported more panic behavior ($M=12.38$) than

fathers (M=10.51). There was a significant difference in couples score on blame and anger ($t=4.39$, $df=54$, $p<.001$). Mothers reported more blame and anger (M=19.07) than fathers (M=15.11). There was a significant difference in couples score on detachment ($t=5.41$, $df=54$, $p<.001$), which means mothers reported more detachment (M=19.87) than fathers (M=13.93). It was also found that there was significant difference in couples score on disorganization ($t=3.07$, $df=54$, $p<.01$), indicating that mothers reported more disorganization (M=18.96) than fathers (15.60). There was no difference in couples score on personal growth ($t=.61$, $df=54$, $p>.05$). Mothers (M=43.86) and fathers (M=44.76) score on personal growth was not significantly different from each other. These results were summarized in Table 6.

Table 6. Results of Paired Samples T-Test Analyses

Variables	Sample	Mean	SD			
Despair	Mother	37.27	11.31	5.25	54	0.001
	Father	28.47	9.91			
Panic Behavior	Mother	41.53	12.38	5.44	54	0.001
	Father	31.31	10.51			
Personal Growth	Mother	43.86	8.76	.61	54	0.55
	Father	44.76	11.23			
Blame and Anger	Mother	19.07	5.98	4.39	54	0.001
	Father	15.11	5.68			
Detachment	Mother	19.87	8.42	5.41	54	0.001
	Father	13.93	4.95			
Disorganization	Mother	18.96	6.28	3.07	54	0.03
	Father	15.60	5.72			

4.4. Results of the Regression Analyses

Seven separate stepwise regression analyses were conducted for each subscale of HGRC and sum of misery subscales of HGRC. In all

analyses demographic variables were entered in one blocks. Demographic variables were gender, age, and education of parents, sex and age of deceased infant and presence of other children.

First stepwise regression analyses was performed by using summing of HGRC misery subscales as dependent variable and demographic variables as independent variable. From six demographic variables, gender of participant and deceased infant entered the regression equation as significant predictors. Participant' and deceased infant' gender were accounted for 21 % of variance in participant's score on all HGRC misery subscales , $F(2,107) = 14.55, p < .001$. Results were summarized in Table7.

Table 7. Results of Stepwise Regression Analyses: Summing of HGRC Misery Subscales as Criterion Variable

Variables	Beta	T	R2 change	F Change
Step 1				
Parents' gender	-.42	-4.83**	.18	23.34**
Step 2				
Parent's gender	-.42	-4.92**		
Infant's gender	.19	2.21*	.04	4.90*
Multiple R=.46**, R2=.21				

** $p < 0.001$, * $p < 0.05$

A stepwise regression analyses was performed between despair as the dependent variable and gender, age, education of the participant, deceased infant' gender and age, former loss experience, having an

another child, and elapsed time since loss as independent variables. From six independent variables, which were demographic variables of the study, two variables entered the regression equation as significant predictors. At the first instance, participant's gender had entered the model and then infant's gender had entered the model. Participants' gender and infants' gender accounted for 19 % of variance in participant's score on despair, $F(2,107) = 12,416, p < .001$. Results of stepwise regression analyses were summarized in Table 8.

Table 8. Results of Stepwise Regression Analyses: Despair as Criterion Variable

Variables	Beta	T	R2 change	F change
Step 1				
Parents' gender	-.39	-4.34**	.15	18.85**
Step 2				
Parents' gender	-.39	-4.39**		
Infant's gender	.20	2.29*	.04	5.24*
Multiple R=.43**, R2=.19				

**p<.001, *p<.05

An another stepwise regression analyses was conducted to determine predictors of the panic behavior as one of the dimensions of grief. From six demographic variables, one variable entered the regression equation as significant predictor. Participants' gender was accounted for 17% of variance in participant's score on Panic Behavior, $F(1,108) = 21,775, p < .001$. Results were summarized in Table 9.

