ABANT IZZET BAYSAL UNIVERSITY

INSTITUTE OF SOCIAL SCIENCES

POSTTRAUMATIC GROWTH AND CORE BEREAVEMENT IN GRIEVING INDIVIDUALS: EXAMINING THE FIVE STAGES OF GRIEF

SAMET BAŞ

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ABANT IZZET BAYSAL UNIVERSITY
INSTITUTE OF SOCIAL SCIENCES
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MASTER THESIS

Samet BAŞ

Supervisor
Assoc. Prof. Dr. Emre ŞENOL-DURAK

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To Institute of Social Sciences,

The study titled **"Posttraumatic Growth and Core Bereavement In Grieving Individuals: Examining The Five Stages of Grief"**, which belongs to **Samet BAŞ**, was certified as fully adequate in scope and quality, and as a **thesis for the degree of Master of Science** by the examining committee members.

03. 06. 2016

Examining Committee Members		**Signature**
Member (Supervisor) :	Assoc. Prof. Dr. Emre ŞENOL-DURAK	**……**
Member	**:** Assoc. Prof. Dr. Mithat DURAK	**……**
Member	**:** Assoc. Prof. Dr. Müjgan İNÖZÜ	**……**

Approval of Institute of Social Sciences

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Director of Institute of Social Sciences

ETHICAL APPROPRIATENESS DECLERATION

I hereby declare that all information in this document titled **"Posttraumatic Growth and Core Bereavement In Grieving Individuals: Examining The Five Stages of Grief",** 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.

Samet BAŞ

03. 06. 2016

PREFACE

The present study was prepared as a master thesis and examined associations of Posttraumatic Growth through the Five Stages of Grief and Core Bereavement. In line with this purpose, bereaved individuals were included in the current study. First of all, I would like to thank all participants for valuable shares from their inner life.

Beyond any doubt, I believe that it would not be possible to complete this precious study without any support of many people. I would like to express my appreciations to my supervisor Assoc. Prof. Dr. Emre Şenol-Durak for guiding me from the begging of thesis to the end. I felt her support, whenever I have a difficulty. Without her valuable knowledge, effort, critics, and support I would not be able to come to the end of this process. I also thank Assoc. Prof. Dr. Mithat Durak who is also one of jury members.

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Samet BAŞ

03.06.2016

To my dear family whose love, support, and prays of day and nights make me able to get such degree an honor…

ABSTRACT

POSTTRAUMATIC GROWTH AND CORE BEREAVEMENT IN GRIEVING INDIVIDUALS: EXAMINING THE FIVE STAGES OF GRIEF

Samet BAŞ

Master Thesis
Department of Psychology
Supervisor: Assoc. Prof. Dr. Emre ŞENOL-DURAK
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This study was designed to investigate possible associations of Posttraumatic Growth with the Five Stages of Grief (denial, anger, bargaining, depression, and acceptance), and intensity of bereavement, together with several bereaved-related (age, gender, education, living conditions, and receiving professional help), loss-related (loss gender, suddenness of loss, time since loss, and closeness to the deceased) factors, and the factors of quality of relationship with deceased (relationship quality, interaction frequency, and supportiveness of the relationship with deceased). With this purpose, 501 bereaved individuals who have a significant loss experience (e.g., father, mother, sibling, child, or close friend etc.) provided data on posttraumatic growth (PTG-X), the five stages of grief (FSGS), and bereavement intensity (CBI), as well as demographic information. Moreover, the five stages of grief and its associations with core bereavement and posttraumatic growth were tested empirically for the first time with a model. Results revealed that several bereaved/loss related variables (gender, education, living conditions, and closeness to the deceased) associated with posttraumatic growth, core bereavement, and certain stages of grief. Additionally, tested model revealed that the nature of the five stages of grief can be separated into two groups: pre-acceptance and acceptance stages. While acceptance stage directly associated, pre-acceptance

stages indirectly (by the way of core bereavement) associated with posttraumatic growth. Moreover, bargaining stage takes a junction role between positive and negative directions in grieving process. Overall, findings of the present study reveal both the linear and overlapping natures of the five stages of grief.

Key words: Posttraumatic growth, Bereavement, Grieving Stages.

ÖZET

KAYIP YAŞANTISI OLAN BİREYLERDE TRAVMA SONRASI GELİŞİM VE TEMEL YAS UNSURLARI: YASIN BEŞ AŞAMASININ İNCELENMESİ

Samet BAŞ

Yüksek Lisans Tezi
Psikoloji Bölümü
Danışman: Prof. Dr. Emre ŞENOL-DURAK
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Bu çalışma, Travma Sonrası Gelişim ile Yasın Beş Aşamasının (inkar, öfke, pazarlık, depresyon ve kabul) ve yasın yoğunluğunun kaybı olanla ilişkili faktörler (cinsiyet, eğitim, yaşam koşulları ve profesyonel yardım) ve kayıpla ilişkili faktörler (kaybın cinsiyeti, kaybın ani/beklenmedik oluşu, kayıp sonrası süre ve kayba olan yakınlık derecesi) ve kaybedilen kişiyle olan ilişkinin kalitesi (ilişki kalitesi, etkileşim düzeyi ve ilişkinin destekleyiciliği) ile birlikte değerlendirilmesini amaçlamaktadır. Bu doğrultuda önemli bir kayıp yaşantısına (ör. anne, baba, kardeş, çocuk ve ya sevilen bir arkadaş) sahip 501 bireyden travma sonrası gelişim, yasın beş aşaması ve temel yas unsurları verilerinin yansıra demografik bilgiler elde edilmiştir. Ayrıca bu sayede, yasın beş aşamasının yasın yoğunluğu ve travma sonrası gelişimle ilişkisi ilk defa görgül bir modelle test edilmiştir. Sonuçlar, bazı kayıp/kaybı olan ile ilişkili faktörlerin (ör. cinsiyet, eğitim, yaşam koşulu ve kayba olan yakınlık derecesi) travma sonrası gelişim, temel yas unsurları ve bazı yas aşamalarıyla ilişkili olduğunu göstermiştir. Ayrıca test edilen model yasın beş aşamasının kabul öncesi ve kabul aşamaları olarak değerlendirilebileceğini ortaya koymuştur. Kabul aşaması direkt olarak travma sonrası gelişim ile ilişkili iken, kabul öncesi aşamaları yasın yoğunluğu aracılığıyla dolaylı olarak travma sonrası gelişimle ilişkili bulunmuştur. Ayrıca pazarlık aşamasının

olumsuz ve olumlu yas süreçleri arasında bir kavşak rolü üstlendiği görülmektedir. Bütün bu sonuçlar aynı zamanda yasın beş aşamasının hem doğrusal hem de eş zamanlı görülebilen bir süreç olduğunu ortaya koymuştur.

Anahtar kelimeler: Travma Sorası Gelişim, Yakın Kaybı, Yas Aşamaları

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ABBREVIATION LIST

ANOVA **:** Analysis of Variance

PTGI **:** Posttraumatic Growth Inventory

CBI **:** Core Bereavement Inventory

FSGS **:** Five Stages of Grief Scale

M **:** Mean

Max **:** Maximum

Min **:** Minimum

SD **:** Standard Deviation

INTRODUCTION

'Traumatic events are extraordinary, not because they occur rarely, but rather because they overwhelm the ordinary human adaptations to life…"

Judith L. Herman[1]

Traumatic events are generally seen as unusual and rare events. However, in some regions of the world, they have been commonly seen as a big part of daily life. For instance, there are two massive earthquakes in the history of Turkey. In 1997 (İzmit), 17118 people lost their lives, while 606 people dead in 2011 (Van) due to the earthquakes, officially (BDTİM 2015). Also, recently more than 300 people lost their life in a mine accident, in Soma. In addition to earthquakes, terrorism has become one of the most common traumatic events for Turkey and its neighboring countries that results the death of many innocent people. Recently, more than 200 people killed by three different blasts in the capital of Turkey. In addition to earthquakes and terrorism, many people lost their lives due to the several reasons (e.g. chronic, sudden or terminal illnesses, suicide or accidents etc.).

It is not surprising that traumatic events lead to many physical, psychological and social problems for the survivors of trauma. However, after a significant loss experience bereaved individuals (parents, couples, friends or someone close to deceased) also struggle with many physical and emotional problems. Depression, anxiety, posttraumatic stress disorder or complicated/prolonged grief disorders have been accepted most common disorders that follow the death of a loved one because of several reasons. All these reactions have been accepted as negative side of stressful life events and researchers have mostly examined these reactions.

[1] Herman (1997: 33).

Recently, Tedeschi and Calhoun (1996) conceptualized a model, namely Posttraumatic Growth that arising from struggling with major life crisis. Although, positive outcomes have been recognized for centuries, it was first studied systematically by these researches. According to their model, traumatic events cause a shift in survivor's worldview and results a personal growth. However, there is no consensus in the field about whether loss experiences can be categorized as a traumatic event or not. Calhoun and colleagues (2010) revealed that if the loss experience is intense as shattering your basic assumptions about yourself, others and world, it is more likely lead to growth. However, this relationship has not been tested systematically with bereaved individuals.

Loss of a loved one has been accepted as one of the most devastating events for bereaved individuals. Therefore, related subjects such as reactions to death, bereavement and grief processes have been widely studied areas in the field. Moreover, there are several grief models that identify grief processes in the frame of bereaved individuals. These models can be categorized as stages, phases, or tasks of grief process. Kübler-Ross (1969) conceptualized a model, namely Five Stages of Grief with terminally ill patients. This model is one the most accepted stage model of grief and revised recently by Kübler-Ross and Kessler (2005) in a book *On Grief and Grieving: Finding the Meaning of Grief Through the Five Stages of Loss* with bereaved individuals who lost a loved one. Although, this model has been widely accepted by several disciplines, researchers have limitedly tested it.

In the present study, loss of a loved one has been accepted as a major life crisis. Therefore, following the loss of a loved one, possible associations between Posttraumatic Growth, the Five Stages of Grief, and intensity of their bereavement by Core Bereavement Phenomenon (Burnett et al. 1997) are questioned.

CHAPTER I

1. LITERATURE REVIEW

Several negative life events have been examined in the context of their traumatic influence, such as, domestic violence (Abrahams 2007), sexual assaults (Dura-Vila, Littlewood, and Leavey 2013), natural disasters (Arnberg, Johannesson, and Michel 2013), combat veterans (Raab et al. 2015) and health problems (cancer, HIV etc.; Sikkema et al. 2013). These events are described as threatening events.

Psychological trauma also includes threatening life events that do not lead to physical damage or harm. These events include bereavement experiences such as individuals losing their families, friends and someone close to them or survivors of terminal illness. Parental loss (Stoppelbein, Greening, and Elkin 2006) and child or infant loss (Christiansen, Olff, and Elklit 2014) have been mentioned as traumatic events specific to grief experiences of deceased individuals. However, these events have been less likely to be examined in the literature.

1.1. Trauma and Loss (Traumatic and Non-Traumatic Bereavement)

Sooner or later, almost everyone may experience the loss of a loved one, at least once during his/her life period. According to the report of United Nations, probability of dying between the ages 15 and 60 in the world globally was 157 per 1000, during the years 2010-2015 (UN 2013). When considering the mortality rates of Turkey, 390,121 people died (5 per 1000) totally by the year 2014 (TÜİK 2015). Contrary to Turkey, global death rate is very high worldwide. Moreover, according to the same database of the Turkish Statistical Institute (2015), 48.6% of the deceased were 75 and more years old. These rates indicate that there are high levels of death rates totally worldwide, additionally, 52.4% of the deceased died in an age range that is lower than life

expectancy (M = 76,3; TÜİK 2014). Thus, more than half of the deaths can be accepted as unexpected death experiences.

"Trauma" and "bereavement" are the terms generally used in the same context both in daily life and in the literature. Generally bereavement term is used in the meaning of loss. It refers to the "situation a person who has recently experienced the loss of someone significant through that person's death (e.g., death of one's partner, parent or child etc.)." (Stroebe, Schut, and Finkenauer 2001: 188).

According to the Rubin, Malkinson, and Witztum (2003) it is needed to specify the meaning of the trauma in the context of bereavement. They highlighted that trauma surrounds or accompanies the bereavement under terrible conditions such as, unexpected death. While some researches (Rubin et al. 2003) subsume that the all loss experiences (bereavement) are traumatic, and have a potential to be traumatic bereavement, others consider that there is a different interaction between trauma and bereavement (Stroebe et al. 2001).

In their leading article, Stroebe and colleagues (2001: 189) specify that, "traumatic events can occur without bereavement". They counter argue that a loss can be either called as a trauma or bereavement. However, they also mentioned a third category of "traumatic bereavements". For instance, traumas including bereavement can be accepted in this traumatic bereavement term. This interaction between trauma and bereavement was showed detailed in Figure 1.1. Traumatic events such as psychological earthquakes (Ozdemir et al. 2015), sexual assault (McCauley and Casler 2015; Ullman, Relyea, Peter-Hagene, et al. 2013), breast cancer (Arnaboldi et al. 2014), or hearth diseases (Senol-Durak and Ayvasik 2010a) are accepted in those events. For the "traumatic bereavements" sudden or unexpected death of a loved one commonly seen in the traumatic events such as a cancer (Lichtenthal and Breitbart 2015), violent death (Burke and Neimeyer 2014), terrorist attacks (Stevens et al. 2013), natural disasters (Garcia et al. 2015; Kalantari and Vostanis 2010) or suicide (Pitman et al. 2014).

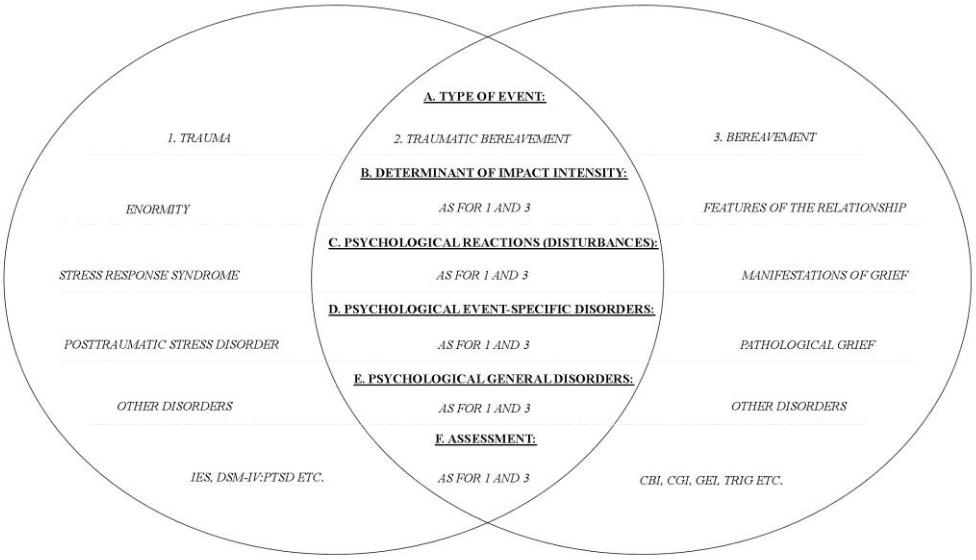

Figure 1.1: The Interface of trauma and bereavement (Stroebe et al. 2001)

Traumatic events and its essential features have been presented in different editions of Diagnostic and Statistical Manuel of Mental Disorders (DSMs) since 1980. In DSM-III, psychological distressing events are the first time described under the title of Posttraumatic Stress Disorder (PTSD), and presented events that must be outside the range of usual human experience (APA 1980). In the revised form, DSM-III-TR, although there is still an emphasis on the "unusual human experience" (e.g., outside the range of such common experience like simple bereavement, chronic illness or marital conflict etc.), the content of traumatic stressors is enlarged (APA 1987). When considering DSM-IV and DSM-IV-TR, witnessing a traumatic event to another person or learning the event that experienced by a family member or close friend, are accepted as traumatic stressors (APA 1994, 2000). In the latest edition, DSM-V, essential feature of the traumatic event is described as exposing to a actual or threatening death, serious injury, or sexual violence in different ways (directly exposure to the event, witnessing, or learning the event as it occurred to a family member, close friend or others; APA

2013). Although the lines of a traumatic event has been drawn by DSMs, in real life it seems very difficult to make a distinction between traumatic and non-traumatic bereavement, also this is often not possible (Rubin et al. 2003). In this regard, trauma and bereavement interface in multiple ways. In some bereavement types, such as a long-expected death or a child death to say it is not a traumatic bereavement is very hard (Stroebe et al. 2001).

There is a growing body of research about the effects of traumatic/non-traumatic bereavement on people. There is a detailed comparison between reactions to trauma and bereavement in a comprehensive study "The Traumatization of Grief" (Stroebe et al. 2001). However, it is asserted that although symptom picture which has generally been used by studies deciding whether a loss is traumatic or not, should not be the only criterion (Rubin et al. 2003). They emphasize the critical role of the relationship with the deceased. According to their perspective, The Two-Track Model of Bereavement is the best way to understand the trauma and bereavement interaction in a multiple perspective. These perspectives are explored later on.

1.2. Traumatic Bereavement and Mental Health

The nature and the type of death have been accepted as important factors that are related with poorer outcomes (Green 2000). These factors are organized, such as sudden or unexpected, horrific, violent (homicide, suicide or AIDS) deaths, and multiple losses or the death of a child. Many of these factors are indicated in stressor criterion (Criterion A) in DSM-IV for Posttraumatic Stress Disorder (PTSD; APA 2000).

After loss experience, especially in which the loss was traumatic, survivors are more likely to experience several psychological problems (Cerel et al. 2006) such as PTSD and depression (Burton, Haley, and Small 2006; Keyes et al. 2014; Melhem et al. 2001; O'connor 2010; Van Denderen et al. 2016), grief difficulties (Feigelman, Jordan, and Gorman 2008), substance use problems in family functioning (Cacciatore et al. 2013). They are also more likely to suffer from several poorer well-being, and health problems (Rogers et al. 2008) and high mental distress (Lohan and Murphy 2005).

In a study conducted by Melhem et al. (2001) with twenty-three bereaved subjects who has traumatic grief symptomology, the comorbidity of traumatic grief with other disorders was investigated. Results revealed that most of subjects met criteria for a current or lifetime Axis I diagnosis. While 52% of the participants (N = 12) met criteria for major depressive disorder, 30% (N = 7) of them met criteria for PTSD. As a comorbid disorder to loss experiences, depressive disorder has an important place. Especially, often experienced unexpected death following through 6-18 months marked increase in depression (Burton et al. 2006). Moreover, relationships with the deceased were highlighted to severity of the PTSD and complicated grief (Van Denderen et al. 2016). In their study parents had a greater risk in terms of developing emotional problems when compared with other relatives of the deceased.

Considering the types of death, the death of a child might be seen as the most traumatic event that leads acute and long-term effects on parents' lives. In a study, bereaved parents (N = 503) reported a large variety of mental and physical health problems (Cacciatore et al. 2013). Also results showed a significant clinical distress among bereaved parents with continuous familial, psychological and health problems following the death of child. Similarly in another study, bereaved parents reported more depressive symptoms, poorer well-being, and more health problems even after 18 years passed (Rogers et al. 2008). It was also found that these parents were more likely to show marital disruption when compared with counterparts who have not any loss experiences.

In addition to loss of a child, unexpected loss of a parent has also been mentioned as influencing bereaved children. In a study by Kalantari and Vostanis (2010) eighty-six children (ages 7-13) who had a parent loss before 4-years from the study compared with children who has no loss experience in their family environment. Children who had suffered parental loss had more behavioural and emotional problems than other children. Same results supported by another study (Cerel et al. 2006), which were conducted with parent-bereaved children (N = 360) 6-17 years old and their surviving parents. In this study families were also categorized based on anticipated (N = 143, 40%), or unanticipated death (N = 203, 56%). In the first two years after the parental death, children reported increased psychiatric problems.

1.3. A Bitter Experience: Loss

"Niobe is one of the more tragic figures in Greek myth … Niobe was the queen of Thebes (the principle city in Boetia), married to Amphion, King of Thebes. Niobe and Amphion had fourteen children (the Niobids), … at a ceremony in honor of Leto, the daughter of the titans Coeus and Phoebe. She mocked Leto, who only had two children, Apollo, … and Artemis… Apollo killed the seven sons … Artemis killed the seven daughters with her lethal arrows. At the sight of his dead sons, Amphion either committed suicide … In any event, Niobe's entire family was dead in a matter of minutes. In shock, she cradled the youngest daughter in her arms, then fled to Mt. Siplyon in Asia Minor. There she turned to stone and from the rock formed a stream (the Achelous) from her ceaseless tears. She became the symbol of eternal mourning. Niobe is weeping even to this day. Carved on a rock cliff on Mt Sipylus is the fading image of a female that the Greeks claim is Niobe (it was probably Cybele, the great mother-goddess of Asia Minor originally). "

This short mythological narrative from the Greek mythology (Balwin 2016, http://www.pantheon.org/articles/n/niobe.html, retrieved March 14 2016), presents us a good prototype of the loss experience itself and bereaved mothers-fathers and families. This painful experience, as a loss, may effects bereaved people and their relatives devastatingly. Therefore, as such in the narrative, being a stone was probably the only way of coping for Niobe. Since, it is an unendurable life experience for the people left behind, hence the tears are every time with you.

In the present study, loss/bereavement is a phenomenon that needs to be understood from a scientific perspective by using the theoretical and empirical knowledge that arises today increasingly. In the field while loss experiences are describing by writers, they generally use some different words such as bereavement, grief, mourning, complicated bereavement/grief or grief process etc. Sometimes this difference may cause an ambiguity for researchers or readers in the field. For example the terms pathological grief, complicated/delayed/chronic grief, and complicated mourning can be used while explaining the same or related process. Although these different words are related to loss experiences, each concept includes different meanings about loss itself.