Table 9. Results of Stepwise Regression Analyses: Panic Behavior as Criterion Variable

Variable	Beta	T	R2 change	F change
Parents' gender	-.41	-4.67*	.17	21.78*

*p<.001

Stepwise regression analyses was conducted to determine predictors of the Blame and Anger as grief dimension. From six demographic variables, two variables entered the regression equation as significant predictors. Participants' gender and infants' gender accounted for 37% of variance in participant's score on blame and anger, $F(2,107) = 8.55$, $p < .001$. Results were summarized in Table 10.

Table 10. Results of Stepwise Regression Analyses: Blame and Anger as Criterion Variable

Variables	Beta	t	R2 change	F change
Step 1				
Parents' gender	-.32	-3.56**	.11	12.69**
Step 2				
Parents' gender	-.32	-3.61**		
Infants' gender	.18	2.02*	.03	4.06*
Multiple R=.37**, R2=.14				

**p<0.001 *p<0.05

Stepwise regression analyses was conducted to determine predictors of the detachment as dimension of grief. From six demographic variables, two variables entered the regression equation as significant predictors. Participants' gender and education accounted for 19 % of variance in

participant's score on detachment, $F(2,107) = 12.49$, $p < .001$. Results were summarized in Table 11.

Table 11. Results of Stepwise Regression Analyses: Detachment as Criterion Variable

Variables	Beta	t	R2 change	F Change
Step 1				
Parents' gender	-.40	-4.52**	.16	20.40**
Step 2				
Parents' gender	-.36	-4.03**		
Parents' education	-.18	-2.00*	.03	4.02*
Multiple R=.44**, R2=.19				

** $p < 0.001$, * $p < 0.05$

Stepwise regression analyses was conducted to determine predictors of the disorganization as dimension of grief. From six demographic variables, gender entered the regression equation as significant predictors. Participants' gender was accounted for 7 % of variance in participant's score on disorganization, $F(1,108) = 8.63$, $p < .01$.

Table 12. Results of Stepwise Regression Analyses: Disorganization as Criterion Variable

Variable	Beta	T	R2 change	F change
Parents' gender	-.27	-2.94*	.07	8.63*

* $p < 0.01$

Stepwise regression analyses was conducted to determine predictors of the personal growth as one dimension of grief. From six demographic variables, two variables entered the regression equation as significant predictors. Presence of other children and age of deceased infant accounted for 11 % of variance in participant's score on despair, $F(2,107) = 6.88, p < .01$. Results of analyses were summarized at Table 13.

Table 13. Results of Stepwise Regression Analyses: Personal Growth as Criterion Variable

Variables	Beta	t	R2 change	F change
Step 1				
Presence of other children	-.27	-2.97**	.08	8.80**
Step 2				
Presence of other children	-.32	-3.39***		
Infant's age	-.20	-2.16*	.04	4.67*
Multiple R=.34**, R2=.11				

*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$

CHAPTER 5

DISCUSSION

The main purpose of the present study was to examine whether there was a significant difference within each spouse's reports on grief reactions. Besides that it was also aimed to investigate whether demographic variables including gender, age, education of parents, gender and age of deceased infant, presence of other child were the predictors of parental grief reactions after an infant death. In order to measure parental grief reaction Hogan Grief Reaction Checklist (HGRC; Hogan, Greenfield, & Schmidt, 2001) was translated into Turkish Language and its reliability and validity were determined. In this chapter, first of all the results of the reliability and validity study of the Hogan Grief Reaction Checklist (HGRC), and findings of the study are discussed. After that, limitations of the study, suggestions for future studies on grief, implications of the study and finally conclusions of the study are presented.

5.1 Discussion of the Study Results

In Turkish literature there is no instrument to measure grief

reaction, so HGRC was translated into Turkish language and the psychometric properties of HGRC in a Turkish population was determined. Results of reliability and validity study were presented in more detail in results section (chapter 4) of the study. Alpha coefficients for subscales and the total scale demonstrate that HGRC was internally consistent. In order to determine construct validity of HGRC, extreme groups method was used. It was found that subscales of HGRC significantly differentiate with high and low group. Intercorrelations between subscales of HGRC provide a further support for construct validity of HGRC. It was noted that intercorrelations between subscales of HGRC were similar to Hogan, Greenfield, & Schmidt's (2001) results. HGRC Personal Growth subscale negatively correlated with other subscales of HGRC. Finding consistent with the results of previous studies from United States and Finland (Hogan, Greenfield, & Schmidt, 2001; Kaunonen, Paivi, Paunonen, & Erjanti, 2000; Laakso & Ilmonen, 2002), HGRC was considered reliable and valid instrument for measuring grief reaction in Turkish culture as well. However, in the present study, psychometric properties of HGRC were tested with mothers and fathers experiencing only infant death. There is a need for further studies confirming HGRC's validity and reliability in more diverse grieved samples, for example, grieving over a loss of an older child or loss of a child with chronic illness, loss of a spouse etc. It might be good for verifying psychometric properties of Hogan Grief Reaction Checklist in Turkish culture. In this study it was also noted that the HGRC found quite

economical as it measures multidimensional aspects of grief reaction with only a single checklist.

After validity and reliability study of the HGRC, hypothesis of the study were tested. It was found that there was a significant difference within each couple's score on despair, panic behavior, blame and anger, detachment and disorganization as dimensions of grief. Speaking more specifically, wives experienced more grief reactions than husbands did. This result was consistent with the related literature (Lang, Gottlieb, & Amsel, 2001; Bohannon, 1990-1991; Dyregrov & Matthiesen, 1987b; Lang & Gottlieb, 1993, Dyregrov & Matthiesen, 1991; Vance et al., 1991). The cause of differences in mothers' and fathers' reactions is unclear. Landrine, & Klonoff, (1997) concluded that women had a higher depressive, somatization and anxiety disorders than men. Consistent with this it was found that woman experienced higher grief reactions than men. Dyregrov, (1990; as cited in Dyregrov, & Dyregrov, 1999) stated that instruments that measure grief, usually focus on emotional reactions, so that women score higher than men do on these measures. Similarly Vance, Boyle, Najman, & Thearle, (1995) stated that mothers and fathers differed in coping with the death of their infant. In their study it was found that mothers experienced significantly higher depression and anxiety score than fathers and control mothers over 30 months following infant loss. However, when the excessive use of alcohol was included as an additional reaction to stress, this difference between men and women

became much smaller, or non-existent. The researchers proposed that increased alcohol use and less psychological distress in fathers might be a demonstration of a different way of coping with such stress for example hiding feelings. Similarly, grieved fathers were found to use more denial for denying the impact of infant's death than grieved mothers during the first 2 years following the loss (Bohannon, 1990-1991). Schwab (1990) found that mothers sought to relieve emotional tension through crying much more than fathers did. Mother's greater need to release emotions might be reflected by reporting high grief score (Carroll, & Shaefer, 1994; Feeley & Gottlieb, 1988-1989; Schwab, 1990).

Another explanation came from Dyregrov, (1990; as cited in Vance, Boyle, Najman, & Thearle, 1995) as well. Dyregrov, (1990; as cited in Vance, Boyle, Najman, & Thearle, 1995) stated that mothers and fathers differed in their grief reaction because they have different social situations. Similarly, Benedek, (1970) stated that

It is only the human female whose mothering behavior has two resources: one is as in any other creature, rooted in her physiology; the other evolves as an expression of her personality which has developed under environmental influences that can modify her motherliness. (p.153)

Dahlström, & Liljeström, (1967) explained the major role of women-wife as requiring protection of family or child. Cervantes-Carson, (1997) stated that women's gender identity was based on these roles

including motherhood, wife and worker. However the most important one is motherhood. Cervantes-Carson (1997) explained this very well in this statement;

All women are mothers when they are children and when they are elder, in adolescence and in adulthood; all women are mothers of their mothers and daughters of their daughters; all women are mothers when they do not have children. (p.24)