1.3.1. Different Expressions Related with Loss

There are some expressions such as bereavement, grief, mourning that are used very commonly in the field to explain the loss experiences. It will be useful to make a descriptive distinction between them. *Bereavement* signifies the situation of a person who has experienced the loss (death) of someone who is significant such as partner, parent or child (Stroebe et al. 2001). *Grief* is an emotional response of a bereaved individual to the bereavement, while *mourning* symbolizes the actions and styles of expressing grief that generally reflects the mourning rituals from one's cultural background (Averill and Nunley 2005).

1.3.1.1. Loss and Bereavement

The different word meanings of the loss are specified as; "(1.) When you no longer have something or have less something" and "(3.) The death of a person" in the English dictionary (CUP 2008: 849). It is clear that the term loss is commonly used for a number of reasons. That means, it is not compulsory that a death has occurred, however, it includes the states of changed relationships with a person or an object or maybe lacking a body part (Mander 2015).

Bereavement is "the death of a close relation or friend who has recently died" (CUP 2008: 125). When we look more closely, especially through the etymological approach, the term bereavement has other meanings, which does not only include death. This approach gives us easiness while understanding the meaning of bereavement. The verb "to bereave" is derived from the adjective "bereft", which means "to steal anything of value" (Mander 2015: 3). When considering that the life steals something that is valuable for you, the term "bereavement" meets finely the state of having lost someone close to you.

1.3.1.2. Grief

The term “grief” briefly refers to the reaction to the experience of death of a loved one. It will be helpful to clarify related concepts with grief such as “acute grief, integrated grief and complicated grief”. While acute grief represents the initial, commonly intense and disruptive reactions, “integrated grief” is the long-lasting response after adjustment to the life without deceased with satisfaction (Shear, Ghesquiere, and Glickman 2013). However, complicated grief “is a form of prolonged acute grief, where the term complicated is used in the medical sense of a superimposed process that impedes healing. Complicated grief is a distinct mental health disorder” (Shear et al. 2013: 406)

Besides, grief may have many social, financial, or other implications, this process highlights the emotional and psychological responses, thus grief is a part of that experience, not the whole of it (Kübler-Ross 2009). We know while the bereavement refers to the state of loss, grief is the response to loss. Therefore grieving or the grieving process with developments in the individual’s emotional state is the main subject in psychology area.

1.3.1.3. Mourning

The term “mourning” is a “great sadness felt because someone has died” (CUP 2008: 930). In his famous paper, Mourning and Melancholia, Freud (1917: 243) indicated that “Mourning is regularly the 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, an ideal, and so on.”. Also, the term includes a large variety of comprehensive, more socially oriented expressions of loss (Mander 2015), such as wearing special clothes (mourning clothes) during a period of time. Following the death of a loved one, these cultural expressions assist someone to move distressing phase of bereavement to rebuild normal functioning (Goodwyn 2015). However, in the case of a failure in transition, a more problematic state can develop namely complicated grief. As stated by Freud (1917), the same experience generates melancholia (currently clinical depression)

instead of mourning for some people, thus this cause to suspect them in a pathological disposition.

In the paper Mourning and Melancholia, Freud (1917) makes a brief but comprehensive description of melancholia. His views still have a substantial impact on researchers and clinicians who work on grief process. As mentioned above, at least two main points about grief reported by Freud have an influential effect on clinical workers as Tedeschi and Calhoun (2004a) mentioned. One idea is that after a significant loss, most of people's psychological activity in response to the bereavement appears unconsciously. Today when a bereaved person is seen in the stage of denial, from this point of view that reflects Freud' s idea about bereaved person's mental process, which is out of conscious awareness. Freud' s other idea that is mentioned by Tedeschi and Calhoun (2004a) is "work of grief" which is a necessary part of psychological intervention. After the loss of a loved one, grieving individuals may need to engage in a complicated psychological process.

1.3.2. Complicated/Prolonged Grief

According to our initial descriptions, grief refers to the psychological and biological responses to bereavement. As stated by Shear et al. (2013: 406), "acute grief is the initial response, often intense and disruptive. Integrated grief is the permanent response after adaptation to the loss in which satisfaction in on-going life is renewed. Complicated grief (CG) is a form of prolonged acute grief…" In the literature, abnormal responses to the bereavement have been defined as either complicated grief or prolonged grief disorder (PGD).

Because of the CG has been accepted as a distinct disorders, some researchers make its definition with regard to certain symptoms of grief that must be distinct from bereavement related depression and predicted from long-term functional impairments (Prigerson et al. 1995). Also, in that study they developed a standardized measurement called Inventory of Complicated Grief (ICG) to detect the symptoms of complicated grief.

The CG does not have a long diagnostic history. In DSM-IV, grief has been accepted as an expected and culturally accepted response (APA 1994). Moreover, in the same version of the DSM, bereavement has been defined as ‘‘other condition that may be a focus of clinical attention’’. In the following time course, there are some consensus effort to assign and detect the criteria of the CG (Horowitz et al. 1997; Prigerson et al. 1995; Shear et al. 2011) and prolonged grief disorder (Boelen et al. 2010; Prigerson et al. 2009) in the diagnostic process. Today the complicated/prolonged grief disorder has its own place in the fifth edition of DSM, in the section on “Disorders Requiring Further Study” with the name of “Persistent Complex Bereavement Disorder (PCBD)” (APA 2013). In the PCBD, bereaved individuals who have a significant loss, experience acute grief symptoms (e.g. persistent yearning, preoccupation with the deceased etc.), and reactive distress to the death (e.g. marked difficulty accepting the death, bitterness or anger related to loss etc.), and social/identity disruption (e.g. difficulty trusting others, a desire to die etc.) for at least 12 months for bereaved adults, for 6 months bereaved children. Moreover, the PCBD is distinguished from normal grief, depressive disorder, posttraumatic stress disorder, and separation anxiety disorder (APA 2013).

Although Prolonged Grief Disorder, as the most common form of complicated grief, it is strongly associated with depression, PTSD, and anxiety (Schaal et al. 2012), it has been accepted as a distinct disorder from both major depressive disorder (MDD) and post- traumatic stress disorder (PTSD; Boelen et al. 2010). It is important to make a distinction between the CG and other comorbid disorders, depression and PTSD (Shear et al. 2013). Although PGD is clearly different, its comorbidity rates with depression and PTSD are quite high. A study conducted with 400 bereaved (widowed and orphan) participants whose relatives (62%, N = 46) died during genocide, PGD fulfilled comorbid symptom criteria for depression (90.3%, N = 428), and PTSD diagnosis (84.4%, N = 427) (Schaal et al. 2012). In another study, while following a significant bereavement, the prevalence of CG was found 6.7%, it was found 3.7% in the general sample (Kersting et al. 2011). In the same study, being female gender, lower income (less than €1250/month), older age (over 61 years), having loss of a child or a spouse, and cancer as a death reason, were indicated as risk factors for the CG.

More than %70 in general population may experience the CG reactions (Li, Chow, Shi, and Chan 2015). The prevalence of the CG changes from 2.5% (Kersting et al. 2011) to 25.4% (Newson et al. 2011). According to the Li et al. (2015), there are two important explanations for these differences: cultural factors and different criteria for diagnosis.

Studies argue that some factors are quite useful in predicting whether an individual will experience complicated/prolonged grief after a death, especially when the deceased is significant. Beside the personal indicators such as coping styles (e.g., religious coping) and trauma history, some external variables including cause of death, relationship with the deceased and social support have an important value in evaluating individuals at high risk (Hibberd, Elwood, and Galovski 2010). Lower social support satisfaction and education level (for the caregivers), being female, types of loss (losing a child or spouse and violent deaths), time of death confirmation, previous loss experiences and lack of preparation for death, attachment styles and marital closeness and younger patient age for deceased (Hibberd, Elwood, and Galovski 2010; Kristensen, Weisaeth, and Heir 2010; Lobb et al. 2010; Lombardo et al. 2012; Morina, et al. 2010; Van Denderen et al. 2016; Villacieros et al 2014).

1.3.3. Grief Reactions to Different Types of Loss

Bereaved individuals mostly have lost a first order family member (spouse, child, parent and sibling (Kersting et al. 2011). The reactions of this kind of loss differ with gender (Burden et al. 2016), type of bereavement (suicide, infant loss, or terminal illness; Ljung et al. 2014), family context (Werner-Lin and Biank 2012), and who the deceased is (spouse, child, siblings or other relatives). Therefore it requires clinical and research attention in order to find out similarities and differences to understand the reactions to these different types of bereavements. Moss and Moss (2014) pointed out the role of family context. Because of the former bereavement studies focused on only the bereaved person as an individual, they highlight the role of including multiple family members into the studies.

1.3.3.1. Loss of Spouse

A significant statement of a woman who lost her husband: *"We were married for fifty-nine years.... (It's) just like somebody comes and ... chopped your arm off."* (Holtslander and Duggleby 2010: 114). This statement clearly explains why the loss of a loved one especially death of a spouse is one of the most stressful life events as it was mentioned by other studies (Gallagher-Thompson et al. 2005). In line with this the death of a partner has an important impact on mortality rates (Van Den Berg, Lindeboom, and Portrait 2011) as well as mental and physical health problems (Hart et al 2007). Well-being including decreased life satisfaction and increased depression (Burton et al. 2006) have also been mentioned among individuals experienced death of a spouse. According to Stroebe et al. (2005) researchers have focused on bereavement as quite related with extreme mental and physical problems, but these problems does not occur among everyone and not always permanently. Therefore, understanding these factors associated with well-being is so important.

In respect to the death of a loved one has a significant effect on bereaved spouse' s mortality rates (Van Den Berg et al. 2011). They investigated causal factors of spousal bereavement on mortality. A strong instantaneous effect of bereavement on mortality have mentioned at the first 2.5 years. Following a death of spouse have also influenced on chronic illness. Bereaved individuals with illness have a decrease on their life expectancy rates (average 12% in the residual life). Another study which focused on mortality rate, gender, and age of bereaved spouse mortality risks were found higher among men than women and also high among younger bereaved individuals compared with older people (Seifter et al. 2014). In addition to the gender difference, remarrying was a significant factor in the same study. Mortality risks were higher in both widows and widowers who did not remarry (Also risk was higher in both genders during the first 6 months after a conjugal bereavement). In addition to death of spouse, death of close family member have been reported as increasing mortality rates and physical or psychological deceases, in a longitudinal study conducted by Jones et al. (2010), there was an increase in mental health. However circulatory disorders rates were two times more in bereaved individuals than non-bereaved individuals.

In respect to well-being, depression, life satisfaction, and social support components following the first two years of widowhood during the process of grief, have been mentioned as important factors (Powers, Bisconti, and Bergeman 2014). While depression levels of widows decreased across months, life satisfaction showed a gradual decline across time. However, life satisfaction gradually increased across the second year of bereavement. For the social support, they showed that while widows reported stable levels of social support during first two years, there was a decline about the level of emotional support and support provided by family member.

Current studies highlight the effects of social support on grief process. Having positive social support resulting a decrease the self-reported symptoms of distress (Wilson and Supiano 2011). In another study conducted with women and men who recently lost their spouse or partner, results showed the significant role of friends (Vries et al 2014). In the first 2-6 months following the death, older spouses was influenced by the support of friends or relatives. Thus, higher satisfaction with these relationships was associated with a decrease in negative affective responses to their loss. However, in the same study, surprisingly higher frequency of social support from both friends and relatives was related higher grief and depression. As well as, researchers discussed this result with turmoil in social-emotional world of bereaved individuals, and also with a greater need of frequent contact with friends and relatives as a way of showing an intense emotional response.

1.3.3.2. Bereaved Parents (Loss of a Child)

Today, it is widely known and accepted reality the death of loved one causes many psychological and physical problems. However, among these losses, the loss of a child has been emphasised as beyond all bear and a long lasting grief process for the parents (Rubin 2005).

Previous studies revealed that bereaved parents have lower level of well being (Wei, Jiang, and Gietel-Basten 2016) and adverse psychological and social effects such as depression, anxiety disorders, and marital breakups (Bolton et al. 2013); PTSD (Christiansen, Elklit, and Olff 2013); prolonged grief disorder and poor quality of life

(Rosenberg et al 2012); dissociation, sleep disturbances, somatization, interpersonal sensitivity (Murphy, Shevlin, and Elklit 2014); family dysfunction (Cao et al. 2013); negative psychological symptoms in subsequent pregnancy, disfranchised grief, grief suppression, and avoidance of memories (Burden et al. 2016). Moreover, there are some studies, which assert that these comorbidities may endure up to 18 years after the death of a child or infant (Christiansen et al. 2013; Dyregrov and Dyregrov 1999).

Reasons of death have been mentioned as influencing different responses to the loss a child. For instance, if the loss reason is a terminal illness (e.g. cancer), and sudden/unexpected death (e.g. suicide, earthquake) or an infant death, the responses will be different from each other in respect to some reactions and morbidities. In a review study with bereaved parents of children with cancer depression, anxiety, prolonged grief and poor quality of life are mentioned as main outcomes for bereaved parents (Rosenberg et al. 2012). However when the death reason is perinatal or postnatal complications, parents' responses include also trauma related symptoms such as dissociation, sleep disturbances, somatization, and interpersonal sensitivity (Murphy et al. 2014). In addition to, these symptoms including trauma specific and psychological outcomes especially aggression and interpersonal sensitivity showed a tendency, which continues up to five years after the death experience. In another longitudinal study conducted with bereaved mothers and fathers (N = 634) by infant death after up to 18 years later, estimated PTSD prevalence was 12.3 % (Christiansen et al. 2013). Besides, PTSD severity did not differ when comparing pre, peri, or post-natal loss groups. The study also gives valuable results about risk factors. For instance, lower gestational age was an important variable related with more symptoms.

Suicide is one of the most influential death reasons for the bereaved parents. In a recent and comprehensive study with an extensive sample of suicide (N = 3284) compared with any-cause deaths (N = 14095), being exposed to offspring's death was a higher risk factor for psychiatric hospitalization, no matter what was the cause (Ljung et al. 2014). This study also stated the central role of familial effects such as shared genetic, because of the lack of psychiatric hospitalization and decreased level of risk on non-bereaved siblings. In another recent study suicide-bereaved parents (N = 1415) contrasted with non-bereaved parents (N = 1415) and motor vehicle crash-bereaved

parents (N = 1132; Bolton et al. 2013). Study showed that, when considered two years before and after the death, marital breakups were associated with suicidal bereavement. Additionally very few differences were found between suicide bereaved and motor vehicle crash-bereaved parents on pre and post outcomes.

Critical risk factors for bereaved parents have been highlighted in the literature. However, these risk factors can be change in terms of the death reason, for instance time since the loss, female sex, attachment avoidance and anxiety, emotion-focused coping, rational coping, feeling let down and social support satisfaction (accounted for 42% of the variance) in PTSD severity (Christiansen et al. 2013). In addition to these, fewer years of education and lower income, being female, being at an advanced age, being divorced or widowed, being directly exposed to the death of their children, not having another baby after the earthquake as well as having chronic diseases are another risk factor for depression when the cause of death was an earthquake (Cao et al. 2013). Finally, developing prevention strategies for complicated grief is essential since the risk factor of parents' needs around the time of their offspring's death. Since, it is stated as a greater risk factor for developing complicated grief (Meert et al. 2012).

Following the death of offspring, differences on responses to the loss depending on gender of parents has been discussed in the literature (Burden et al. 2016; Christiansen et al. 2014). In a recent a meta-analysis, psychological impact of stillbirth on bereaved parents has been investigated (Burden et al. 2016). According to their comprehensive analysis, beyond negative psychological factors that noted above, fathers and mother are affected differently from stillbirth. While negative psychological symptoms, pressures to delay or prioritise conception, stigmatisation, altered body image, mixed feelings on decision making, motivation for and use of healthcare services were mostly associated with mothers, employment difficulties and increased substance abuse were associated with fathers. Moreover, avoidance and grief suppression affects both parents and leads to relationship difficulties within the couple and also the wider family unit.

1.3.3.3. Parental Bereavement (Loss of a Parent)

Over 150 million children (infants to teenagers) around worldwide, experience the death of one or both parents in 2012 (UNICEF 2014). Although the term parental bereavement has not been used only for bereaved children who lost a parent during childhood, the death of parent for the children must be one of the most critical life events in all over the world. Most common reasons living without one or both parents for children are wars, invasion, natural disasters, conflict, chronic poverty (IHH 2014), and terminal illness (AIDS; Jacobson et al. 2014).

The death of parent among bereaved children has been commonly studied in the field. In this context several studies has focused on the mental health (especially with longitudinal studies), family contexts, type of death reason, and treatment approaches for the children who lose one or both parents. In the present study it will be included study results on this topics.

Lucenko et al. (2015) conducted a study with youths between the ages 12–17 and their biological parents, to examine the effects of negative life experiences on adolescent behavioral health problems. According to the findings, the death of a biological parent was an important predictor for mental illness. In another study, which was also conducted with youth between the ages 7-13, and compared the experiences of parental cancer (N = 31) and parental death (N = 32; Howell et al. 2016). They assessed levels of depression, anxiety and posttraumatic stress symptoms (PTSS) and found that while both groups revealed similar levels of depression and anxiety, PTSS scores were higher for children who lost their parents. Moreover, expressive coping, supportive caregiver communication and positive parental reinforcement were associated with lower levels of PTSS. In the sample of bereaved group, PTSD symptoms and its relationship with children who experience parental death is also supported other studies (Stoppelbein et al. 2006).

There is a common question in the field, including parental death during childhood and its relation to lifelong psychological and physical problems (e.g. chronic illness) during their adulthood. There are contradictory results in the field about long-term effect of parental bereavement (Jacobs and Bovasso 2009; McClatchey and

Wimmer 2014; Stikkelbroek et al. 2012). In a longitudinal study conducted by McClatchey and Wimmer (2014) with adults (N = 571) between the ages 18-64 who lost a parent before the age of 16, parental death was not associated with mental health both 12 month time interval and lifetime. Similar results were revealed in another longitudinal study (Stikkelbroek et al. 2012). In this study conducted with adults aged 18-64 years (N = 7076), there was no strong association between parental death and mental health in adulthood 12-month time interval and lifetime. Also, parental death was not associated with age of onset, occurrence of mental health problems, use of mental health services and functional limitations. It was also argued that, adults losing a parent in childhood could cope successfully; therefore, they might not be need and professional help.

Parental death may increase suicide and other mortality risk in adulthood has also been investigated. According to a recent study from US, in a sample of 663,729 individuals 4533 of them committed suicide, also had early life parental death history during early life. Suicide risk was reported before age 50, and among individuals with cardiovascular disease deaths (Hollingshaus and Smith 2015). In another review study, effects of parental death by suicide in the sample of children was studied (Hung and Rabin 2009). Although children experience posttraumatic stress symptoms, guilt and self-blame that contributes to depression in adulthood following the suicidal event, it was revealed that studies did not provide significant support for qualitative and quantitative difference. Also, Kovess-Masfety et al. (2015) investigated prevalence of suicidal ideation and thoughts of death and their relationships with demographic factors. In the sample of primary school children (N = 7061) aged 6-12 living in different countries including Italy, Turkey, Romania, Bulgaria, Lithuania, Germany, and the Netherlands. It was indicated that, suicidal ideation and thoughts of death were more frequent in single-parent families and large families.

There are studies, which focusing on other associated factors about the death of a parent. These are well-being, self-confidence and self-esteem, coping efficacy, parent child relationship quality, and internalizing problems (Leopold and Lechner 2015; Mack 2001; Stikkelbroek et al. 2016; Wolchik et al. 2008).

Mack (2001) directly made a comparison between different family disruption groups (adults who experienced parental divorce, adults who experienced parental death, and adults who were raised in intact families) before the age 19 (N = 4,341). Interestingly, scores of self-confidence were higher in adults who experienced parental death during childhood. In a current study, Leopold and Lechner (2015) studied with 2760 adult children between the ages 17-70. They found that, effects of parental loss on life satisfaction change considerably by gender and age over 11 years. In terms of satisfaction level, daughters who experience the death of their mothers have lowest level of life satisfaction. Also sudden death of mothers, adversely affects their daughters adaptation of loss even after several years.

Lastly, role of relationship quality with child-parent and the coping efficacy have also mentioned. Wolchik et al. (2008) conducted a cross-sectional (N = 340) and longitudinal (N = 100) study on bereaved youths. They found that, intensity of general grief and intrusive grief thoughts were affected by the relationship quality between child and parent affect levels of general grief and intrusive grief thoughts. They also found that, coping efficacy partially mediated relation between relationship quality with parent and general grief reactions. They account for this interaction with the behaviour of supportive caregivers and their positive parental strategies that shapes children belief of control and greater coping efficacy on stressors. In line with these findings, it is expected that family functioning (family organization, cohesion, communication and role differentiation, pre- and post-bereavement) and multiple loss in the family may affect grief process and mental health adversely. However it is possible to find contrary results. In their longitudinal study with adolescents who have family bereavement during 2 years research process, Stikkelbroek et al. (2016) found that family functioning did not change significantly. It predicted internalizing or externalizing problems after bereavement. Also they indicated that experiences more than one family members' death did not predict externalizing problems.

1.3.3.4. Bereaved Siblings

Loss of a sibling has been accepted one of the most important loss experiences in the in the circle of immediate family (Van Denderen et al. 2016). Although there are

restricted studies about the prevalence of the loss of a sibling during childhood and its consequences in adulthood, it has been indicated that from 5% to 8% of the children affected by the death of one or more siblings (Fletcher et al. 2013).