This conclusion is also consistent with Turkish culture. Although women have many roles in Turkish society, the most important one is the motherhood as well (Saktanber, 1995). For fathers role, Benedek, (1970) declared that “the father-husband was assumed to be strong, active, providing for his wife and children not only a livelihood but also the means of emotional security.” (p:177) Consistent with this statement it was found that at the times of loss, fathers were more emotionally constrained and peripheral (Walsh, & Goldrick, 1998) since he was expected to be the supporter and the strong one (Smialek, 1978), be non-communicative and inexpressive (Kavanough, 1997). To this knowledge, question of whether women experience more grief or not might be answered. Death of an infant or child would mean to mother that she couldn't accomplish the role of “motherliness”, because wives are expected to be “mother” both from their instinct and the expectations of society. Therefore mothers/wives experienced more grief reactions than fathers who were expected to be strong.

Another explanation for difference in grief reactions came from Kavanough (1997). Kavanough (1997) stated that fathers might be distracted themselves with working after loss. Dyregrov & Matthiesen (1991) found that housewives experienced significantly higher psychological distress than working mothers after an infant death. In the present study 50 of 55 husbands were working whereas 52 of the 55 wives were housewife. Staying at home could cause mothers with more opportunity to think about the infant's death, which could have contributed to the mothers' higher score on grief than fathers'. Further studies using samples with working grieved mothers may provide valuable information on this issue.

Besides that in the current study, positive aspects of grief were treated as another dimension of parental grief reactions, which was named as personal growth according to the grief dimensions defined by Hogan, Greenfield & Schimidth (2001). As mentioned before personal growth is spiritual and existential awareness, sense of becoming more forgiving, caring, compassionate, hopeful, and tolerant of self and others (Hogan, Greenfield and Schimidth, 2001). It looks like posttraumatic growth (Tedeschi, Park & Calhoun, 1998), positive psychological changes (Yalom, & Lieberman, 1991) and meaning reconstructions (Neimeyer, 2000; Neimeyer, 2001). All of these emphasised on the positive aspects of grief and had some common explanations, although their names are different. Concerning the gender differences, Tennen, & Affleck (1998) stated that women and men might have different nature of

personal growth experience. However, studies examined that growth after traumas have recruited only men or only women. Because of that, it is not possible to obtain valid results about gender differences in growth experience (Tennen, & Affleck, 1998). Gender difference in personal growth was not met in grief literature as well. Results of the current study supported that there was no significant gender difference in personal growth as a grief dimension. Mothers and fathers were not different in their experience of personal growth after an infant death, whereas in the present study and previous studies it was found that wives/mothers experienced higher grief reactions than fathers\ husbands. Nerken (1993) suggested that growth following grief exist when person grieved actively, confront their loss. According to the results of the present study, because of having higher score on misery grief subscale (despair, detachment, panic behavior, blame and anger, disorganization) wives grieved more actively than their husbands did, so that wives could had higher score on personal growth than husbands. However, in the present study there was no significant difference in their score on personal growth. The mothers mean of personal growth (M=43.86), was quite similar to fathers (M=44.76). Although it was not statistically proved, fathers' score on personal growth was higher than mothers' as well. This finding might give a support to Cordell & Thomas (1997) and Carrol & Shaefer's (1994) conclusion. As mentioned before they emphasized that, both parents are markedly affected but their reactions are different after an infant death. Taking this knowledge into the consideration, both parent might

experience the same degree of suffer but their way of showing might be different in the present study. On the other hand, Hogan, Greenfield, & Schmidt, (2001) found that grieved mothers who loss their child over 3 years experienced higher personal growth than mothers who loss their child within 3 years. In the same study it was found that grieved mothers who loss their child over 3 years experienced higher despair, blame and anger, detachment, disorganization, and panic behavior than mothers who loss their child within 3 years. To this knowledge, no difference between spouses' score on personal growth would be resulted form mothers higher score on misery grief subscales including despair, detachment, blame and anger, disorganization. Mothers' higher reports on misery grief subscales would hide mothers' experience of personal growth. In the present study, reason for not finding any difference within spouses score on personal growth may be related to the fact that elapsed time since loss was ranged between 6-24 months which was less than 3 years ($M= 11.77$ months, $SD= 4.90$). Further studies with parents experiencing an infant death over 3 years or longitudinal study may provide valuable information on this issue.