This tragic life event causes elevated psychological problems (Dowdney 2008). When the age of bereaved sibling is lower than 10 years, increased crying, altered sleep patterns, enuresis, loss of skills, headaches, stomachaches, and sleep disturbances are the most common problems (Machajewski and Kronk 2013). However, when the age of bereaved individuals is 13 an more years, bereaved siblings have increased levels of mental disorders (e.g. depression [unipolar and bipolar], anxiety disorders, and attention deficit hyperactivity disorder etc.) as well as suicide attempts and higher alcohol and drug use disorders compared non-bereaved siblings (Bolton et al. 2016). In addition to psychological problems, loss of a sibling has been considered a risk factor for increased mortality rates. Rostila, Saarela, and Kawachi (2012) revealed that following a sibling loss mortality risks were higher in all age groups. Also, this relationship was stronger when the bereaved was younger.

In addition to the age of bereaved individuals, suddenness of sibling loss has been considered a risk factor for developing psychotic disorders in adulthood. In a study conducted by Clarke et al (2013), individuals who had sibling loss before they were five years old due to the natural disasters, had more risks for developing bipolar disorder and schizophrenia when compared individuals who had sibling loss due to the illness.

1.3.3.5. Other Loss Experiences

As mentioned above, the death of an intimate family member (father, mother, child or sibling) causes many negative outcomes. In addition to intimate family members, loss of a close friend also related with psychological problems, such as PTSD and depression. In a study conducted with bereaved young adults (aged 12-17) who had a close friend or family member loss due to the homicide, bereaved individuals experienced PTSD, depression, and alcohol/drug use problems (Rheingold et al 2012).

In addition to the psychological problems, closeness to the deceased has an important role in terms of bereavement intensity (Van Denderen et al. 2016) and personal growth (Armstrong and Shakespeare-Finch 2011). In a cross-sectional study with community-based sample (N = 312; spouses, family members, and friends), who were homicide victims, other relatives had lower levels of emotional problems compared intimate family members (Van Denderen et al. 2016). Moreover, in another study with different bereaved sample (N = 146), individuals who had second-degree relative loss, reported less posttraumatic growth as well as lower levels of bereavement intensity (Armstrong and Shakespeare-Finch 2011).

1.4.7. Current Theories of Grief

In the psychology literature, it is possible to find widely accepted and comprehensive theories about the grief process. Some writers make distinction between them in terms of their developmental tradition and contextualisation of the grief process. Stroebe et al. (2005) groups these theories as "depression models of grief" (understanding emotional reactions to the loss) and "stress theories" (in which bereavement is seen as a stressful life event). However there are alternative groupings in terms of structures of models. Different theorists handle the subject in various ways such as stages, phases, and tasks (Worden 2009). When considering the stage theory of grief, Elisabeth Kübler-Ross is the most famous one. In her leading book, *Death and Dying* (1969), she worked with the people who were struggling with a terminal illness. According to her model (which will be discussed in detail), as a response to the awareness of dying, patients go through to the death with five stages (denial, anger, bargaining, depression and acceptance). However, in their current work, *On Grief and Grieving: Finding The Meaning of Grief Through The Five Stages of Loss* (2005, 2014), Kübler-Ross and David Kessler reprocessed the five stages of dying on individuals who has a significant loss, as well.

1.3.4. Modern Grief Theories

1.3.4.1. Phases of Grieving

In the literature about grief, John Bowlby who is the developer of attachment theory, and Colin Murray Parkes have an important place with their influential theories on other clinical workers about grief/grief work. According to the Bowlby' s key observation (similarity of responses between a person who is grieving and a child separated from his/her primary caregiver), individual's status of attachment with the deceased who is loved one, is a good indicator understanding how that person can cope effectively (Tedeschi and Calhoun 2004a).

Bowlby (1980), Colin Murray Parkes (2006), and Colin Murray Parkes and Prigerson (2010) developed an alternative approach as phases of grieving, in place of stages. These phases are categorized as; initial sense of numbness (phase I), and then a period of highly distressing yearning and "searching" for the deceased person (phase II), and disorganization and despair (phase III), and finally psychological reorganization, following the death of a loved one (Tedeschi and Calhoun 2004a). Therefore, it is difficult to say that the stages and phases are very distinct models, since they have similarities.

1.3.5.2. Task of Grieving

Contrary to previous model of grieving (stages, phases) the task of mourning model, which was developed by (Worden 2002, 2009) includes an active process. According to this model, bereaved individuals do not need to pass through stages/phases in a specific order and be passive during the grief process.

The task model consists of four main tasks: task I (accepting the reality of the loss), task II (processing the pain of grief), task III (adjusting to the world without the deceased) and lastly task IV (finding an enduring connection with the deceased in the midst of embarking on a new life; Worden 2009). Due to the fact that grieving is a process unlike stages or phases, bereaved individuals' effort is needed for healing during this process. As it is valid for other models, not every task has to be effected in

the same way from all loss experiences (Worden 2009). It is possible to find detailed description about tasks of grieving in *Grief Counseling and Grief Therapy.*

1.3.5.3. Five Stages of Grief

According to the Maciejewski et al (2007) adjustment to the bereavement through stages of grief theory was first proposed by Bowlby (1980) and Parkes (1972). Afterwards, Kübler-Ross (1969) adapted the theory as five-stages (denial, anger, bargaining, depression, and acceptance) to the terminal ill patients' dying process. Currently, Kübler-Ross and Kessler (2005) reconsidered the model, as five stages of grief, for people who are grieving for the loss of loved one. However it is asserted that beside the fact that stages have evolved since they were propounded, they were also generally a misunderstood concept (Kübler-Ross and Kessler 2014). David Kessler expresses his opinions by these sentences; *"Elisabeth always said that the most misunderstood thing in her life is her stages. They are unique as we are. Not everyone goes through them in the same way. If you go back and read her initial papers on it, they're not the same for everyone."* (Oransky 2004: 1120).

The first stage of this model is denial. In this stage people who are in denial may act different than people who are denying their terminal illness, so denial is more symbolic than literal for them (Kübler-Ross and Kessler 2014). As a typical statement when we faced the death "No, not me, it cannot be true." represents our initial denial (Kübler-Ross 2009:39). Shock and numbness may be seen firstly following the death of a loved one. Then people begin questioning the death with "why" and "how". Each question help us to accept the reality of death (Kübler-Ross and Kessler 2014). It is asserted that denial cannot be continued any longer and it is replaced by the feeling of anger and the question "why" (Kübler-Ross 2009). This stage is called "anger". Bereaved people generally feel anger towards the deceased person, healthcare professionals or others and even God (Cimete and Kuguoglu 2006; McClatchey and Wimmer 2014; Webb 2014) Also, anger allows us to find other hidden emotions about our loss (Kübler-Ross and Kessler 2014). Anger gives its place to next stage "bargaining". In this stage bereaved individuals bargain with God and generally use that kind of statements; "I will never be angry at my wife again if you'll just let her

live." (Kübler-Ross and Kessler 2014: 18). According to the model, the next stage is depression. As it was indicated in a study by Maciejewski et al. (2007) after around six months following the death, while anger decreases depressive mood reaches the top level. Bereaved individuals state this stage as meaningless, not enjoyable at all or a "darkness" (Cimete and Kuguoglu 2006). However, depression stage has not been completely accepted as Major Depressive Disorder. Although, depression is one of the most comorbid situations in the frame of grief process (Burton et al. 2006; Keyes et al. 2014), there are studies, which support the depression model, that indicates differences major depression bereavement exclusion and bereavement related depression (Wakefield and Schmitz 2013). Final stage is "acceptance". Kübler-Ross and Kessler (2014) specify that acceptance should not be seen as being all right or okay after death experience. It means that bereaved individual accepts the reality of death. Many of the bereaved individuals express their feeling of acceptance with these sentences; "We still remember our child frequently but not as frequently as we had in the first months. Now we have been able to go back to our routines. Time is the cure." (Cimete and Kuguoglu 2006: 41).

1.3.5.4. Two-Track Model of Bereavement

The development of Two-Track Model of Bereavement (TTMoB) goes back to the beginnings of 1980s (Rubin 1981). The TTMoB undertakes as a goal to integrate the theoretical, clinical, and empirical findings on bereavement in direction of two group of literature: relationship with the deceased and changes in the life after a shattering major life events (Rubin 1999).

Track I represents emotional, interpersonal, somatic and psychiatric indicators of functioning within the frame of some features. A few of those ten features are anxiety, depressive affect, somatic symptoms, and familial or general interpersonal relationships. Each of the ten qualities is based on literature and the responses of bereaved individuals. Track II is also represented basically with ten factors such as emotional distance, positive or negative affect vis-a-vis deceased some of them, and related with interpersonal relationship to the deceased (Rubin 1999). These tracks can be

summarized as “General or Biopsychosocial Functioning (Track I) and Relationship to the Deceased (Track II)” (Rubin et al. 2009: 308).

Rubin et al. (2009) developed a questionnaire named “The Two-Track Model Of Bereavement Questionnaire” (TTBQ), to assess both biopsychosocial functioning and the on going relationship to the deceased. Questionnaire consists of 70-item self-report items and five factors three of which have a relational focus, and the other two are related with general biopsychosocial functioning. They describe five factors in the following way: First factor (Relational Active Grieving) may be seen as evaluating how one is grieving. Second factor (Close and Positive Relationship to the Deceased) assess the degree of emotional support, closeness, and mutual trust present two years prior to the death. Third factor (Conflictual Relation to the Deceased) shows a picture about the relationship and thoughts about conflicts with the deceased two years prior the death. Factor 4 (General Biopsychosocial Functioning) includes items related with problems of functioning. Last factor (Traumatic Perception of the Loss) is related with the difficult side of acceptance of the bereavement according to different perspectives. They indicate that high scores on the TTBQ reflect the problems generally seen in a traumatic bereavement (Rubin et al. 2009).

1.4. Positive Effects of Trauma and Stress

There are overwhelming evidences of traumatic events in the psychological trauma history that cause many negative physical and psychological effects on people. It is understandable when considering highly distressing nature of traumatic life events. Christopher (2004) asserts that growth is a normal outcome than pathology following a traumatic experience. However, growth should not be seen as a predictable outcome of traumatic event just like disorders because it can be seen together with continuing personal distress (Tedeschi and Calhoun 2004b).

One of the best conceptualisations is presented by (Janoff-Bulman 1992), about how traumatic events resulted with positive outcomes. She asserted that traumatic life events cause a change on our fundamental assumptions about our world and ourselves. In the aftermath of these disrupting life events, survivors reconstruct an assumptive

world with the help of their meaningful cognitive reappraisals and support of inner circle.

Scientists used various terms to describe this kind of positive changes such as; stress-related growth (Park, Cohen, and Murch 1996), perceived benefits (McMillen and Fisher 1998), and posttraumatic growth (Tedeschi and Calhoun 1995). In these directions, different assessment tools were developed to assess self-report responses of posttraumatic growth. Some of them are, The Stress-Related Growth Scale (Park et al. 1996), Perceived Benefit Scale (PBS; McMillen and Fisher 1998), and also the Post-Traumatic Growth Inventory (PTGI; Tedeschi and Calhoun 1996), which is the most widely used assessment tool in the field.

Today, there has been a growing body of literature, which focus on positive effects of stressful life events on people since the last three decades. Such as earthquake (Yu et al. 2010), cancer (Barakat, Alderfer, and Kazak 2006), cardiovascular diseases (Senol-Durak and Ayvasik 2010a; 2010b), diabetes (Senol-Durak 2014), bereavement (Engelkemeyer and Marwit 2008; Senol-Durak and Tedeschi 2015; Tedeschi and Calhoun 2008), HIV infection (Mo et al 2014), combats (Tedeschi 2011) are some of currently focused traumatic events in terms of growth.

1.4.1. Posttraumatic Growth

Positive effects of trauma were first conceptualized as “posttraumatic growth” (PTG) by Tedeschi and Calhoun (1996). PTG refers to a positive psychological change experienced as a consequence of struggling with a highly disrupting life event (Calhoun and Tedeschi 1999). Terminology of PTG, associated with some earliest time Hebrew, Greek, and Christian writings and ideas, and also as such in teachings of Hinduism, Buddhism, and Islam about the transformative power of suffering (Tedeschi and Calhoun 1995) and more recently has similarity with existential philosophy about growth opportunity in trauma and struggling (Tedeschi, Park, and Calhoun 1998) and with some approaches of scientists and clinicians in 20th century, such as G. Caplan, Irvin D. Yalom, Abraham Harold Maslow, Martin E. P. Seligman and Mihaly Csikszentmihalyi (Tedeschi and Calhoun 2004b).

According to the Tedeschi and Calhoun (2004b), the term "posttraumatic growth" is the best one to describe the experiences of individuals' development following a traumatic event, in contrast to other terms, such as stress-related growth, illusion, one of many ways to cope with trauma, thriving or flourishing. Tedeschi and Calhoun (1996) developed a scale to assess PTG, named *Posttraumatic Growth Inventory (PTGI).* Scale consists of five factors that define the basic domains of PTG: greater appreciation of life and changed sense of priorities; warmer, more intimate relationships with others; a greater sense of personal strength; recognition of new possibilities or paths for one's life; and spiritual development. Afterwards, they elaborated spirituality dimensions as spirituality-existentialism (Tedeschi et al 2016).

1.4.1.1. The Process of Posttraumatic Growth

Tedeschi and Calhoun (1996) model of PTG has some similarities, in terms of theoretical ideas, with the trauma model of Janoff-Bulman (1992) and the "assumptive world" of (C Murray Parkes 1971). Thus, they assumed that a person' s understanding of the world relies on major challenges resulting from major life crises (Tedeschi and Calhoun 2004b).

Janoff-Bulman (2004) asserts that cognitive processing and schema reconstruction has an important place in the model of PTG. Calhoun and Tedeschi 1998: 215) described this process by using an earthquake metaphor:

"A psychologically seismic event can severely shake, threaten, or reduce to rubble many of the schematic structures that have guided understanding, decision making, and meaningfulness. Psychological crisis can be defined in relation to the extent to which the fundamental components of the assumptive world are challenged, including assumptions about the benevolence, predictability, and controllability of the world; one's safety is challenged, and one's identity and future are challenged"

They extended their earthquake metaphor with drawing an analogy between physical and cognitive rebuilding. Just like physical structures are rebuilt more resistant to the future earthquakes, cognitive rebuilding also becomes more resistant (Tedeschi

and Calhoun 2004b). These results have been accepted as PTG. In this context, the model of PTG gives general information about PTG and thoughts of creators about the process (Calhoun and Tedeschi 1998). In the model of PTG, they highlight some individual characteristics, the ways of managing distressing emotions, and degree of self-disclosure about one's emotions was well as cognitive processing of the traumatic event and role of ruminative thoughts (Tedeschi and Calhoun 2004b).

1.4.1.2. Individual Characteristics and PTG

Although some personality characteristics (conscientiousness, agreeableness, and openness to experience; Karanci et al. 2012; Linley and Joseph 2004), coping strategies [e.g. problem-focused coping (Buyukasik-Colak, Gundogdu-Akturk, and Bozo 2012), religious coping (Prati and Pietrantoni 2009)] and seeking or perceived social support (Schroevers et al 2010) have been mentioned here basically, cognitive processing was explained in detail, as coherent to study framework.

1.4.1.3. Cognitive Processing and Rumination

According to Greenberg (1995), in the process of reconstruction the worldview of the survivors and adjusting to trauma, cognitive processing has a valuable role. Also, the term rumination as a part of cognitive rumination was described as "a process of frequently returning to thoughts of the trauma and related issues, characterized by a sense of intrusion of these thoughts during daily activities" (Calhoun and Tedeschi 1998: 227). Nolen-Hoeksema (2001) indicated that rumination and ruminative coping increases negative emotions and the probability a depressed mood will become a depressive disorder. Because of that, rumination might be accepted as an avoidant coping against to painful side of bereavement (Stroebe et al. 2007). However, Calhoun et al (2000), asserted that although there is powerful relationship between certain types of rumination and negative affect and depression, relationship between growth and cognitive processing is surprising. Thus, Tedeschi and Calhoun (2004b) distinguish rumination that related with PTG from rumination in depression. In this context, rumination can be used as a domain of cognitive processing and event related thinking,

which includes making sense, problem solving, reminiscence and anticipation rather than negative, self-punitive thinking (Calhoun et al. 2000). Especially, in the context of bereavement, it has been asserted that rumination (deliberate, reflective or constructive) has an important role in repairing and reconstructing for a working belief system following a significant loss experience (Calhoun et al. 2010). In a qualitative study with six bereaved mothers, rumination that includes negative themes about the death itself, has been described as not useful behaviors while mothers coping with their loss (Parker and Dunn 2011).

It is possible to find studies in the literature that support the relation between rumination and PTG, with bereaved individuals. Recently Taku and coworkers (2009) conducted a cross-cultural study (US and Japanese sample, N = 224). In this study, they examined the relationship between intrusive rumination versus deliberate rumination (soon after the event and recently), and found that both types of rumination were positively associated with PTG. Moreover, they also indicated different effects of ruminations over time. While intrusive ruminations soon after the event were positively related with PTG, recent deliberate rumination strongly predicted the level of PTG. The positive relationship between deliberate rumination and PTG was supported by other recent studies (Garcia et al. 2016; Zhang et al. 2013).

Moreover, Calhoun and colleagues (2000) supported their ideas about rumination with the finding of a study conducted with young adults (N = 54) who experienced a traumatic event. They found a relationship between event related rumination and the degree of reported PTG scores.

1.5. Aim of the Present Study

Posttraumatic growth has been largely examined with several events such as natural disasters (Eren-Kocak and Kilic 2014; Guo et al. 2015), sexual abuse (Hartley et al 2016; Lev-Wiesel, Amir, and Besser 2005), combat veterans (Marotta-Walters, Choi, and Shaine 2015), acute or chronic illnesses (e.g., rheumatoid arthritis) (Dirik and Karanci 2008); cancer (Bozo, Gundogdu, and Buyukasik-Colak 2009); diabetes (Senol-Durak 2014); heart disease (Senol-Durak and Ayvasik 2010a; 2010b). On the other hand, bereavement has been limitedly examined in the literature in respect to PTG literature although its relation to PTSD has been extensively evaluated (Chan and Rhodes 2013; Jin, Xu, and Liu 2014; Sattler, Boyd, and Kirsch 2014).

Extensive studies are associated with bereaved-related factors (e.g., coping styles, meaning making of the death or intensity of grief process) (Gillies, Neimeyer, and Milman 2014; McClatchey and Wimmer 2014) and loss-related factors (e.g., sudden/unexpected nature of death, violent or natural deaths) (Buckley et al. 2015; Kaltman and Bonanno 2003). Therefore this study aimed firstly to investigate both bereaved-related factors (e.g., gender, living conditions, having a loss experience in last year) and loss-related factors (e.g., gender of loss, cause of death, time since death, and suddenness of death) to understand better the process of grief.

Also, as mentioned in the literature review, there are several models explaining grief process. Those models are mostly theoretically discussed but less empirically tested. Therefore, this study aimed secondly to empirically test Kübler-Ross and Kessler's grief model (2005), which is the most comprehensive model explaining grief process. As known, this model has not been tested yet. The linearity and overlapping natures of each stage was aimed to test. Moreover, possible associations between stages of grief, core bereavement and posttraumatic growth were aimed to investigate. Also, fourthly, this study aimed to develop a model to find a link between stages of grief, grief intensity and posttraumatic growth by considering associations between variables, the stages of grief model (Kubler-Ross and Kessler 2005), and posttraumatic growth model (Tedeschi and Calhoun 1996).

1.6. Hypotheses of the Present Study

Hypotheses of the present study can be categorized as in four groups. The first groups of hypotheses are related to bereaved related and loss related variables and their association with the stages of grief, grief intensity and posttraumatic growth.

Hypothesis 1: Being women, having higher levels of education, living in a nuclear family, and receiving professional help will be associated with higher levels of Posttraumatic Growth, Core Bereavement, and Five Stages of Grief.

Hypothesis 2: Having a loss in last year will be associated with lower levels of Posttraumatic Growth, higher levels of Core Bereavement, and the Five Stages of Grief.

Hypothesis 3: Experiencing sudden/unexpected loss, gender of the deceased as women, loss of a first-degree relative will be associated with higher levels of Posttraumatic Growth, Core Bereavement, the Five Stages of Grief.

The second groups of hypotheses are related to whether stages of grief are linearly associated with each other after controlling socio-demographic variables.

Hypothesis 4: After controlling the effects of socio-demographic variables, higher levels of Quality of Relationship with the Deceased (relationship quality, interaction frequency, and supportiveness of the relationship) scores will be associated with higher levels of Denial.

Hypothesis 5: After controlling socio-demographic variables, higher levels of Quality of Relationship with the Deceased (relationship quality, interaction frequency, and supportiveness of the relationship), and higher denial scores will be associated with higher levels of Anger.

Hypothesis 6: After controlling socio-demographic variables, higher levels of Quality of Relationship with the Deceased (relationship quality, interaction frequency, and supportiveness of the relationship) and higher Denial and Anger scores will be associated with higher levels of Bargaining.

Hypothesis 7: After controlling socio-demographic variables, higher levels of Quality of Relationship with the Deceased (relationship quality, interaction frequency, and supportiveness of the relationship), and higher Denial, Anger and Bargaining scores will be associated with higher levels of Depression.

Hypothesis 8: After controlling socio-demographic variables, higher levels of Quality of Relationship with the Deceased (relationship quality, interaction frequency, and supportiveness of the relationship), and higher Denial, Anger, Bargaining, and Depression scores will be associated with lower levels of Acceptance.