In the present study, it was found that there was no association between parents' age and parental grief reactions after an infant death. This result was consistent with some studies in grief literature (Littlefield, Rushton, 1986; Elder, & Laurence, 1991; Nicol, Tompkins, Campbell, & Syme, 1986; Hazzard, Weston, & Gutterres, 1992, Lasker, & Toedler,

1991). However, it contradicts with the Fish (1986; as cited in Moss, Moss, & Hansson, 2001) Dyregrov & Matthiesen, (1987b) & Janssen, Cuisinieri, Graauw, & Hoogduin 's (1997) results in which found that being older were associated with higher grief reactions. In the present study, reason for not finding age as a significant predictor of grief may be related to the fact that most participant was young ($M=29.66$, $SD= 6.24$). Further studies using samples with a wider age may provide valuable information on this issue.

In the present study, when the detachment, which was a subscale of HGRC; used as a dimension of grief, education found to be a significant predictor of detachment. Lower the education would predict the Turkish parent's higher detachment after an infant death. However, this association was not found for other subscales of HGRC and HGRC misery scale. This result contradicted with the literature in which found less educated parents were reported more grief reactions (Boyle, 1993; as cited in Murray & Terry 1999; Lasker, 1990; as cited in Murray & Terry 1999). Murray & Terry (1999) found that higher education would predict the lower distress only in the longer time periods (15 months post loss). In the present study sample's mean of elapsed time since loss was 11.77 (Table1) which was lower than the Murray and Terry's (1999). Another reason for not finding education as a significant predictor of intensity of grief may be related with distribution of sample according to the education which was not uniform (Illiterate ($n=2$), literate ($n=1$), primary

school (n=60), secondary school (n=17), high school (N=17), university (n=6), master\doctorate (n=1)).

The age of deceased infant was not a significant predictor of parents' grief reactions after an infant death. This result would be consistent with the literature most of which found no association between infant's age and parental grief reaction (Roskin, 1984; as cited in Hazzard, Weston, & Gutterres, 1992; Littlefield, & Rushton, 1986; Hazzard, Weston, & Gutterres, 1992; Peppers,& Kanpp, 1980 as cited in Lang, et al., 2001; Smith, & Borgers, 1989,1989 ; as cited in Lang et al., 2001). Similarly the presence of other child was not a significant predictor of grief misery as well. This result was contradicts with some studies in the literature reporting the positive effects of having surviving children on parental reactions (Janssen, Cuisinieri, Graauw, & Hoogduin, 1997; Lasker, 1990; as cited in Murray, & Terry, 1999).

On the other hand infant's age and presence of children were found significant predictors of personal growth as dimensions of grief. Literature about personal growth was very limited so there was no early findings about predictive power of infant's age and presence of other children. Gamino, Sewell, & Easterling, (2000) used personal growth as measure of functional adaptation level of the grieved person in their study. In the present study if personal growth thought as a functional adaptation of grieved parent after an infant death, it was concluded that

presence of other children and losing a young infant would be predictors of functional adaptations of grieved parents. Wheeler (2001) stated that grieved parents found meanings in their ongoing lives and concerned the other living children more. For this reason presence of other children would help parents to adapt their loss easily.

In this study, it was found that there was an association between infant's gender and grief reaction of Turkish parents. Losing a boy infant would predict higher level of Turkish parents' grief reaction. This result consistent with the literature in which found that parents experience more intense grief reactions for deceased boys than for deceased girls (Hazzard, Weston, & Gutterres, 1992; Littlefield, Rushton, 1986; Fish, 1986; as cited in Hazzard, Weston, & Gutterres, 1992). This finding of the study was also consistent with the knowledge of cultural trend in bringing up a child. Brun-Guldbrandsen, (1967) stated that mothers treated boys with greater impatience, care and attention than girls. Kağıtçıbaşı (1979) stated that Turkish parents wanted to have a boy child because they thought that it was easy to grow boy child up and also boy child might more likely to give economical support to the family. Similarly Kağıtçıbaşı, (1998) found that Turkish parents wish to have a boy rather than having a girl. Meaning of having a boy for parents was to guarantee the continuity of their generation. In Turkish culture, male children were more valued. This knowledge which from Turkish culture support the results of the

present study in which it was found that losing a boy infant would be a predictor of Turkish parents intense grief reaction.

5.2. Implications of the Study

Results of the present study have some implications for professionals working in grief area and health care. Firstly, information about gender difference in parental grief reactions may have some implications for professionals working with grieved parents or individuals. Knowing this information about Turkish grieved parents may be helpful in clinical conditions and parents everyday life. In clinical conditions psychologist might give an information to the parents about their experience of grief as both individual and couple. It might be prevented misinterpretations about each other's behaviour. Early studies found that marital disruption and difficulties occurred in grieved families because of misinterpretation of differences of grief reaction between parents. If parents know that this difference in expressing grief reaction is common in other parents experiencing infant death, marital difficulties might be prevented or reduced.

Another implication of the study would be that, knowing associations between parental grief reactions and demographic characteristics professionals would have a baseline information about grieved parents.

Having knowledge about grieved parents' experiencing the same degree of suffer whereas showing this suffer in different way would be important information for professionals as well. This study implies that paying attention on only mother/wives complaints would lead unfairness to father/husband.

5.3. Limitations of the Study and Future Suggestions

Some lacking part of validity and reliability study of HGRC mentioned before. Other limitation of validity and reliability studies of HGRC, construct validity of HGRC can not be verified by confirmatory factor analysis because of insufficient sample size. Although reliability and validity findings supported that HGRC is reliable and valid instrument for measuring grief in Turkish culture, further studies with Turkish sample may focus on factor structure of HGRC.

One of the limitations of the present study is its cross-sectional design. Longitudinal studies need to be conducted in order to understand consistency of gender difference in grief reaction with time.

An another limitation of the present study is measurement of grief. This study can be labelled as quantitative study. However, in grief area there is a need for using qualitative and quantitative measure together.

Further studies conducted with Turkish grieved parents might use the qualitative and quantitative measures together.

5.4. Conclusions of the Study

The present study is one of the first attempts to parental grief area in Turkish literature. Consistent with the general parental grief literature wives/mothers experience more despair, panic behavior, blame and anger, detachment, and disorganization (as separate dimensions of grief), than husbands/fathers after an infant death. It was also found that being a mother would predict Turkish grieved parents' higher grief reaction. There was no significant difference within grieved couples' score on personal growth. This study concludes that having the same score on personal growth of couples would mean that they experience the same degree of suffer even though they show different level of grief reactions such that women/wives experienced higher levels of grief reactions than father/husband did. According to the results of the study, being a mother and having lost boy infant were proved as the predictor of Turkish parents' higher level of grief reactions. It was concluded that age, education of parents, gender and age of deceased infant, presence of other children were not associated with parental grief reactions. In the present study it was also implied that younger age of deceased infant and having an another child were proved as predictor of Turkish grieved parents' higher level of personal growth.