The third groups of hypotheses are related to associations between stages of grief and socio-demographic variables to grief intensity and posttraumatic growth.

Hypothesis 9: After controlling socio-demographical variables (age, gender, and education) higher levels of Quality of Relationship with the Deceased (relationship quality, interaction frequency, and supportiveness of the relationship) at the second step, Higher levels of Denial, Anger, Bargaining, and Depression scores at the third step, lower Acceptance scores at the fourth step will be associated with higher levels of Core Bereavement.

Hypothesis 10: After controlling socio-demographical variables (age, gender, and education) higher levels of Quality of Relationship with the Deceased (relationship quality, interaction frequency, and supportiveness of the relationship) at the second step, lower levels of Denial, Anger, Bargaining, and Depression scores at the third step, higher Acceptance scores at the fourth step, higher Core Bereavement scores at the fifth step will be associated with higher levels of Posttraumatic Growth.

The fourth group of hypotheses is developing a model by testing the non-linearity of stages of grief model (Kubler-Ross and Kessler) and giving importance to grief intensity as a way of cognitive processing the event to encourage Posttraumatic growth (Tedeschi, Calhoun).

It is hypothesized that Denial, Anger, Bargaining, Depression, Acceptance, and Core Bereavement will combine to influence PTG. Particularly; the relationship

between the stages of grief and PTG will be mediated through the effect of Core Bereavement.

CHAPTER II

2. METHOD

This chapter will be giving information about the population and sample, participants, measurements that were used, and procedure of the present study.

2.1. Population and Sample

The study population is bereaved adult individuals experiencing different type of loses living in Turkey. The current study sample was conducted with 501 bereaved adult individuals who live in different cities of Turkey such as Bolu, Ankara, İstanbul, İzmir, Samsun, and Trabzon. Individuals had a significant loss experience (father, mother, sibling, child, loved one and relatives etc.) with the mean time since loss 10.2 years (SD = 10.01).

2.1.1. Participants

The sample of the present study was consists of 501 bereaved individuals. While 50.5% of them were women (N = 253), and 49.5% were men (N = 248). The age ranged between 19 and 78 and the mean age of participants were 42.44 (SD = 10.43)

When considering their education levels, 37.1% of the participants were primary-secondary school graduates (N = 186), 27% of them were high school graduates (N = 140), 30.7% of them were university graduates (N = 154), and 4.2% of them were master/PhD graduates (N = 21).

All of the participants were married 100% (N = 501). While 92.4% of them (N = 463) reported that they were living in a nuclear family, 7.6% of them (N = 38)

reported that they were living with a large family. Table 2.1 shows the demographical variables of the participants in detail. Additionally, while 15.4% of the participants have no child (N = 77), 15.8% of them have only one child (N = 79), 40.9 of the participants have two children (N = 205) 20.6% of them have three children (N = 103), and 7.4% of the participants have four or more children (N = 37).

With respect to the participants' job status most of them were housewife 29.3% (N = 147), 12.4% were worker (N = 62), 11.2% retired (N = 56), 8.2% self-employed (N = 41), 7.6% officer (N = 38), 6.6% teacher/lecturer (N = 33), 5.8% architect/engineer (N = 29), tradesman 3.6% (N = 18), 3% technician (N = 15), 2% director (N = 10), 1.8% healthcare personnel (N = 9), 1% unemployed (N = 5), .8% farmer (N = 4), .6% student (N = 3), and .6% of the participants were chef (N = 3) (See Table 2.1).

2.2. Instruments

In the current study, Demographic Information Form that include detailed questions about participants (age, gender, education, income, marital status, number of child, and living conditions), and their loss experiences (number of loss, loss in last year, closeness to the deceased, gender of loss, age of loss, time since loss, cause of death, and sudden/unexpected nature of loss) were asked to answer. Moreover three statistically reliable and valid scales were used. These scales were Posttraumatic Growth Inventory-X Version (PTGI-X), Core Bereavement Items (CBI), and The Five Stages of Grief Scale (FSGS).

2.2.1. Demographical Information Form

Demographic Information Form was designed to obtain information about individuals' socio-economic status and their loss experiences. Thus, the form consists of two parts. In the first part of the form there were questions about participant's age, gender, education, income,

Table 2.1: Demographic characteristics of the participants

Variables	M	SD	N	%
Age	42.44	10.43	501	100
Gender				
Woman			253	50.5
Man			248	49.5
Education				
Primary-Secondary School			186	37.1
High School			140	27.9
University			154	30.7
Master/PhD			21	4.2
Income	3580	2542	501	100
Marital Status				
Married			501	100
Number of Child				
0			77	15.4
1			79	15.8
2			205	40.9
3			103	20.6
4 and more			37	7.4
Living With				
A nuclear family			463	92.4
A large family			38	7.6
Professional				
Housewife			147	29.3
Worker			62	12.4
Retired			56	11.2
Self-employment			41	8.2
Officer			38	7.6
Teacher/Lecturer			33	6.6
Architect/Engineer			29	5.8
Tradesman			18	3.6
Technician			15	3
Director			10	2
Healthcare Personnel			9	1.8
Security Personnel			6	1.2
Unemployed			5	1
Farmer			4	.8
Student			3	.6
Chef			3	.6

marital status, number of child, and living conditions etc. In the second part of the form there were questions about loss experiences; number of loss, loss in last year, closeness to the deceased, loss gender, loss age, time since loss, cause of death, and sudden/unexpected nature of loss etc. In the first part of the form participants were asked whether they had an experience of any loss history up till now and recent year, and which is the most effective for them among this loss experiences. In the second part of the form, there were detailed questions about the characteristics of the loss experiences. Whether the loss was sudden/unexpected or not, what was the reasons of loss, whether they received any professional help or not, how was the quality of relationship with deceased prior to death (1 to 6), how was the interaction frequency between them (1 to 6) and perceived supportiveness of the relationship with deceased prior to death (1 to 6). This form is available in Appendix A.

2.2.2. Posttraumatic Growth Inventory-X Version (PTGI-X)

Posttraumatic Growth Inventory was developed by Tedeschi and Calhoun (1996) to assess perceived positive changes after traumatic life events with 21 items. Original PTGI has acceptable construct validity with high internal consistency coefficient (.90) by using university students. Moreover, the scale has satisfactory test-retest reliability (.71) over 2-months period of time. Currently, the scale was adapted as PTGI-X by including 26 items since spirituality dimension of the previous scale includes only two items. In recent form, this dimension is extended to six items and named spiritual and existential dimension. In respect to the scale's adaptation, US, Turkish and Japanese samples are used (Tedeschi et al. 2016). In PTGI-X, in addition to its reliability, confirmatory factor analysis was adequate and factor names are typically same; appreciation in life, relating to others, personal strength, new possibilities, spiritual changes (See Appendix C).

2.2.3. Core Bereavement Items (CBI)

Core Bereavement Items (CBI) which was developed by Burnett et al (1997) aims to measure of core bereavement phenomenon with the level of grief experience. CBI is a 17 items self-report questionnaire and participants rates the grief experience with a 4-point Likert-type scale ranging from never to a lot of time (0 to 3). Factor analysis revealed that in the original form of CBI, there are three sub-dimensions; images and thoughts (7 items), acute separation (5 items) and grief (5 items). Burnett and colleagues (1997) reported that CBI has acceptable construct validity and high internal consistency coefficient (α = .91), also significant group (spouses, adult children and parents) and time effects.

The adaptation of CBI in the Turkish culture was conducted by Selvi and colleagues (2011). The Turkish form of CBI has a high internal consistency coefficient (α = .94). Cronbach' s Alpha coefficient of each sub-dimension is as high as total items; images and thought .83, acute separation .89 and grief .87. In the analysis of t-test for test-retest reliability of CBI was found .78. This result shows that total categories and items scores of CBI has not a significant change in time. The CBI is available in Appendix B.

2.2.4. The Five Stages of Grief Scale (FSGS)

The Five Stages of Grief Scale (FSGS) was developed by Senol-Durak, Durak, and Baş (2016) on the basis of the stage model of Kübler-Ross (1969). The FSGS aims to assess each stages of grief, namely denial, anger, bargaining, depression, and acceptance. Scale consists of 17 items, which represent each stages of grief. Participant rates their grief experiences with a 6-point Likert-type scale ranging from absolutely inappropriate to absolutely appropriate (1-6). Factor analysis indicated that the FSGS has two sub-dimensions: pre-acceptance stages (12 items) and acceptance stage (5 items). It has been reported that the FSGS has acceptable construct validity and high internal consistency coefficient (α = .85) Senol-Durak et al. (2016). (See Appendix D)

2.3. Procedure

The current study obtained the ethical approval of to the Human Research Ethics Committee of Abant Izzet Baysal University. After getting the approval, data was collected by self-report measures. After explaining the aim and the scope of the study, participants were voluntarily participated into previous study. And also there was contact information for any unexpected situation. For this purpose 535 individuals who experienced a significant loss were reached. Participants were attended to the study from different cities of Turkey such as Bolu, Ankara, İstanbul, İzmir, Samsun, and Trabzon.

CHAPTER III

3. RESULTS

Results were arranged in three different sections: data cleaning, descriptive statistics of the variables (e.g., means and standard deviations), and correlations between variables. Afterwards, the results of several t-test, One-Way ANOVAs, and hierarchical regression analyses were included. Regression analyses were conducted to examine a model explaining the associations among posttraumatic growth, intensity of bereavement, five stages of grief and quality of relationship with the deceased. Structural equation modeling was performed to explore five stages of grief, core bereavement and posttraumatic growth relationships.

3.1. Data Cleaning

Firstly all the data were entered in the SPSS (IBM Statistical Package for the Social Sciences 21 2012) program to check the accuracy of the data. Then the data entry was corrected for the incorrect values, and missing value analyses were performed by Multiple Imputation technique. Thirty-four cases were deleted due to the have missing values higher than 5%. Afterwards five cases were also deleted because of their highly low z scores. At the end data was ready with 501 cases for the further statistical analysis.

3.2. Descriptive Statistics of the Variables

Means, standard deviations, and possible ranges of variables were demonstrated in Table 3.1 and also demographic characteristics of the loss related variables were included in Table 3.2.

Table 3.1: Descriptive characteristic of the variables

Measures	**M**	**SD**	**Min.**	**Max.**
Age	42.45	10.43	19.34	78.36
Posttraumatic Growth Inventory	2.66	1	0	5
Core Bereavement Items	1.17	.58	1	4
Five Stages of Grief Scale				
Denial	2.22	1.43	1	6
Anger	1.86	1.24	1	6
Bargaining	2.98	1.58	1	6
Depression	2.42	1.19	1	6
Acceptance	4.64	1.28	1	6
Quality of Relationship with Deceased				
Previous Quality of Relationship	5.3	1	1	6
Previous Interaction Frequency with Deceased	4.95	1.22	1	6
Previous Perceived Supportiveness of Relationship	4.91	1.29	1	6

Table 3.2: Demographic characteristics of the loss related variables

Variables	M	SD	N	%
Gender of Loss				
Woman			212	42.3
Man			289	57.7
Age of Loss	57.79	21.37	501	100
Time Since Loss	10.2	10.07	500	99.8
Closeness to the Deceased (I)				
First-degree			284	56.7
Second-degree			148	29.5
Other (friend, workmate, neighbor etc.)			69	13.8
Closeness to the Deceased (II)				
Mother			81	16.2
Father			133	26.5
Sibling			47	9.4
Child			23	4.6
Other relative			148	29.5
Close friend			38	7.6
Other			31	6.2
Cause of Death				
Sudden illness (e.g. cancer, cerebral hemorrhage)			196	39.4
Chronic disease (e.g. diabetes, Alzheimer/dementia, tension)			137	27.5
Health crises (e.g. hearth attack, intoxication)			93	18.7
Accidents (e.g. traffic. work/home etc.)			50	10
Murdered by someone (e.g. homicide, terror attack, robbery)			10	2
Other (unspecified)			8	1.6
Suicide			4	0.8
Suddenness of Loss				
Sudden			343	68.5
Not sudden			158	31.5

Table 3.2: (Continued)

Quality of Relationship with Deceased				
Previous Quality of Relationship	5.3	.99	499	99.6
Previous Interaction Frequency with Deceased	4.95	1.22	499	99.6
Previous Perceived Supportiveness of Relationship	4.91	1.3	499	99.6
Received Professional Help				
No			477	95.2
Psychiatric help/ Medical Treatment			18	3.6
Psychotherapy + Medical Treatment			6	1.2
Recent Loss in Last Year				
No			297	59.28
Yes			204	40.72

3.3. Correlations among the Variables

Bivariate correlations were conducted in order to investigate relationships between PTG and its predictor variables, core bereavement, five stages of grief, factors of the quality of relationship with deceased, and demographical characteristics of bereaved were showed in Table 3.3. Results were accepted in range.

3.3.1. Quality of Relationship with Deceased

According to the correlation analysis, relationship quality with deceased was significantly correlated with both interaction frequency with deceased ($r = .58$, $p < .001$), and supportiveness of the relationship ($r = .63$, $p < .001$). Also, interaction frequency with deceased was significantly correlated with supportiveness of the relationship with deceased ($r = .69$, $p < .001$). Additionally, there were significant correlations (positive and negative respectively) between supportiveness of the relationship with deceased and age of bereaved individuals ($r = .09$, $p < .05$), and

Table 3.3: Correlations among the variables

		1	2	3	4	5	6	7	8	9	10	11	12	13
1	**Age**		.17***	-.25***	.06	.09	.09*	.05	.02	.03	.02	.01	.03	.06
2	**Gender**			.10*	.05	-.01	-.02	-.12**	-.16***	-.04	-.02	-.02	-.08	-.16***
3	**Education**				.08	-.12**	-.09	-.23***	-.18***	-.07	-.15***	-.11*	-.16***	-.23***
4	**Relation**					.58***	.63***	.07	.19***	.10*	.02	.09*	.16***	.02
5	**Interaction**						.69***	.15***	.23***	.09*	.08	.09*	.19***	.06
6	**Supportiveness**							.15***	.26***	.11*	.05	.12**	.21***	.08
7	**PTGI**								.28***	.18***	.17***	.19***	.28***	.26***
8	**CBI**									.44***	.35***	.53***	.60***	.06
9	**Denial**										.46***	.56***	.60***	-.08
10	**Anger**											.49***	.56***	.03
11	**Bargaining**												.65***	.13**
12	**Depression**													.05
13	**Acceptance**													

* $p \leq .05$ ** $p \leq .01$ *** $p \leq .001$

Note. Gender was coded as 1 for women, and 2 for men
PTGI: Posttraumatic Growth Inventory
CBI: Core Bereavement Items

between interaction frequency and education levels of bereaved individuals ($r = -.12$, $p < .01$).

3.3.2. Posttraumatic Growth

According to the correlation analysis, posttraumatic growth was significantly and positively correlated with core bereavement ($r = .28$, $p < .001$), and all of the five stages of grief; namely denial ($r = .18$, $p < .001$), anger ($r = .17$, $p < .001$), bargaining ($r = .19$, $p < .001$), depression ($r = .28$, $p < .001$), and acceptance ($r = .26$, $p < .001$). Posttraumatic growth was also significantly and positively correlated with some factors of the quality of relationship with deceased, namely interaction ($r = .15$, $p < .001$), and supportiveness of the relationship ($r = .15$, $p < .001$) with deceased. When considering relationship between posttraumatic growth and demographical characteristics of bereaved individuals, there were significant and negative correlations between posttraumatic growth and gender ($r = -.12$, $p < .01$) and education ($r = -.23$, $p < .001$).

3.3.3. Core Bereavement

According to the correlation analysis, core bereavement (intensity of bereavement), was significantly and positively correlated with all the stages of grief except acceptance dimension ($r = .06$, $p = .21$); namely denial ($r = .44$, $p < .001$), anger ($r = .35$, $p < .001$), bargaining ($r = .53$, $p < .001$) and depression ($r = .60$, $p < .001$). Core bereavement also showed significant and positive correlation with all factors of the quality of relationship with deceased; namely relationship($r = .19$, $p < .001$), interaction ($r = .23$, $p < .001$) and supportiveness ($r = .26$, $p < .001$). Additionally, there were significant and negative correlations between core bereavement, and gender ($r = -.16$, $p < .001$) and education ($r = -.18$, $p < .001$).

3.3.4. The Five Stages of Grief

Denial is the first stage of grief process. There was a significant and positive correlation between denial and anger ($r = .46$, $p < .001$), bargaining ($r = .56$, $p < .001$) and depression ($r = .60$, $p < .001$). It was not significantly associated with acceptance ($r = -.08$, $p = .07$) Moreover, denial was significantly and positively correlated with the factors of the quality of relationship; namely relationship quality ($r = .10$, $p < .05$), interaction level ($r = .09$, $p < .05$), and supportiveness of the relationship with deceased ($r = .11$, $p < .05$).

In addition to denial, anger was significantly positively correlated with only bargaining ($r = .49$, $p < .001$) and depression ($r = .56$, $p < .001$). It was not significantly correlated with ($r = .03$, $p = .46$), relationship ($r = .02$, $p = .70$), interaction ($r = .08$, $p = .06$), supportiveness ($r = .05$, $p = .30$). Bargaining was also found to be significantly and positively correlated with depression ($r = .65$, $p < .001$) and acceptance ($r = .13$, $p < .001$). Moreover, it had a significant correlation with all factors of the quality of relationship with deceased; relationship quality ($r = .09$, $p < .05$), interaction level ($r = .09$, $p < .05$), and supportiveness of the relationship with the deceased ($r = .12$, $p < .01$). Lastly, depression was found significantly correlated with all factors of the factors of quality of relationship with the deceased, namely relationship quality ($r = .16$, $p < .001$), interaction level ($r = .19$, $p < 0$), and supportiveness of the relationship with deceased ($r = .21$, $p < .001$). It was not significantly associated with acceptance ($r = .05$, $p = .25$). Acceptance dimension was not significantly associated with quality of relationship factors; relationship ($r = .02$, $p = .64$), interaction ($r = .06$, $p = .22$) and supportiveness ($r = .08$, $p = .06$).

When considering demographical characteristics of bereaved individuals, only acceptance stage was significantly and negatively correlated with gender. Additionally, there were significant and negative correlations between anger ($r = -.15$, $p < .001$), bargaining ($r = -.11$, $p < .05$), depression ($r = -.16$, $p < .001$), acceptance ($r = -.23$, $p < .001$) stages and education levels of bereaved individuals.

3.4. Group Differences

In this part of the study, the effects of both bereaved-related variables (gender, living condition, education level, receiving professional help, and having a loss in last year) and loss-related variables (gender of deceased, suddenness of loss, closeness to the deceased, and cause of death) on posttraumatic growth, intensity of bereavement and the stages of grief were analyzed by using several Independent Samples t-Tests and One-Way ANOVAs. The total scores of Posttraumatic Growth Inventory, Core Bereavement Items and each stages of grief (denial, anger, bargaining, and acceptance) were used as dependent variables. Analyses were performed for each dependent variable. Analyses were explained below in accordance with bereaved-related variables and loss-related variables.

3.4.1. Bereaved-Related Variables

In order to determine the role of bereaved related variables namely, gender of bereaved, living condition, education level, receiving professional help, and having a loss in last year on the scores of posttraumatic growth, core bereavement and five stages of grief several independent samples t-tests (gender of bereaved, living condition, and having a loss in the last year) and one-way ANOVAs (education level, receiving professional help) were conducted. Results of the analyses are indicated detailed in Table 3.4 and Table 3.5 (for t-tests) and Table 3.6 and Table 3.7 (for ANOVAs).

3.4.1.1. The Role of Gender Differences

According to the independent samples t-test analysis, there was a significant difference between women and men in terms of posttraumatic growth scores [$t\ (499) = 2.72$, $p < .01$]. Women ($M = 2.78$, $SD = .91$) had higher level of posttraumatic growth than men ($M = 2.54$, $SD = 1.08$). Figure 3.1 illustrates the result.

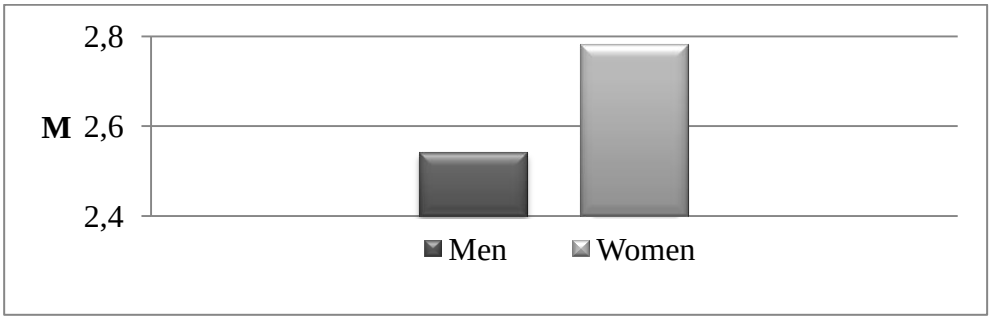

Figure 3.1: Posttraumatic growth and gender

When the intensity of bereavement was examined there was a significant difference between among gender groups [t (499) = 3.66, p < .001]. Independent samples t-test analysis indicated that woman participants (M = 1.27, SD = .59) had higher scores of bereavement intensity than men (M = 1.08, SD = .56). Figure 3.2 illustrates the results.

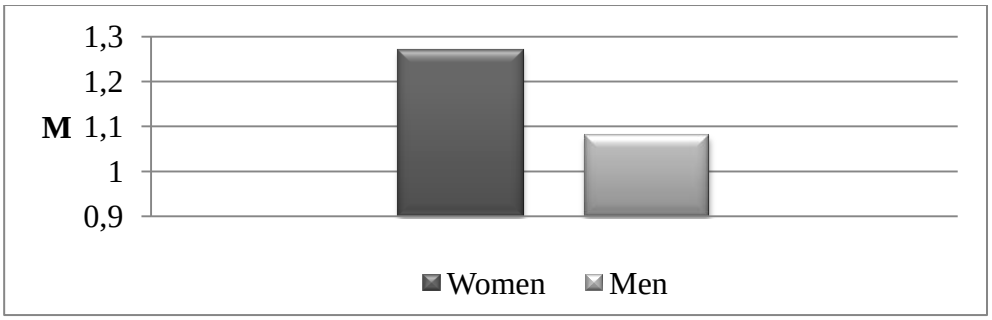

Figure 3.2: Core bereavement and gender

According to the analysis of independent samples t-test, there was a significant difference among gender groups in terms of acceptance stage [t (499) = 3.6, p < .001]. Results indicated that women experienced higher level of acceptance (M = 4.84, SD = 1.20) than the men (M = 4.43, SD = 1.32). Figure 3.3 shows the results. Moreover, denial [t (499) = .88, p = .37], anger [t (499) = .841, p = .68], bargaining [t (499) = .47, p = .64], depression [t (499) = 1.76, p = .08] were not significantly changed among each gender group.

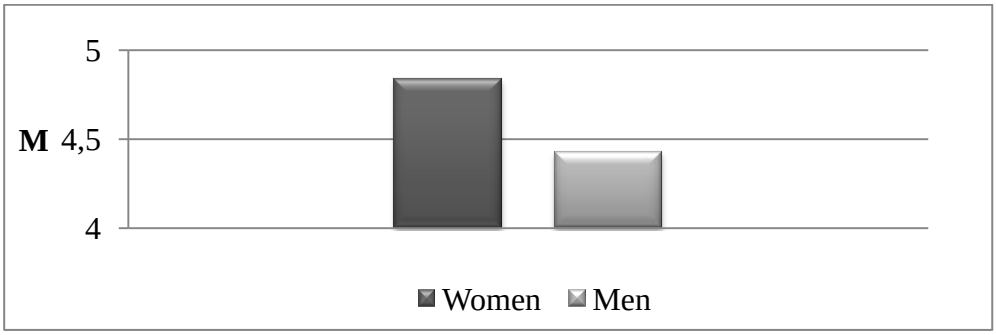

Figure 3.3: The stage of acceptance and gender

3.4.1.2. The Role of Living Conditions

When considered the living conditions independent samples t-test analysis indicated that there was no significant difference on the scores of posttraumatic growth in terms of participants who live with a nuclear family and participants who live with a large family [t (499) = -1.28, p = .20]. Moreover similar results were found for intensity of bereavement. Living conditions did not show a significant difference on the scores of core bereavement [t (499) = -.94, p = .35].

Analysis also showed that on the basis of living conditions (living with a nuclear or large family) there was a significant difference on the scores of anger stages of grief [t (499) = -3.00, p < .01]. Results indicated that participants who live with a large family (M = 2.44, SD = 1.63) experienced increased level of anger than the participants who live with a nuclear family (M = 1.82, SD = 1.19). Figure 3.4 indicates the results.

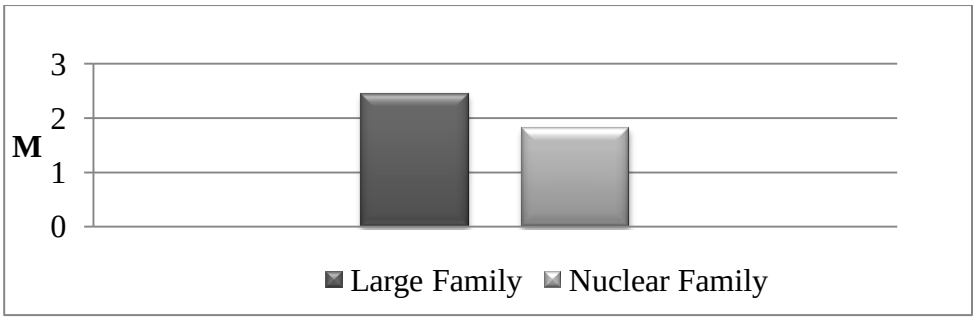

Figure 3.4: The stage of anger and living conditions

In addition to anger, there was a significant difference between the groups of living condition (living with a nuclear or a large family) in terms of the score of depression stage [t (499) = -2.23, p < .05]. It was found that participants who live with a large family (M = 2.84, SD = 1.44) had higher level of depression stage than the participants who live with a nuclear family (M = 2.39, SD = 1.16). Figure 3.5 represents the group differences.

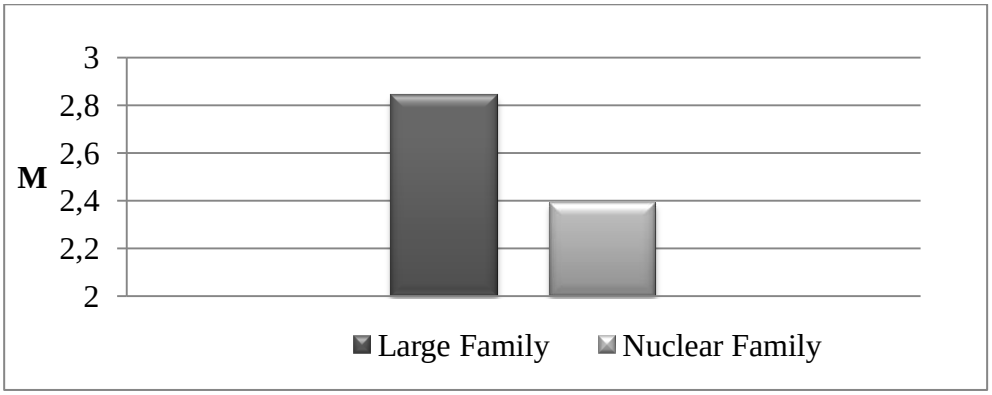

Figure 3.5: The stage of depression and living conditions

On opposed to significant findings defined above, denial [t (499) = -1.12, p = .32], bargaining [t (499) = -1.56, p = .16], acceptance [t (499) = -.52, p = .60] scores were not change across different living conditions.

3.4.1.3. The Role of Education Level

When conducted One-Way ANOVA to examine the role of education levels on the scores of posttraumatic growth, results indicated that it was significant [F (3, 497) = 11.71, p < .001]. Post-hoc analysis using Bonferroni test indicated that the participants who were master/PhD graduates (M = 1.97, SD = 1.19) reported lower levels of posttraumatic growth than the participants who were primary-secondary school graduates (M = 2.84, SD = .85), and high school graduates (M = 2.83, SD = .89). Additionally, there were no significant differences between the participants who were

university graduates (M = 2.37, SD = 1.14) and master/PhD graduates. Also, there were no significant difference between the participants who were primary school graduate and high school graduate. (See Figure 3.6)

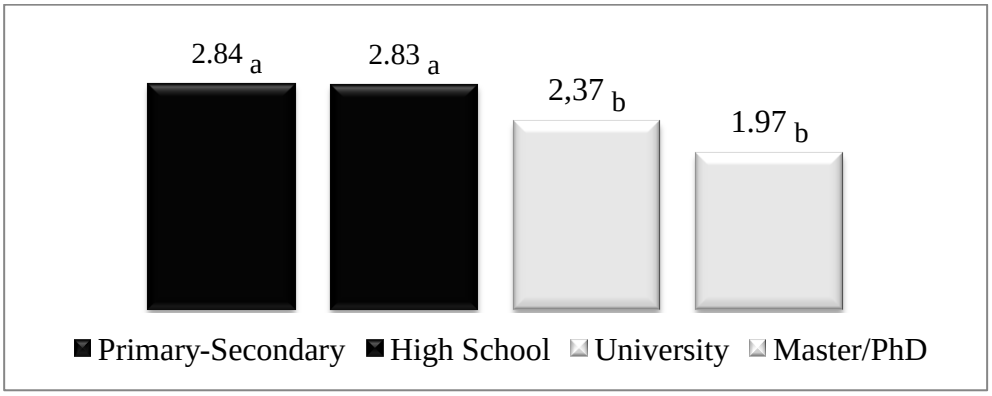

Figure 3.6: Education level and posttraumatic growth

In order to examine the role of education level on the scores of core bereavement, one-way ANOVA were used and it was found to be significant [F (3, 497) = 6.24, p < .001]. The results of Bonferoni post-hoc showed that participants who were primary-secondary school graduates (M = 1.30, SD = .63) had higher levels of bereavement intensity than the participants who were university graduates (M = 1.09, SD = .58) and master/PhD graduates (M = .86, SD = .48). Results also indicated that there were no significant differences between the participants who were primary-secondary school graduates and high school graduates (M = 1.14, SD = .51); and the participants who were high school graduates, university graduates and master/PhD graduates. Results were presented in Figure 3.7.

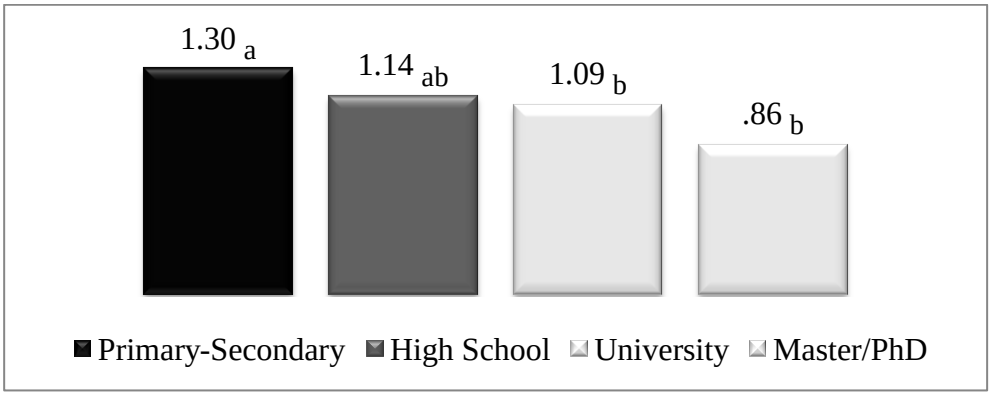

Figure 3.7: Education level and core bereavement

In order to examine the effect of education level on the five stages of grief, one-way ANOVA were conducted. Results indicated that while the role of education levels was not significant for denial stage [F (3, 497) = 1.10, p = .35], it was significant for anger stage [F (3, 497) = 3.90, p < .01]. According to the Bonferoni post-hoc results, participants who were primary-secondary school (M = 2.07, SD = 1.35) graduates had higher levels of anger than the participants who graduated from university (M = 1.68, SD = 1.11). Additionally there were no significant differences between the participants who were primary-secondary school, high school (M = 1.87, SD = 1.25) graduates, and master/PhD graduates (M = 1.38, SD = .60); and between participants who were high school graduates, university graduates and master/PhD graduates. (See the Figure 3.8)

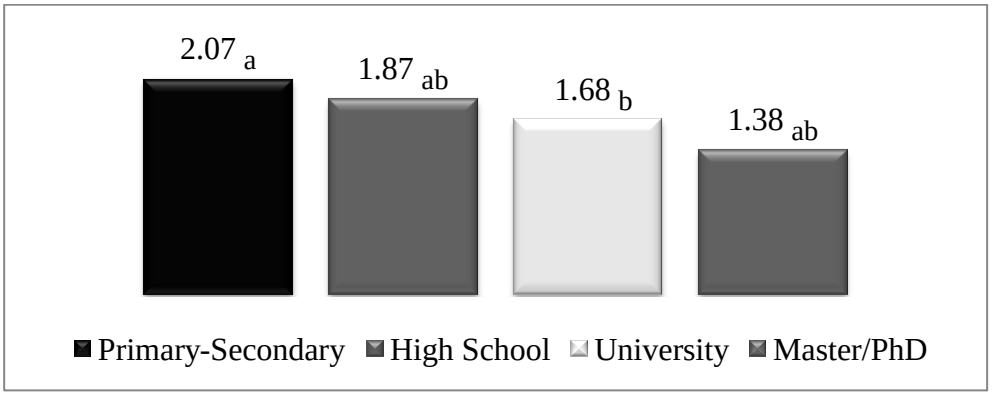

Figure 3.8: Education level and anger stage

The role of education level was also found to be significant for bargaining stage [F (3, 497) = 4.55, p < .01]. Post-hoc results of Bonferoni indicated that the participants who graduated from primary-secondary school (M = 3.30, SD = 1.71) had higher scores of bargaining than the participants who graduated from high school (M = 2.67, SD = 1.47). Moreover there were no significant differences between the participants both who were primary-secondary school graduates and high school graduates, and participants who were university graduates (M = 2.91, SD = 1.49), master/PhD graduates (M = 2.83, SD = 1.47) (See Figure 3.9).

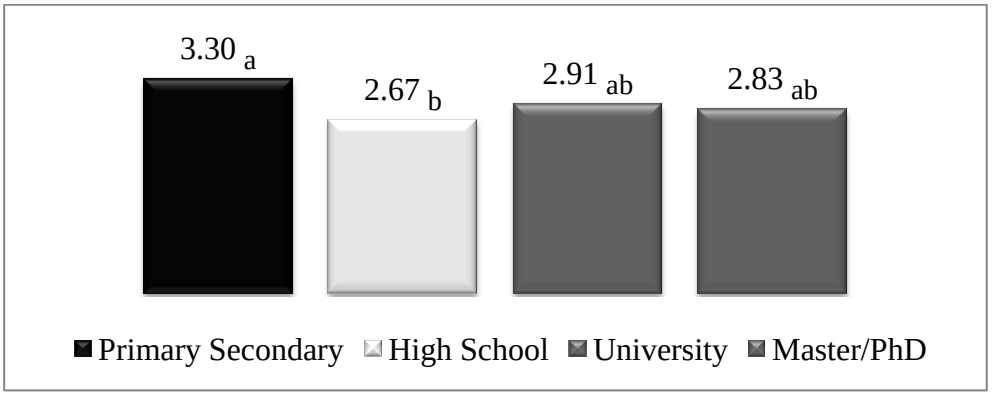

Figure 3.9: Education level and bargaining stage

The role of education level was also found to be significant for depression stage [F (3, 497) = 5.06, p < .01]. Bonferoni post-hoc results showed that participants who were primary-secondary school graduates (M = 2.65, SD = 1.29) had higher scores of depression stage than who were university (M = 2.30, SD = 1.15) and master/PhD (M = 1.81, SD = .71) graduates. Additionally there were no significant differences between the participants who were high school graduates (M = 2.35, SD = 1.10) and both who were primary-secondary school graduates and university and master/PhD graduates. (See Figure 3.10)

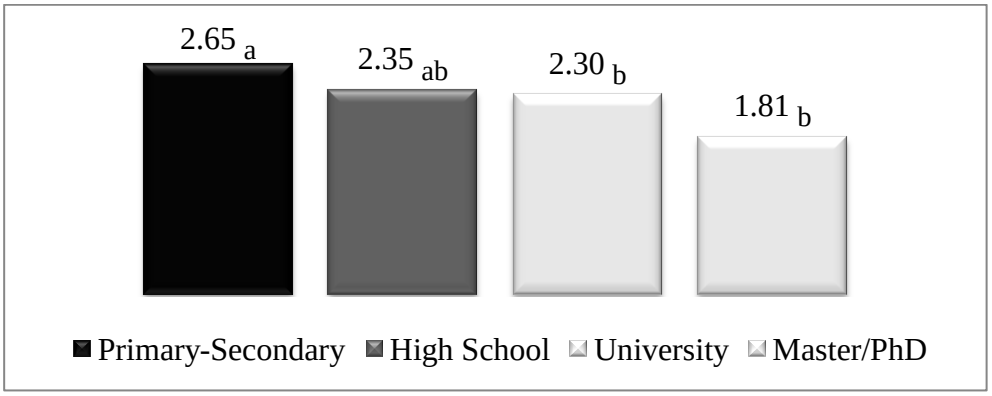

Figure 3.10: Education level and depression stage

One-way ANOVA results indicated that education level had a significant effect on acceptance stage [F (3, 497) = 10.56, p < .001]. According to the results of Bonferoni post-hoc, the participants who were primary-secondary school graduates (M = 4.99, SD = 1.11), high school graduates (M = 4.64, SD = 1.15), and master/PhD graduates (M = 4.48, SD = 1.80) had higher levels of acceptance than the participants who were university graduates (M = 4.24, SD = 1.38) and also there were no significant differences between them. Moreover results indicated that there were no significant differences between the participants who were university graduates and master/PhD graduates (See Figure 3.11).

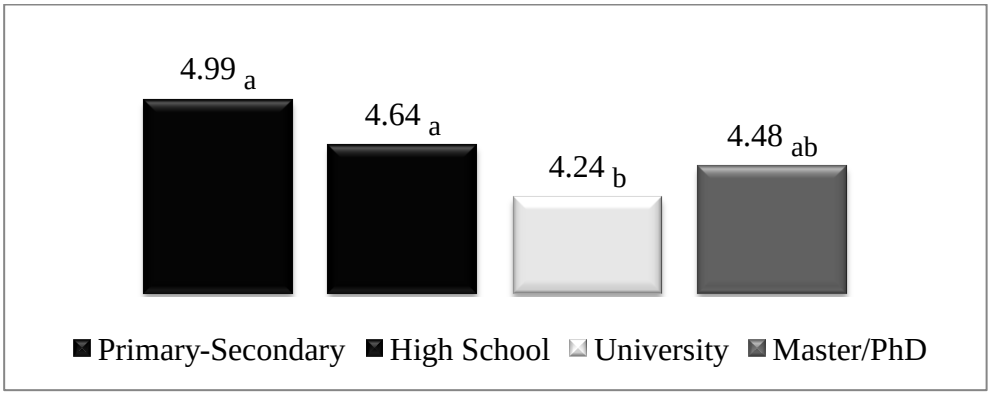

Figure 3.11: Education level and acceptance stage

3.4.1.4. Receiving Professional Help

According to the analysis of one-way ANOVAs, there were no significant differences on the scores of posttraumatic growth [F (2, 498) = .57, p = .56], core bereavement [F (2, 498) = .35, p = .70], and all stages of grief namely, denial [F (2, 498) = 1.14, p = .32], anger [F (2, 498) = 1.94, p = .15], bargaining [F (2, 498) = .42, p = .66], depression [F (2, 498) = 1.13, p = .33], and acceptance [F (2, 498) = .34, p = .71] among the participants groups of receiving professional help.

3.4.1.5. Having Loss in Last Year

Independent samples t-test was performed in order to examine the role of differences having a loss in last year on the scores of dependent variables. Finding indicated that there were no significant differences on the scores of posttraumatic growth [t (499) = .95, p = .35], core bereavement [t (499) = -1.58, p = .12], and all stages of grief process, namely denial [t (499) = -.68, p = .50], anger [t (499) = -.52, p = .61], bargaining [t (499) = -.23, p = .82], depression [t (499) = .03, p = .98], and acceptance [t (499) = .56, p = .57] on the basis of differences having a loss in last year.

3.4.2. Loss-Related Variables

In order to examine whether the scores of posttraumatic growth, core bereavement and five stages of grief on the basis of loss-related factors (gender of deceased, suddenness of loss, closeness to the deceased, and cause of death), several Independent Samples t-Tests (gender of deceased, suddenness of loss) and One-Way ANOVAs (closeness to the deceased, and cause of death) were conducted. Results of the analyses were indicated in Table 3.4 and Table 3.5 (for t-tests), and Table 3.6 and Table 3.7 (for ANOVAs).

3.4.2.1. The Role of Gender Differences

When considered the gender of the deceased, independent samples t-test analysis indicated that there were no significant differences on the scores of posttraumatic growth [t (499) = 1.84, p = .07], core bereavement [t (499) = .45, p = .07], and all stages of grief process, namely denial [t (499) = .11, p = .92], anger [t (499) = .99, p = .33], bargaining [t (499) = .91, p = .37], depression [t (499) = -.87, p = .39], and acceptance [t (499) = .80, p = .42].

3.4.2.2. The Role of Sudden/Unexpected Nature of Death

Finding of the independent sample t-test, there were no significant differences on the scores of posttraumatic growth [t (499) = 1.70, p = .09], core bereavement [t (499) = 1.54, p = .13], and all stages of grief process, namely denial [t (499) = .88, p = .38], anger [t (499) = .93, p = .35], bargaining [t (499) = 1.12, p = .26], depression [t (499) = 1.51, p = .13], and acceptance [t (499) = -.34, p = .73] among participants who reported their loss experiences were sudden/unexpected or not.

3.4.2.3. The Role of Closeness to the Deceased

In the present study, closeness to the deceased of the participants was arranged into two categories (closeness to the deceased-I and closeness to the deceased-II) to clearly investigate the associations between dependent variables and closeness to the deceased factors. Firstly, their responses were categorized into three; first-degree relatives, second-degree relatives and others. Secondly, first-degree relatives were taken in detail since closeness to the deceased was statistically different on the basis of some of dependent variables. Therefore, second category was totally arranged into seven sub-categories (mother, father, sibling, child, second-degree relative, close friend, and other). Results were indicated in Table 3.6 and Table 3.7.

In order to examine the role of closeness to the deceased-I of the participants were tested with one-way ANOVA, and results indicated that type of closeness to the deceased had a significant effect [F (2, 498) = 3.60, p < .05] on the scores of

posttraumatic growth. On the other hand, post-hoc results of Bonferoni test indicated that there were no significant differences between the any types of closeness to the deceased.