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APPENDICES

APPENDIX A

HOGAN GRIEF REACTION CHECKLIST HOGAN YAS TEPKİLERİ TARAMA LİSTESİ

Örnek maddeler:

*Bu anket çocuğunuzun kaybından sonra sizde olabilecek duygu ve düşüncelerin listesinden oluşmaktadır. Lütfen her maddeyi dikkatlice okuyup, **bugünü de** kapsayacak şekilde geçtiğimiz **iki hafta boyunca** hissetmiş olduğunuzu en iyi tarif eden ifadenin yanındaki numarayı işaretleyin. Lütfen hiçbir maddeyi atlamayın.*

1. Beni hiçbir şekilde tanımlamıyor
2. Beni tam olarak tanımlamıyor
3. Beni oldukça iyi tanımlıyor
4. Beni iyi tanımlıyor
5. Beni çok iyi tanımlıyor

1. Umutlarım kırıldı.....	1	2	3	4	5
2. Hayatla başa çıkmayı daha iyi öğrendim.....	1	2	3	4	5
3. Üzüntümü kontrol etmekte zorlanıyorum.....	1	2	3	4	5
4. Haddinden fazla endişeleniyorum.	1	2	3	4	5
5. Sık sık kendimi kötü hissediyorum.....	1	2	3	4	5
6. Kendimi şokta gibi hissediyorum.....	1	2	3	4	5

Yazışma adresi: sehnazy@hotmail.com

APPENDIX B**DEMOGRAPHIC INFORMATION FORM**

1. Cinsiyetiniz: Kadın Erkek
2. Yaşınız: _____
3. Eğitim durumunuz
 Okur yazar değil Okur-yazar İlkokul
 Ortaokul Lise ve dengi
 Üniversite Yüksek lisans-doktora
4. Mesleğiniz: _____
5. Çalışıyor musunuz? Evet Hayır
6. Kaç yıllık evlisiniz? _____
7. Bebeğinizi ne zaman kaybettiniz? _____
8. Bebeğiniz kaç yaşındaydı \ aylıktı? _____
9. Bebeğinizin cinsiyeti nedir?
 Kız Erkek
10. Bebeğinizin rahatsızlığı neydi?

11. Bebeğiniz nerde vefat etti?
 Ev Hastane
12. Başka çocuğunuz var mı?
 Evet ; Cinsiyet ve yaşları nedir? _____
 Hayır
13. Yaşamınızda daha önce bir kayıp yaşadınız mı?
 Evet; yakınlık dereceleri ve aradan geçen süre nedir?

 Hayır
14. Yaşamınızın herhangi bir döneminde hiç psikolojik yardım aldınız mı?
 Evet Hayır

APPENDIX C

INFORMATION FORM

Bu araştırma, Ortadoğu Teknik Üniversitesi Psikoloji Bölümü Klinik Psikoloji yüksek lisans programı çerçevesinde yürütülen bir tez çalışmasıdır. Çalışma, bebeğini kaybeden anne ve babaların yaşayabilecekleri yas tepkilerini araştırmaktadır. Araştırma kapsamındaki soruların doğru ya da yanlış cevapları yoktur. Sizin içten, samimi ve gerçek cevaplar vermeniz araştırmada geçerli ve güvenilir sonuçlar elde edilmesini sağlayacaktır.

Çalışmada sizden kimlik belirleyici bilgiler istenmemesi nedeniyle kimliğinizle ilgili bilgi vermenize gerek yoktur. Araştırma amacıyla toplu olarak değerlendirilecek olan cevaplarınız gizli tutulacaktır.

Araştırmama gösterdiğiniz ilgi, yardım ve işbirliği için şimdiden teşekkür ederim.

Psk. Şehnaz Yıldırım
ODTÜ Psikoloji Bölümü
Klinik Psikoloji Y.L. Öğrencisi

APPENDIX D
THE PERMISSION TO USE THE HOGAN GRIEF REACTION
CHECKLIST

From :
To : sehnazy@hotmail.com
Subject : From Nancy Hogan
Date : Mon, 1 Apr 2002 15:42:35 EST
Attachment : HOGANS~1.DOC (143k)

Dear Sehnaz Yildirim,

You have my permission to use my instruments the Hogan Grief Reaction Checklist and the Inventory Social Support to use for research purposes. These instruments are not to be used as diagnostic instruments.

Good luck with your research. If I can be of further assistance, do not hesitate to contact me.

Regards,

Nancy Hogan