In order to examine the role of closeness to the deceased-II of the participants were tested with one-way ANOVA, and results indicated that type of closeness to the deceased had no significant effect [F (6, 494) = 6.49, p = .09] on the scores of posttraumatic growth.

One-Way ANOVA test was conducted to examine the role of closeness to the deceased-I of the participants on the scores of core bereavement, and indicated that the effect was significant [F (2, 498) = 13.10, p < .001]. According to the Bonferroni post-hoc results, participants who had first-degree loss (M = 1.29, SD = .59) experienced increased level of bereavement intensity than the participants who had second-degree loss (M = 1.04, SD = .54) and other loss (M = .99, SD = .53). Moreover results also indicated that there was no significant difference between the participants who had first-degree loss and other loss (See the Figure 3.12).

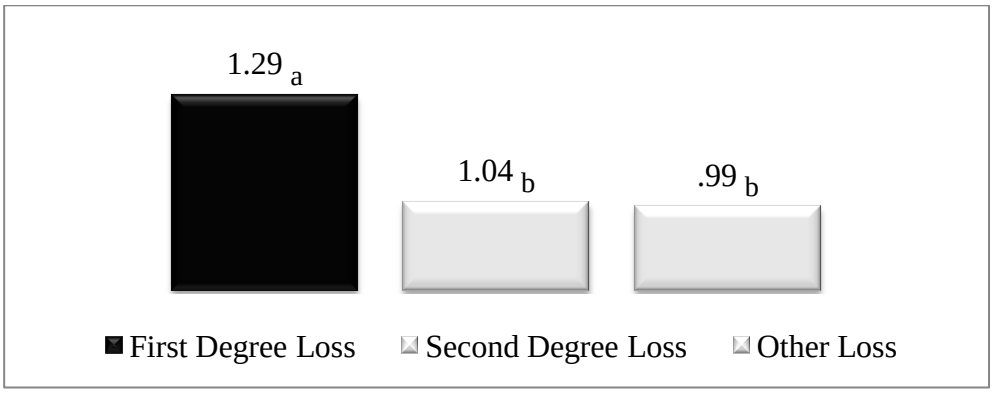

Figure 3.12: Closeness to the deceased of the participants and core bereavement

One-Way ANOVA test was conducted to examine the role of closeness to the deceased-II of the participants on the scores of core bereavement, and indicated that the association was significant [F (6, 494) = 6.05, p < .001]. According to the Bonferroni

post-hoc results, participants who had sibling loss (M = 1.47, SD = .67) experienced increased level of bereavement intensity than the participants who had close friend loss (M = .87, SD = .44) and other relative loss (M = 1.04, SD = .54). Also, there were significant differences between participants who had other relative loss and close friend loss. Moreover, results indicated that there were no significant differences between the participants who had mother (M = 1.26, SD = .63), father (M = 1.23, SD = .51), child (M = 1.29, SD = .69), and other (M = 1.14, SD = .61) loss. (See the Figure 3.13).

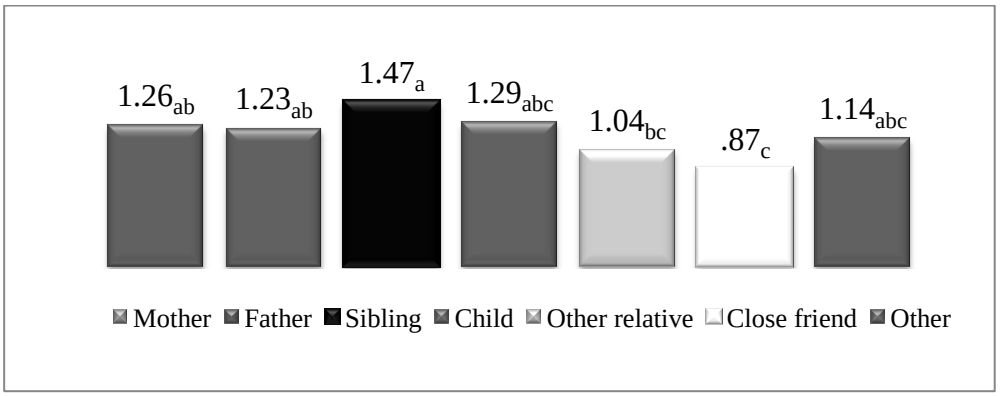

Figure 3.13: Closeness to the deceased of the participants and core bereavement

In order to examine the role of closeness to the deceased-I of the participants on the scores of the five stages of grief, one-way ANOVA test conducted and results indicated that the association was not significant for denial [F (2, 498) = 2.68, p = .07], anger [F (2, 498) = 1.55, p = .21], and acceptance [F (2, 498) = 2.71, p = .07] stages.

In addition, the association was significant for bargaining stage [F (2, 498) = 3.30, p < .05]. According to the post-hoc Bonferoni test, participants who had first-degree loss (M = 3.13, SD = 1.69) had higher scores of bargaining stage than the participants who had second-degree loss (M = 2.73, SD = 1.46), and there was no significant difference between the participants who had other loss (M = 2.93, SD = 1.32). Moreover, there was no significant difference between the participants who had

second-degree loss and other loss in terms of the scores of bargaining stage (See the Figure 3.14).

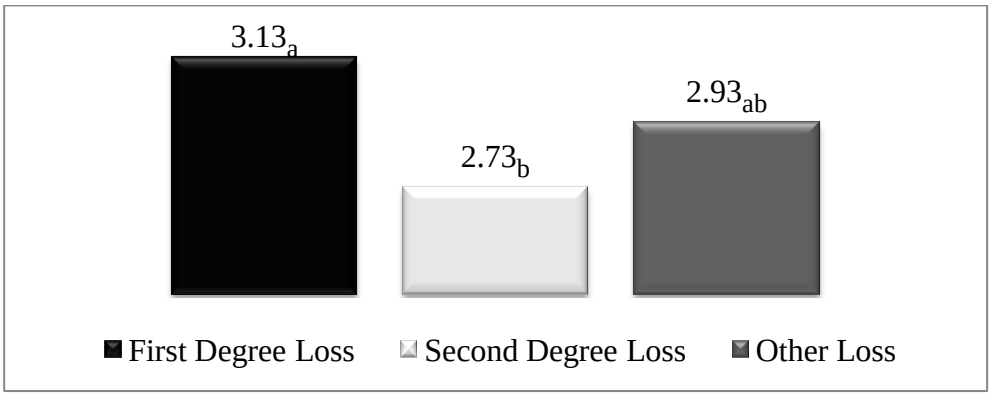

Figure 3.14: Closeness to the deceased of the participants and bargaining stage

Furthermore, the role of closeness to the deceased-I of the participants was significant for the scores of depression stage [F (2, 498) = 9.49, p < .001]. Post-hoc Bonferoni test results indicated that the participants who had first-degree loss (M = 2.62, SD = 1.26) experienced higher level of depression than the participants who had second-degree loss (M = 2.17, SD = 1.03) and other loss (M = 2.14, SD = 1.05). Additionally, there were no significant differences between the participants who had second-degree loss and other loss in terms of the scores of depression stage. Results were showed in Figure 3.15.

In order to examine the role of closeness to the deceased-II of the participants on the scores of the five stages of grief, one-way ANOVA test conducted. Results indicated that the effect was not significant for denial [F (6, 494) = 1.74, p = .11], anger [F (6, 494) = 1.69, p = .12], and bargaining [F (6, 494) = 1.37, p = .23] stages.

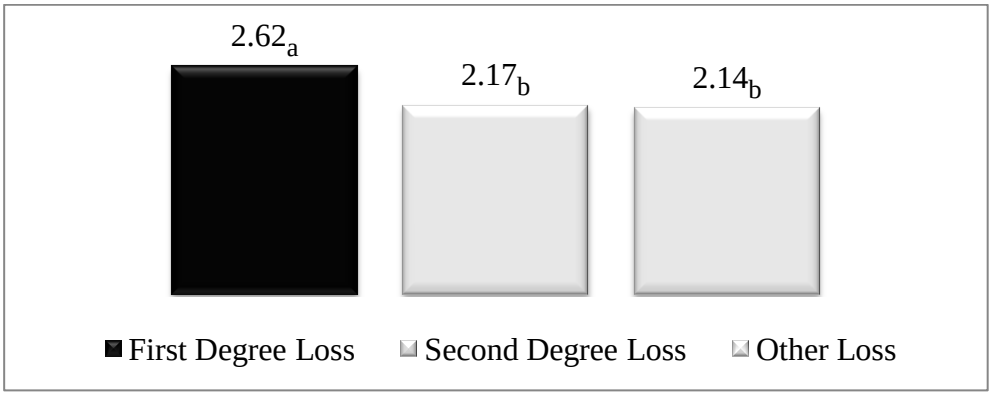

Figure 3.15: Closeness to the deceased of the participants and depression stage

In addition, the effect was significant for depression stage [F (6, 494) = 3.20, p < .01]. According to the post-hoc Bonferoni test, participants who had father loss (M = 2.62, SD = 1.18) had higher scores of bargaining stage than the participants who had other relative loss (M = 2.17, SD = 1.03). Moreover, there were no significant differences between the participants who had mother (M = 2.59, SD = 1.32), sibling (M = 2.67, SD = 1.41), child (M = 2.65, SD = 1.32), close friend (M = 2.09, SD = 1.03), and other (M = 2.21, SD = 1.08) (See the Figure 3.16).

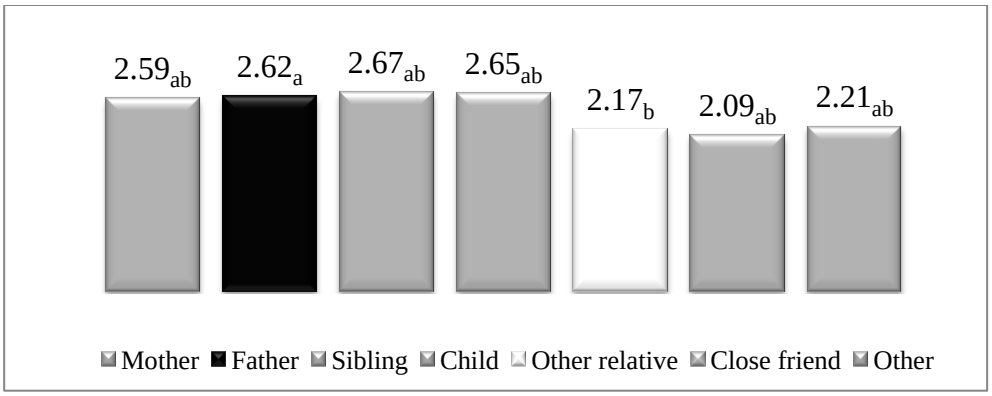

Figure 3.16: Closeness to the deceased of the participants and depression stage

Furthermore, the role of closeness to the deceased-II of the participants was significant for the scores of acceptance stage [F (6, 494) = 2.44, p < .05]. Post-hoc Bonferoni test results indicated that the participants who had child loss (M = 5.36, SD = .77) had higher level of acceptance stage scores than the participants who had other relative loss (M = 4.47, SD = 1.42) and other loss (M = 4.31, SD = 1.32). Also, there was no significant difference on the scores between other relative loss and other loss. Additionally, there were no significant differences between the participants who had mother (M = 4.75, SD = 1.27), father (M = 4.75, SD = 1.04), sibling (M = 4.48, SD = 1.36), and close friend (M = 4.71, SD = 1.39) in terms of the scores of acceptance stage. Results were showed in Figure 3.17.

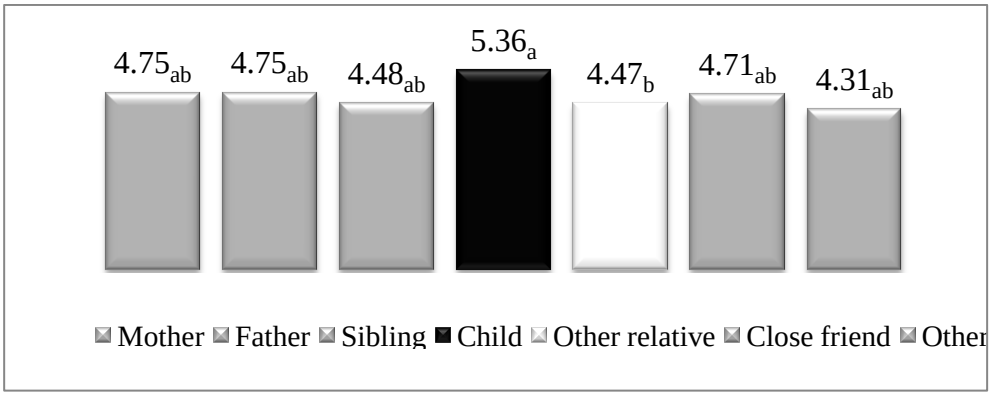

Figure 3.17: Closeness to the deceased of the participants and acceptance stage

Table 3.4: Independent samples t-test results (I)

			Dependent Variable: **PTGI**					Dependent Variable: **CBI**				
		N	**M**	**S**	**t**	**df**	**p**	**M**	**S**	**t**	**df**	**p**
Gender	Women	253	2.78	.91	2.72	499	.01	1.27	.59	3.66	499	.00
	Men	248	2.54	1.08				1.08	.56			
Living With	Nuclear Family	463	2.64	1.01	-1.28	499	.20	1.17	.58	-.94	499	.35
	Large Family	38	2.86	.91				1.26	.58			
Loss in Last Year	Yes	297	2.62	.99	.95	499	.35	1.21	.60	-1.58	499	.12
	No	204	2.71	1.03				1.12	.55			
Loss Gender	Male	289	2.59	.96	1.84	499	.07	1.16	.57	.45	499	.65
	Female	212	2.75	1.03				1.19	.61			
Suddenness of Loss	Yes	343	2.71	.99	1.70	499	.09	1.20	.57	1.54	499	.13
	No	158	2.55	1.03				1.11	.60			

Table 3.5: Independent samples t-test results (II)

			Dependent Variable: **FSGS**																						
			Denial					**Anger**					**Bargaining**					**Depression**					**Acceptance**				
		N	**M**	**S**	**t**	**df**	**p**	**M**	**S**	**t**	**df**	**p**	**M**	**S**	**t**	**df**	**p**	**M**	**S**	**t**	**df**	**p**	**M**	**S**	**t**	**df**	**p**
Gender	Women	253	2.28	1.49	.88	499	.38	1.89	1.30	.41	499	.68	3.02	1.58	.47	499	.64	2.52	1.24	1.76	499	.08	4.84	1.20	3.60	499	.00
	Men	248	2.17	1.37				1.84	1.17				2.95	1.59				2.33	1.13				4.43	1.32			
Living With	Nuclear Family	463	2.20	1.42	1.12	499	.26	1.82	1.19	3.00	499	.00	2.95	1.57	1.56	499	.12	2.39	1.16	2.23	499	.03	4.63	1.27	-.52	499	.60
	Large Family	38	2.47	1.61				2.44	1.63				3.37	1.72				2.84	1.44				4.74	1.41			
Loss in Last Year	Yes	297	2.26	1.48	-.68	499	.50	1.89	1.26	-.52	499	.61	3.00	1.51	-.23	499	.82	2.42	1.15	.03	499	.98	4.61	1.31	.56	499	.57
	No	204	2.17	1.36				1.83	1.21				2.96	1.69				2.43	1.24				4.68	1.23			
Loss Gender	Male	289	2.22	1.42	.11	499	.92	1.82	1.21	.98	499	.33	2.93	1.64	.91	499	.37	2.46	1.20	-.87	499	.39	4.60	1.24	.80	499	.42
	Female	212	2.23	1.45				1.93	1.28				3.06	1.50				2.37	1.18				4.69	1.33			
Suddenness of Loss	Yes	343	2.26	1.43	.88	499	.38	1.90	1.28	.93	499	.35	3.04	1.59	1.12	499	.26	2.48	1.20	1.51	499	.13	4.63	1.29	-.34	499	.73
	No	158	2.14	1.44				1.79	1.15				2.87	1.58				2.31	1.17				4.67	1.25			

Table 3.6: One-way ANOVA results (I)

			Dependent Variable: **PTGI**					Dependent Variable: **CBI**				
		N	**M**	**S**	**F**	**df**	**p**	**M**	**S**	**F**	**df**	**p**
Education Level	Primary-Secondary	186	2.84	.85	11.71	3. 497	.00	1.30	.63	6.24	3. 497	.00
	High School	140	2.83	.89				1.14	.51			
	University	154	2.37	1.14				1.09	.57			
	Master/PhD	21	1.97	1.19				.86	.48			
Closeness to the Deceased (I)	First-degree	284	2.76	.96	3.60	2. 498	.03	1.29	.59	13.10	2. 498	.00
	Second-degree	148	2.55	1.04				1.04	.54			
	Other	69	2.47	1.09				.99	.53			
Closeness to the Deceased (II)	Mother	81	2.86	.96	1.85	6. 494	.09	1.26	.63	6.05	6. 494	.00
	Father	133	2.69	.94				1.23	.51			
	Sibling	47	2.66	1.09				1.47	.67			
	Child	23	3.01	.71				1.29	.69			
	Other relative	148	2.55	1.04				1.04	.54			
	A close friend	38	2.39	1.03				.87	.44			
	Other	31	2.56	1.16				1.14	.61			
Received Professional Help	No	477	2.65	1.01	.57	2, 498	.56	1.17	.58	.35	2, 498	.70
	Psychiatric / Medical T.	18	2.90	.81				1.28	.59			
	Psychotherapy+Medical T.	6	2.58	.69				1.25	.62			

Table 3.7: One-way ANOVA results (II)

			Dependent Variable: **FSGS**																							
			Denial						**Anger**					**Bargaining**					**Depression**					**Acceptance**				
		N	**M**	**S**	**F**	**df**	**p**	**M**	**S**	**F**	**df**	**p**	**M**	**S**	**F**	**df**	**p**	**M**	**S**	**F**	**df**	**p**	**M**	**S**	**F**	**df**	**p**
Education Level	Primary-Secondary	186	2.36	1.50	1.10	3. 497	.35	2.06	1.35	3.90	3. 497	.01	3.30	1.71	4.55	3. 497	.00	2.65	1.29	5.06	3. 497	.00	4.99	1.11	1.56	3. 497	.00
	High School	140	2.16	1.38				1.87	1.25				2.67	1.47				2.35	1.10				4.64	1.15			
	University	154	2.16	1.40				1.68	1.11				2.91	1.49				2.30	1.15				4.24	1.38			
	Master/PhD	21	1.90	1.35				1.38	.60				2.83	1.47				1.81	.71				4.48	1.80			
Closeness to the Deceased (I)	First Order	284	2.35	1.53	2.68	2. 498	.07	1.93	1.28	1.55	2. 498	.21	3.13	1.69	3.30	2. 498	.04	2.62	1.26	9.49	2. 498	.00	4.75	1.16	2.71	2. 498	.07
	Second Order	148	2.01	1.28				1.84	1.21				2.73	1.46				2.17	1.03				4.47	1.42			
	Other	69	2.17	1.29				1.64	1.10				2.93	1.32				2.14	1.05				4.53	1.37			
Closeness to the Deceased (II)	Mother	81	2.52	1.66	1.74	6. 494	.11	1.92	1.25	1.69	6. 494	.12	3.19	1.59	1.37	6. 494	.23	2.59	1.31	3.20	6. 494	.00	4.75	1.27	2.44	6. 494	.03
	Father	133	2.27	1.46				1.81	1.19				3.02	1.67				2.62	1.18				4.75	1.04			
	Sibling	47	2.48	1.49				2.29	1.54				3.34	1.79				2.67	1.41				4.48	1.36			
	Child	23	1.89	1.46				1.93	1.31				3.16	1.95				2.65	1.32				5.36	.77			
	Other relative	148	2.01	1.28				1.84	1.21				2.73	1.46				2.17	1.03				4.47	1.42			
	A close friend	38	2.03	1.26				1.82	1.31				2.96	1.32				2.09	1.03				4.71	1.39			
	Other	31	2.34	1.31				1.42	.72				2.88	1.33				2.21	1.08				4.30	1.32			
Received Professional Help	No	477	2.24	1.44	1.14	2, 498	.32	1.89	1.25	1.94	2, 498	.15	3.00	1.57	.42	2, 498	.66	2.42	1.19	1.13	2, 498	.33	4.63	1.29	.34	2, 498	.71
	Psychiatric / Medical T.	18	1.89	1.35				1.33	.92				2.65	1.86				2.76	1.31				4.86	.91			
	Psychotherapy+Medical T	6	1.58	.74				1.56	.75				3.00	1.76				2.00	.95				4.43	1.48			

3.5. Hierarchical Multiple Regression Analyses

In the present study three groups of hierarchical multiple regression analyses were conducted to examine the associations among the variables of the study. In the first group of hierarchical multiple regression analysis were conducted at five times for the Five Stages of Grief; Denial, Anger, Bargaining, Depression and Acceptance. Hierarchical multiple regression analysis for Core Bereavement in the second group, and finally for Posttraumatic Growth were performed. Results of regression analysis were showed detailed in Table 3.8.

3.5.1. Variables Associated with The Five Stages of Grief

Hierarchical multiple regression analyses were conducted to reveal the significant associates of the Five Stages of Grief; namely, Denial, Anger, Bargaining, Depression, and Acceptance. Variables were entered into the equation via three steps. In order to control for the possible effects of socio- demographic variables (e.g. Age, Gender and Education) these first step variables were entered into the equation via stepwise method. After controlling for the socio-demographic variables that were significantly associated with the dependent variable, the factors of the quality of relationship with the deceased (e.g., relationship quality, interaction level, and supportiveness of the relationship with the deceased) were entered into the equation on the second step. Except for the denial stage, lastly, rests of the variables of the Five Stages of Grief were entered on the third step of the analysis following through Denial. In order to test linearity or overlapping features of the Five Stages of Grief, each stage was used as both predictor variable and dependent variable.

Hierarchical multiple regression analyses were conducted for the Five Stages of Grief. In order to test, whether stages of grief are linearly associated or not, as mentioned before, each stages were used as predictors and dependent variable. By taking each stage as predictors, whether stages are simultaneously experienced or not, were examined. By taking each stage as dependent variable, whether stages of grief linearly associated were examined. For instance, to test possible associations for anger stage, denial is used as a predictor variable. Here the purpose is to test the necessity of

denial for the second stage; anger. Therefore, hierarchical multiple regression analyses were performed five times.

3.5.1.1. Denial

Hierarchical multiple regression analysis was conducted for the Denial and revealed that, neither demographic variables nor the factors of quality of relationship with the deceased (relationship quality, interaction frequency, and perceived supportiveness of the relationship with the deceased) had no significant association with Denial (see Table 3.8).

3.5.1.2. Anger

Hierarchical regression analyses were conducted for the Anger. Results revealed that Education (low level of education) had a significant negative association ($\beta = -.15$, $t(497) = -3.26$, $p < .001$) with Anger, and this variable explained 2% of the variance ($F[1, 497] = 10.63$, $p < .001$). After controlling for Education factor, any factors of the quality of relationship with the deceased had no significant association with Anger ($F[3, 494] = 1.051$, $p = .037$). Lastly, on the third step, Denial, was found to be significantly associated ($\beta = .46$, $t(493) = 11.49$, $p < .001$) with Anger, and increased explained variance to 23% ($F[1, 493] = 132.03$, $p < .001$). In summary, only two variables Education and Denial were significantly associated with Anger (see Table 3.8).

3.5.1.3. Bargaining

Hierarchical regression analysis was conducted for Bargaining, and revealed that Education (low level of education) significantly associated with Bargaining ($\beta = -.09$, $t(497) = -2.12$, $p < .05$). This variable explained 1% of the variance ($F[1, 497] = 4.48$, $p < .05$). On the second step, all factors of the quality of relationship with deceased had no significant association with Bargaining ($F[3, 497] = 2.33$, $p = .07$). On the third step, other factors of the Five Stages of Grief, Denial ($\beta = .41$, $t(492) = 10.18$, $p < .001$), and

Anger (β = .30, t (492) = 7.46, p < .001) were found to be significantly associated with Bargaining. These factors increased explained variance to 39% (F [2, 492] = 145.27, p < .001). In summary, only low level of Education, Denial and Anger were found to be significantly associated with Bargaining (see Table 3.8).

3.5.1.4. Depression

Hierarchical regression analysis was conducted for Depression and revealed that, among the control variables, only Education (low level of education) was significantly associated (β = -.14, t (497) = -3.16, p < .01) with Depression. It explained 2% of the variance (F [1, 497] = 9.99, p < .01). After controlling Education on the second step, only Supportiveness factor among the factors of the Quality of Relationship with Deceased had a significant association (β = .14, t (494) = 2.07, p < .05) with Depression. All factors of the Quality of Relationship with Deceased increased the explained variance to 6% (F [3, 494] = 7.55, p < .001). On the third step, all other factors of the five stages of grief, Denial (β = .28, t (491) = 7.47, p < .001), Anger (β = .24, t (491) = 6.60, p < .001), and Bargaining (β = .36, t (491) = 9.44, p < .001) had significant associations with Depression, and with the entrance of these variables, increased the explained variance to 57% (F [3, 491] = 189.26, p < .001) (see Table 3.8).

In summary, in addition to lower level Education, Supportiveness of the relationship with deceased and other stages of grief (Denial, Anger, and Bargaining) were found to be significantly associated with Depression variable.

Table 3.8: Variables associated with the five stages of grief

	Predictors in set	F for set	t for w/in set Predictors	df	Beta (β)	Model R^2 Change
A. Dependent Variable: DENIAL						
I.	*Quality of Relationship*	2.19		3, 495		.013
	Relationship		.826	495	.05	
	Interaction		.374	495	.02	
	Support		.853	495	.06	
B. Dependent Variable: ANGER						
I.	*Control variables*	10.63***		1, 497		.021
	Education		-3.26***	497	-.15	
II.	*Quality of Relationship*	1.05		3, 494		.006
	Relationship		-.82	494	-.05	
	Interaction		1.55	494	.10	
	Supportiveness		-.06	494	.00	
III.	*Five Stages of Grief*	132.03***		1, 493		.206
	Denial		11.49***	493	.46	
C. Dependent Variable: BARGAINING						
I.	*Control variables*	4.48*		1, 497		.009
	Education		-2.12*	497	-.09	
II.	*Quality of Relationship*	2.33		3, 494		.014
	Relationship		.33	494	.02	
	Interaction		.03	494	.00	
	Supportiveness		1.55	494	.10	
III.	*Five Stages of Grief*	145.27***		2, 492		.363
	Denial		10.18***	492	.41	
	Anger		7.46***	492	.30	
D. Dependent Variable: DEPRESSION						
I.	*Control variables*	9.99**		1, 497		.020
	Education		-3.16**	497	-.14	
II.	*Quality of Relationship*	7.55***		3, 494		.043
	Relationship		.37	494	.02	
	Interaction		1.17	494	.07	
	Supportiveness		2.07*	494	.14	
III.	*Five Stages of Grief*	189.26***		3, 491		.503
	Denial		7.47***	491	.28	
	Anger		6.60***	491	.24	
	Bargaining		9.44***	491	.36	
E. Dependent Variable: ACCEPTANCE						
I.	*Control variables*	31.84***		1, 497		.060
	Education		-5.64***	497	-.25	
II.	*Control variables*	9.08**		1, 496		.017
	Gender		-3.01**	496	-.13	
III.	*Quality of Relationship*	.94		3, 493		.005
	Relationship		-.75	493	-.04	
	Interaction		-.25	493	-.02	
	Supportiveness		1.54	493	.10	
IV.	*Five Stages of Grief*	6.53***		4, 489		.047
	Denial		-4.03***	489	-.22	
	Anger		-.15	489	-01	
	Bargaining		4.01***	489	.24	
	Depression		-.22	489	-.01	

* p < .05 ** p < .01 *** p < .001

Note. Gender was coded as 1 for women, and 2 for man

3.5.1.5. Acceptance

Hierarchical regression analyses were conducted for Acceptance, and revealed that, among the control variables, Education (low level of education) had a significant and negative association (β = -.25, t (497) = -5.64, $p < .001$) with Acceptance. This variable explained 6% of the variance (F [1, 497] = 31.84, $p < .001$). Following Education, Gender (being women) was found to be significantly associated (β = -.13, t (496) = -3.01, $p < .01$) with Acceptance, and this variable increased explained variance to 8% (F [1, 496] = 9.08, $p < .01$). After controlling Education and Gender, on the third step, all variables of the Quality of Relationship with Deceased had no significant association with Acceptance (F [3, 493] = .94, p = .42). On the last step, while Denial (β = -.22, t (489) = -4.03, $p < .001$), and Bargaining (β = .24, t (489) = 4.01, $p < .001$) revealed significant association (negative and positive respectively) with Acceptance, Anger and Depression were significantly associated with Acceptance. All these variables increased the explained variance to 13% (F [4, 496] = 6.53, $p < .001$) (see Table 3.8).

In summary, two control variables (Education and Gender) were found to be significantly associated with Acceptance. Moreover two factors of the five stages of grief (Denial and Bargaining) were found to be significantly associated with Acceptance.

3.5.2. Variables Associated with Core Bereavement

In order to investigate whether the scores of intensity of bereavement, significantly differ in respect to demographical characteristics of bereaved participants (Age, Gender, and Education), factors of the Quality of Relationship with deceased, and the Five Stages of Grief, hierarchical multiple regression analyses were conducted. According to the analyses, Gender (being women) was significantly associated with Core Bereavement (β = -.16, t (497) = -3.69, $p < .001$), and explained 3% of the variance (F [1, 497] = 13.60, $p < .001$). Education (lower level) had also significant association (β = -.14, t (496) = -3.22, $p < .001$) with Core Bereavement, and increased explained variance to 5% (F [1, 496] = 10.36, $p < .001$). After controlling Gender and

Education variables, Supportiveness of the relationship with deceased revealed a significant association (β = .19, t (493) = 2.95, p < .01) with Core Bereavement, and all these factors increased explained variance to 11% (F [3, 493] = 12.09, p < .001).

On the fourth step, only two variables, Bargaining (β = .24, t (489) = 4.99, p < .001) and Depression (β = .36, t (489) = 7.03, p < .001) had significantly associated with Core Bereavement. On this step, all grief stages except Acceptance increased explained variance to 43% (F [4, 489] = 69.54, p < .001). On the last step, Acceptance were entered the model, and the association with Core Bereavement was not significant (F [1, 488] = .91, p = .34). All in all, in addition to control variables; Gender and Education, Supportiveness of the relationship with deceased and two grief stages; Bargaining and Depression were found significantly associated with Core Bereavement (See Table 3.9).

3.5.3. Variables Associated with Posttraumatic Growth

In order to examine the associations between Posttraumatic Growth and its predictor variables, hierarchical multiple regression analyses were conducted. According to the results, two control variables were found to be significantly associated with PTG. On the first step, Education (lower level) had a significant association with (β = -.21, t (497) = -4.83, p < .001) Posttraumatic Growth, and explained 5% of the variance (F [1, 497] = 23.28, p < .001). Also Gender (being women) was found to be significantly associated (β = -.10, t (496) = -2.33, p < .05) with Posttraumatic Growth, and explained 6% of the variance totally (F [1, 496] = 5.44, p < .05). After controlling these variables, on the third step, any of the factors of the Quality of Relationship with Deceased did not reveal significant association with Posttraumatic Growth, though these variables increased the explained variance to 8% (F [3, 493] = 3.77, p < .01). On the fourth step, among the five stages of grief, depression had a significant association (β = .21, t (489) = 3.31, p < .001) with Posttraumatic Growth, and increased the variance to 13% (F [3, 493] = 3.77, p < .001). On the next step, Acceptance was found to be significantly associated (β = .22, t (489) = 4.89, p < .001) with Posttraumatic Growth, and also increased the explained variance to 17% (F [1, 488] = 23.88, p < .001). Lastly, Core Bereavement entered the model and revealed a significant association (β = .15, t (487) = 2.65, p < .01) with Posttraumatic Growth. Also, Core Bereavement increased

Table 3.9: Variables associated with core bereavement and posttraumatic growth

	Predictors in set	F for set	t for w/in set Predictors	df	Beta (β)	Model R^2 Change
A. Dependent Variable: CORE BEREAVEMENT						
I.	*Control variables*	13.60***		1, 497		.027
	Gender		-3.69***	497	-.16	
II.	*Control variables*	10.36***		1, 496		.020
	Education		-3.22**	496	-.14	
III.	*Quality of Relationship*	12.08***		3, 493		.065
	Relationship		.59	493	.03	
	Interaction		.98	493	.06	
	Supportiveness		2.95**	493	.19	
IV.	*Pre-Acceptance Stages*	69.54***		4, 489		.32
	Denial		1.50	489	.07	
	Anger		-.35	489	-.02	
	Bargaining		4.99***	489	.24	
	Depression		7.03***	489	.36	
V.	*Acceptance Stage*	.91		1, 488		.001
	Acceptance		-.95	488	-.04	
B. Dependent Variable: POSTTRAUMATIC GROWTH						
I.	*Control variables*	23.28***		1, 497		.045
	Education		-4.83***	497	-.21	
II.	*Control variables*	5.44*		1, 496		.010
	Gender		-2.33***	496	-.10	
III.	*Quality of Relationship*	3.77**		3, 493		.021
	Relationship		-.82	493	-.05	
	Interaction		1.14	493	.07	
	Supportiveness		1.84	493	.12	
IV.	*Pre-Acceptance Stages*	7.17***		4, 489		.051
	Denial		.38	489	.02	
	Anger		.00	489	-.05	
	Bargaining		.24	489	.01	
	Depression		3.31***	489	.21	
V.	*Acceptance Stage*	23.88***		1, 488		.041
	Acceptance		4.89***	488	.22	
VI.	*Core Bereavement*	7.02**	2.65**	1, 487	.15	.012

* $p < .05$ ** $p < .01$ *** $p < .001$

Note. Gender was coded as 1 for women, and 2 for men

explained variance to 18% ($F [1, 487] = 7.02$, $p < .01$) (See Table 3.9).

All in all, two control variables; Education (low level of education) and Gender (being women) were found to be significantly associated with PTG. Also, among the factors of the five stages of grief, Depression and Acceptance had a significant association with PTG. Moreover on the last step, core bereavement was found to be significantly associated with PTG. Table 3.10 shows the general results of the hierarchical multiple regression analyses.

Table 3.10: General summary of multiple hierarchical regression analyses

			DEPENDENT VARIABLES						
			PTGI	**CBI**	**Denial**	**Anger**	**Bargaining**	**Depression**	**Acceptance**
PREDICTORS	Socio-Demographic Variables	Age							
		Gender	- - -	- - -					- -
		Education	- - -	- -		- - -	-	- -	- - -
	Quality of Relationship with the Deceased	Relationship							
		Interaction							
		Supportiveness		++				+	
	Pre-Acceptance Stages	Denial				+++	+++	+++	- - -
		Anger					+++	+++	
		Bargaining		+++				+++	+++
		Depression	+++	+++					
	Acceptance Stage	Acceptance	+++						
	Core Bereavement	CB	++						
		Total R^2	**.18**	**.44**	**.01**	**.23**	**.39**	**.57**	**.13**

Note: Grey area demonstrates the variables that were not entered into the equation.

3.6. Testing The Model of Five Stages of Grief, Grief Intensity and Posttraumatic Growth

Kübler-Ross and Kessler's (2005) model of Five Stages of Grief, has not been tested empirically, despite it is popularity both clinical and research field. The model was constructed through regression results and theoretical knowledge. To test the model, Structural Equation Modeling (SEM) was employed by considering regression results for the Five Stages of Grief. Also, by considering regression results, and both the original theoretical model of Tedeschi and Calhoun, and Calhoun and his colleagues model later on, Posttraumatic Growth and Core Bereavement relationships were examined through the process of grief. In this respect, the model put emphasis on cognitive processing which is essential part for PTG. Core Bereavement is considered as a way of cognitive processing the bereavement by evaluating the intensity of grief. Additionally event related factors are highlighted as contributing to Posttraumatic Growth. Therefore, here each stage of grief can be attributable to event related factors and their associations with PTG were examined.

In order to examine the role of Five Stages of Grief and Core Bereavement on Posttraumatic Growth, AMOS.21 software (2010) was used. The model evaluated by χ^2 /df ratio, goodness of fit indexes, likewise Comparative Fit Index (CFI), The Incremental Fit Index (IFI), Tucker–Lewis index (TLI), and root-mean-square error of approximation (RMSEA). SEM analyses demonstrated that the model fit the data adequately, χ^2 (9, N = 501) = 16.38, p = .059. Furthermore, the χ^2 ratio was below the suggested 2:1 ratio (χ^2/df = 1.82). Goodness of fit index showed that the fit was adequate; RMSEA (Browne and Cudeck 1993) = .041, The CFI (Bentler 1990) = .993, The IFI (Bollen 1989) = .993, and TLI (Bentler and Bonett 1980) = .984 (See Figure 3.16).

Anger was significantly related to Denial (Regression Estimate, RE = .46, p < .001). Denial explained 21% of the variance in Anger.

Bargaining was significantly related to Anger (RE = .30, p < .001) and Denial (RE = .42, p < .001). Denial explained 18% of the variance in Bargaining, while Anger explained 9% of the variance.

Depression was significantly related to Denial (RE = .28, $p < .001$), Anger (RE = .24, $p < .001$), and Bargaining (RE = .37, $p < .001$). Denial explained 8% of the variance in Depression, while Anger explained 6% of the variance and Bargaining explained 14% of the variance.

Acceptance was significantly related to Denial (RE = -.22, $p < .001$) and Bargaining (RE = .25, $p < .001$). Denial explained 5% of the variance in Acceptance, while Bargaining explained 6% of the variance.

Core Bereavement was significantly related to Bargaining (RE = .24, $p < .001$) and Depression (RE = .44, $p < .001$). Bargaining explained 6% of the variance in Core Bereavement, while Depression explained 19% of the variance.

Posttraumatic Growth was significantly related with Core Bereavement (RE = .27, $p < .001$) and Acceptance (RE = .24, $p < .001$). Core Bereavement explained 7% of the variance in Posttraumatic Growth, while Acceptance explained 6% of the variance in Posttraumatic Growth.

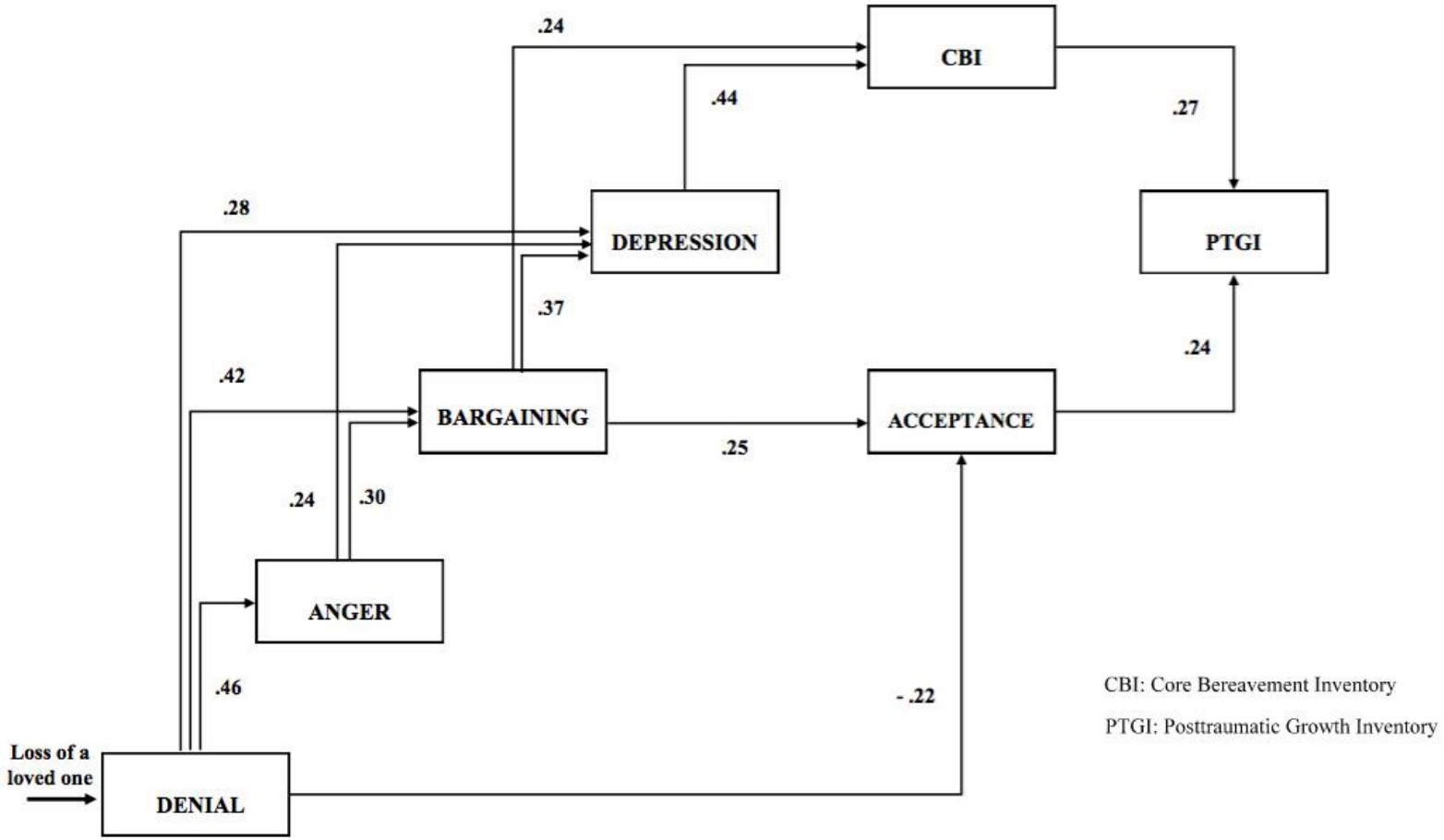

Figure: 3.18: Testing the model of five stages of grief

CHAPTER IV

4. DISCUSSION

Posttraumatic growth has been accepted as positive side of stressful life events (e.g., trauma and loss), and widely studied in the field since, it was firstly proposed by Tedeschi and Calhoun (1996). As it was stated before, today PTG has been examined for the many traumatic events such as earthquakes, sexual assaults, terminal illness (e.g., cancer, HIV), natural disasters or loss of a loved one. In general model of PTG, it has been emphasized that, traumatic life events cause a change on people's assumptive world, but not for everyone. People experience a shift in their opinions about themselves, others and the world and that resulted as posttraumatic growth. Studies have been conducted in respect to their negative experiences such as mental health and mortality. Positive experiences have been less likely to examine after loss experiences. Therefore, understanding bereavement and its relation to positive side of loss experience is valuable. Today, it has been suggested that some bereavement circumstances have the potential to make a change on the people's assumptive worlds, at least for some individuals. Therefore, researchers have been investigated answers of the questions "why or how some losses cause a personal growth?" The possible answers have been examined under the headings of bereaved-related factors (e.g., gender, coping styles, and meaning making of the death or intensity of grief process) and loss-related factors (e.g., sudden/unexpected nature of death, violent or natural deaths). On the other hand, there is a gap in the literature to understand the grief related factors by considering both bereaved and loss related factors. Present study also investigated those factors as bereaved-related factors (e.g., gender, living conditions, loss experience in last year) and loss-related factors (e.g., gender of loss, cause of death, time since death, suddenness of death). Lastly, although there are several theoretical models aforementioned before, those models are limitedly tested. This is the third gap in the

literature. Therefore, in the present study we aimed to examine the five stages of grief, which was proposed by Kübler-Ross and Kessler (2005), in the perspective of Posttraumatic Growth.

4.1. Correlations among the Variables

In the present study, correlations between the variables were expected in ranges. When considering socio-demographical variables, posttraumatic growth was significantly and negatively correlated with gender. Similar findings were revealed by Oginska-Bulik (2015). Women participants tended to have higher Posttraumatic Growth than men. Another socio-demographic variable, education was also significantly and negatively correlated with posttraumatic growth. Results are supported in another study with a different sample by Jin and colleagues (2014).

Parallel to findings of Keesee, Currier, and Neimeyer (2008), gender was significantly and negatively correlated with core bereavement. In the present study, more educated people had lower levels of bereavement intensity. Similar relationships were revealed in another study with bereaved adults (Newson et al. 2011).

Contrary to Nazare, Fonseca, and Canavarro (2013) women participants had higher levels of acceptance than men. In addition to gender, education was significantly and negatively correlated with anger, bargaining, depression, and acceptance stages. Bereaved individuals who were higher educated might be cope better with difficulties, during their grief process. Besides, they had lower levels of acceptance than lower educated individuals.

Posttraumatic growth was positively correlated with core bereavement and the five stages of grief. Similar findings were found in between grief intensity and posttraumatic growth (Yilmaz and Zara 2016). Also, as mentioned in the literature, posttraumatic growth was moderately related with depression and acceptance dimensions of grief. It can be argued that losses leading changes in the assumptive world are needed to provide growth (Calhoun et al. 2010). In this respect, depression and acceptance dimensions of grief and posttraumatic growth relation can be explained.

Furthermore, posttraumatic growth was positively correlated with quality of relationship variables that are perceived interaction and perceived supportiveness. Higher growth scores were correlated with higher previous interaction with deceased and higher previous supportiveness of the relationship with the deceased.

Considering stages of grief, while pre-acceptance stages of grief (denial, anger, bargaining, depression) were positively and highly correlated with each other, acceptance was only correlated with depression stage. These correlations demonstrated that acceptance stage was not interrelated with other stages except depression.

4.2. Bereaved-Related Factors

Several analyses were conducted to investigate whether the groups differ on dependent variables. To begin with gender, bereaved women reported higher scores of posttraumatic growth than men in the present study. This result was expected. Similar findings were found in a study, individuals experienced the death of a premature baby (Buchi et al. 2009).

Likewise in posttraumatic growth, intensity of bereavement was significantly different in terms of gender differences. Woman participants had higher scores of core bereavement than men. Similar findings were found in a study conducted with sampling bereaved parents by Keesee and colleagues (2008). Mothers reported more complicated grief scores than fathers. However, lower bereavement intensity among men might be related with their engagement in funeral issues afterwards a loss.

When considered the five stages of grief, only the scores of acceptance stage were changed among women and men. Contrary to Nazare and colleagues (2013), women had higher acceptance scores than men. This difference might be explained by women experienced their bereavements outward. However, examining the role of emotional expression can further reveal such findings.

In addition to gender differences mentioned above, scores of anger and depression stage differed on the basis of living conditions. In Turkish culture, participants have higher responsibility in an extended family context; this might

suppress showing their anger during grief process. Therefore, their anger levels were higher than participants who live in a nuclear family. These participants feel connected to their family members (White 2004). Furthermore, individuals who live with a large family had higher levels of depression than individuals who live with a nuclear family, despite negative associations between social support or supportive family environment and depression that was revealed by previous studies (Stroebe, Abakoumkin, and Stroebe 2010). Burden and colleagues (2016) revealed that poor supports from partner and grief suppression are some of influencing factors for depression and negative symptoms after stillbirth. Thus, as stated for anger stage, large family context is more likely to trigger these kinds of components.

In respect to education levels, participants who have either primary-secondary school graduates or high school graduates had higher scores of posttraumatic growth than the participants either university or master/PhD graduates. Higher posttraumatic growth prevalence among lower educated people were supported by current findings (Jin et al. 2014). More educated people might have less personal growth due to their realistic perceptions.

When examined the scores of core bereavement on the basis of education levels, participants who were primary-secondary school graduates had higher levels of bereavement intensity than the participants who were university graduates and master/PhD graduates. Newson and coworkers (2011) indicated that lower educated adults had more complicated grief symptoms.

Receiving professional help was not significantly associated with posttraumatic growth, core bereavement and each stages of grief. This insignificance might be related with limited number of participants receiving professional help. There were only twenty-four participants receiving either psychiatric help or psychotherapy with medical treatment. Also, this might be related the lack of receiving professional help specific to the bereaved individual.

Similar with receiving professional help variable, having loss in last year did not significantly related with any dependent variables. Number of participants having loss experience in last year or not were quite appropriate. Therefore, since all individuals

experienced more than one loss experiences, it is not creating such a difference across each dependent variable.

4.3. Loss-Related Factors

In the present study, several variables about the one who deceased were investigated. To begin with the gender of deceased, there were no significant differences on the scores of posttraumatic growth, core bereavement, and all stages of grief process. On the other hand, contrary findings were found among Turkish university students (Senol-Durak and Tedeschi 2015). In that study, if the gender of deceased was women, participants reported greater posttraumatic growth. However, in the same study researchers did not found the role of gender differences. Therefore, contrary findings remark that further studies are encouraged to see the role of gender of deceased.

When considering the sudden/unexpected nature of the death, there were no significant differences on the scores of posttraumatic growth, core bereavement, and all the stages of grief process. In respect to posttraumatic growth, when the death was sudden or unexpected, it is suggested to lead more stress and growth because unexpected death is contrary to our worldview (Tedeschi and Calhoun 2008). In respect to grief process, when individuals reported that their loss was sudden/unexpected, it is more likely to be associated with lower scores of acceptance (Currier, Holland, and Neimeyer 2006). On the contrary to these explanations about grief and posttraumatic growth, the present study did not demonstrate the importance of sudden/unexpected nature of death. When returning back to data it was found that participants who reported their cause of death as one of sudden or unexpected reasons (e.g. acute illness, murdered by someone or traffic accident etc.), did not respond their nature of death as sudden/unexpected. This might be due to the fatalistic life approach in our sample, because of the death is one of expected life event in their life. Additionally, Kaltman and Bonanno (2003) emphasized the contrary findings about suddenness of the death and its relation with grief symptomology. According to their explanation, suddenness of loss was generally confounded with violent nature of the event in the studies.

Apart from suddenness of the death, the role of closeness to the deceased was tested. Results indicated that on the basis of type of closeness to the deceased, posttraumatic growth and core bereavement scores were different. Participants who lost first-degree relative had higher level of bereavement intensity than the participants who lost a second-degree relative and other type of loss. Findings of the present study are supported by other studies, revealing the importance of closeness to the deceased associated with the scores of posttraumatic growth (Armstrong and Shakespeare-Finch 2011). As demonstrating the grief intensity and the closeness of the deceased, in another sample, bereaved individuals who lost their child or spouse reported significantly higher complicated grief scores than immediate family members (Van Denderen et al. 2016). Moreover, when closeness to the deceased-II was analyzed, although individuals who had a sibling loss had the highest scores of core bereavement, there were no significant differences between participants who had sibling loss and mother, father, and child loss in terms of bereavement intensity, as it was revealed by Hardison, Neimeyer, and Lichstein (2005).

In addition to posttraumatic growth and core bereavement, the role of closeness to the deceased was tested on the scores of the five stages of grief. Results indicated that the effect was not significant for denial, anger, and acceptance stages. However, it was significant for bargaining and depression stages. Participants who lost first-degree relative reported higher scores of bargaining stage than the participants who lost second-degree relative. When considered the items of the Five Stages of Grief Scale related with the bargaining stage, there are statements like “All I want is his/her coming back again. I agree with everything only if he/she were with me one more day. I promise I would give anything if I just could see him/her, hug him/her. Please, don't take his/her life / Please, send him/her back and take my life instead. I wish he/she wouldn't have died and I would have instead.” (Item 6). Similar themes have been described in *On Grief and Grieving: Finding the Meaning of Grief Through the Five Stages of Loss* (Kübler-Ross and Kessler 2014) for the bargaining stage. These statements demonstrate the importance of living with the one deceased, which was in their close environment in the past. It was not acceptable that anyone does not want to devote their life for someone who is not close to them such as a neighbor. Therefore it is acceptable to bargain for deceased who closer to you than the other relatives.

Furthermore, participants who lost first-degree relatives reported higher levels of depression than the participants who lost second-degree relative and other relative. As mentioned above, although depression or depressive mood is one of the most comorbid situations in the frame of grief process (Burton et al. 2006; Keyes et al. 2014), depression following bereavement has not been completely accepted as same disorders (Wakefield and Schmitz 2013). As similar with depression, individuals who lost their first-degree relatives reported higher scores on some items like “Life is so meaningless without him/her.”, “I can not get taste of life.”, “Everything (e.g. photos, films, music etc.) that remind me him/her, stop me from enjoying life.”, and “I have lost all my hope.”.

When considering type of closeness to the deceased-II, similar differences were found between first-degree relatives and other relatives on the scores of depression stage. Individuals who had father loss had the highest scores of depression, than who lost other relative and others. However, these individuals’ depression scores did not differ from participants who had mother, sibling, and child loss. Similar findings were investigated by (Van Denderen et al. 2016) with homicide victims on the results negative grief reactions. Although first-degree family members had more negative results than other family members or others, they did not show a significant difference each other.

When considered closeness to the deceased-II, there was a significant difference between participants who had child loss and other relative loss on the scores of acceptance stage. The reason why a child loss was more acceptable than the others, might be related with presence of other children in the family, as compensation opinions of the loss. Therefore, a child loss might be more acceptable than the other losses for bereaved parents.

4.4. Variables Associated with the Five Stages of Grief, Core Bereavement and Posttraumatic Growth

After analyzing bereaved related variables and loss related variables, in accordance with the main hypothesis of the study several hierarchical multiple regression analyses were performed. Analyses were conducted for each stages of grief

firstly, core bereavement secondly, and posttraumatic growth thirdly. Possible associations between bereaved related variables (age, gender, and education), the quality of relationship with the deceased (relationship quality, interaction frequency, and perceived supportiveness of the relationship with the deceased) were tested in forwards to each stages of grief. Findings were discussed below on the basis of theoretical background of grief process and current results of the other researches.

4.4.1. The Five Stages of Grief

Hierarchical multiple regression analyses were conducted for the Five Stages of Grief. In order to test whether stages of grief are linearly associated or not, as mentioned before, each stages were used as predictors and dependent variable. By taking each stage as predictors, whether stages are simultaneously experienced was examined. By taking each stage as dependent variable, whether stages of grief linearly associated were examined. For instance, to test possible associations for anger stage, denial is used as a predictor variable. Here the purpose is to test the necessity of denial for the second stage anger. Therefore, hierarchical multiple regression analyses were performed five times.

To begin with Denial, findings revealed that both demographic variables and the factors of the quality of relationship with the deceased (relationship quality, interaction frequency, and perceived supportiveness of the relationship with the deceased) had no significant association with Denial. In fact, associations between denial and quality of relationship factors have supposed to be related. This contrary finding might be related with time since loss factor. As mentioned in the literature review, bereaved individuals experience denial stage soon after the death and in the following couple of months except for complicated/prolonged grief process. However, in the present study, the mean year of time since loss ($M = 10.2$) was longer.

When looking at hierarchical regression analysis results for the Anger, individuals with lower levels of education had higher scores of Anger. Although Maciejewski and colleagues (2007) revealed that bereaved individuals who had high school or higher educated showed more grief indicators, there is a need for further investigation on education levels and stages of grief.

After controlling Education, on the other hand, there were no significant associations between all factors of the quality of relationship with the deceased. Moreover, on the third step, Denial was found to be significantly associated with Anger. Considering t and Beta value of Denial, the connection between Denial and Anger was powerful. As stated before by Kübler-Ross and Kessler (2014), while denial fades slowly, bereaved individuals began questioning the process with "how" or "why". With each question, bereaved individuals began to understand the reality of their loss. Following the stage of Denial, they blame him/herself, others such as healthcare professionals, caregivers or even the God. These behaviors are the main picture of anger stage and represented with the items in the present study. Therefore, findings of the present study supported the idea that these stages denial and anger are associated parts of the grief process.

In addition to anger stage, hierarchical regression analysis was conducted for Bargaining. To similar with previous approach, possible associations between socio-demographic variables at first step, relationship with the deceased at the second step and denial and anger at the third step were examined. Individuals with lower levels of education had higher scores of Bargaining likewise seen in the stage of Anger. This might be related with the reality perception of the lower educated participants. When considered one of lexical meanings of the word "bargain" (bargain something away): part with something after negotiation but get little or nothing in return (Dictionary 2016, http://www.oxforddictionaries.com/definition/english/bargain, retrieved May 1 2016), as it was observed, unrealistically bargain after death were higher among the low-educated individuals.

Contrary to education, there were no significant associations between Bargaining and all factors of the quality of relationship. Results indicated that bargaining stage is experienced no matter what is the quality of relationship between bereaved individuals and deceased before death. Moreover, Denial and Anger were found to be significantly associated with Bargaining. As mentioned previously in Anger stage, when people began questioning their loss experiences, they feel angry to themselves or others and they still partially deny their loss (Kübler-Ross and Kessler 2014). It has been suggested that bereaved individuals feel guilt which is generally

accompanies to bargaining stage, and they also find out themselves or others faults in facing with the loss experience by the help of questioning.

Depression is the last stage of the pre-acceptance stages. Hierarchical regression analysis was conducted for Depression and revealed that, lower level of Education was significantly associated with Depression. As mentioned in the literature review, depression stage is not exactly same with depression as a mood disorder. Depression stage generally represents a mood in which, bereaved individuals feel deep pain, emptiness and meaningless after realizing the reality of loss. Due to the lack of knowledge about grief process and other variables like socio-demographic variables, depression literature might give idea about results. For instance, relationship between depression stage and education is consistent with findings about education and depressive symptoms (Kamin, Berzelak, and Ule 2012).

In addition to Education, only Supportiveness among the factors of the Quality of Relationship with Deceased had a significant association with Depression. Individuals who reported higher supportiveness score with the deceased had higher Depression in the process of grief. In the present study depression stage was questioned with four items of the Five Stages of Grief Scale. One of those items begins with sentence: “The life is so meaningless without him/her.” (Item 10). As the statement demonstrates, depression in the grief process is mainly focus on the one who deceased with despair, hopelessness, and so on.

In addition to Education and Supportiveness, pre-acceptance stages of the Five Stages of Grief, Denial, Anger and Bargaining were significantly associated with Depression. As mentioned above, the purpose of entering the stages with a sequential manner with either setting a stage as a predictor or a dependent variable, it was tested the linearity and co-occurrence of the stages during grief process. Results of the present study indicated linearity and overlapping nature of each grief stage. In the process of Depression stage, three stages of grief were significantly associated with depression stage. This result demonstrated that three stages of grief were linearly related with depression. Also, significance of all three stages demonstrated their overlapping features of the pre-acceptance stages which was supported by the first empirical examination of the stage theory of grief (Maciejewski et al. 2007).

Lastly, findings indicated that lower level of education had a significant association with Acceptance, likewise seen in Anger, Bargaining, and Depression stages. Following Education, Gender was also significantly associated with Acceptance. Women bereaved individuals had higher acceptance scores than men. Culturally, women generally find resources to express their loss related emotions and experiences. Therefore, when considered supportive social network circles of the women in contrast to men, this network may enhance their acceptance more. However, these explanations need to directly examine in the further studies. Especially, social support, emotional approach coping (emotional expression) might be crucial for Acceptance. In the present study level or type of social support instruments did not questioned. Thus, for social support mechanisms need to further investigations.

In addition to socio-demographic variables, all factors of the Quality of Relationship with Deceased were not significantly associated with Acceptance. Results indicated that acceptance stage is experienced no matter what is the quality of relationship between bereaved individuals and deceased before death. Similar findings were found in Denial, Anger, and Bargaining.

In respect to stages of grief, although previous stages of grief were associated with each other, surprisingly, only Denial and Bargaining were associated with Acceptance. While Denial was negatively associated with Acceptance, Bargaining was positively associated. Participants, who had increased levels of Denial, experienced lower levels of Acceptance. If pre-acceptance stages are accepted as negative responses to a loss experience, inverse relationship between Denial and Acceptance was expected. Likewise in a study conducted with bereaved couples, while adaptive coping was positively associated with Acceptance, Maladaptive coping was positively associated with Denial (Nazare et al. 2013). Although there were indirect relationships between Denial, Acceptance, maladaptive and adaptive coping, the association between Denial and Acceptance were directly inverse.

Contrary to Denial, Bargaining was positively associated with Acceptance. Participants, who had higher Bargaining stage scores, had higher levels of Acceptance. This relationship makes the Bargaining one of the most important stage in the grief process which goes trough Acceptance. Following statements supports the finding of

the present study on the basis of relationship between denial and acceptance stage: "… In other cases, bargaining can help our mind move from one state of loss to another. It can be a way station that gives our psyche the time it may need to adjust. … It allows us to believe that we can restore order to the chaos that has taken over." (Kübler-Ross and Kessler 2014: 19)

As a conclusion, in respect to five regression analyses mentioned above, the pre-acceptance stages (denial, anger, bargaining, and depression) were both linearly and simultaneously experienced by bereaved individuals. Their significance levels, explained variances, t values, and their β values supported this idea. On the other hand, as decreasing level of variance when adding acceptance stages in to regression equation demonstrates acceptance stage is distinct phenomenon in the grief process. Therefore, it cannot be experienced simultaneously. Decreased level of denial and increased level of bargaining were associated with acceptance.

4.4.2. Core Bereavement

In order to investigate the associations between Core Bereavement and its predictor variables, hierarchical multiple regression analyses were conducted. Analyses indicated that Gender was significantly associated with Core Bereavement. Women participants had higher scores of Core Bereavement than men. Similar findings are supported by other grief related studies (Keesee et al. 2008).

Additionally, individuals with lower levels of education had also higher scores of Core Bereavement. Similar with this, findings indicated that individuals with lower levels of education reported higher grief intensity (Newson et al. 2011). This result might demonstrate individuals with higher levels of education have better coping abilities. Also, individuals with lower levels of education and higher core bereavement scores might be related with ruminative thinking about grief. However, these hypotheses are needed to investigate in further studies.

In addition to demographical variables, Supportiveness of the relationship with deceased revealed a significant association with Core Bereavement. If individuals

reported that their relationships were highly supportive with the deceased, they had higher Core Bereavement scores. This association indicated the important role of relationship factors with the deceased. Previous studies supported this finding also (Hardison et al. 2005). This result demonstrates that individuals losing their supportive relationship might feel difficulty to compensate their life afterwards and they might engage the lack of one by elaborating bereavement more. When considered the items of the scale, yearning the deceased (e.g., missing deceased when looking at his/her photo etc.) and the link between degrees of supportiveness, higher scores might reveal showing respect or continuing bonds by intensify the grief. However, relationship quality and interaction frequency with the deceased did not reveal significant associations with Core Bereavement. This might be due to time since loss. When considering the average value of the time since loss factor (M = 10.2) as quite long, these factors and core bereavement were not significantly associated. Therefore, further studies with shorter duration of loss might examine those associations.

Besides of socio-demographic variables and quality of relationship, only two variables, Bargaining and Depression were significantly associated with Core Bereavement. Individuals, who engaged in bargaining and depression during grief process, had higher grief intensity. As a way of grief intensity, Core bereavement, includes themes (acute separation, images and thoughts, yearning) that are cognitively ruminative. Therefore, both bargaining stage and depression stage comprehend to thinking more about bereavement negatively. As reported by Kübler-Ross and Kessler (2014) these stages are the most intense stages of grief processes. Therefore, bargaining and depression can also be identified as core stages of grief when considering their association with Core Bereavement. However, Denial, Anger, and Acceptance were not associated with Core Bereavement. Also, r square change results revealed the importance of pre-acceptance stages rather than acceptance stage. Former variables explained 32% of variance while latter explained almost 1%. These associations are consistent with the general course of the grief process. The stages of Denial and Anger have a protective role against to this devastating event for the bereaved individuals soon after the death. Therefore, during these stages it is not expected to see intense grief reactions (e.g. to avoid from memories, yearning, losing control the life, meaningless or emptiness etc.) from bereaved individuals, because the reality of the loss is not accepted

yet. On the other hand, to consider acceptance stage, moreover, when bereaved individuals accepted the reality of loss that means they feel themselves better and they cope better with life problems. Also, they do not avoid from memories about the deceased, and they understand that the life goes on. Therefore, no association between core bereavement and acceptance is expected since acceptance does not include returning back to pain about the loss. As a result, those findings mentioned above clarify acceptance as healthy part of the grief while Bargaining and Depression are the core.

4.4.3. Posttraumatic Growth

In order to examine the associations between Posttraumatic Growth and its predictor variables, hierarchical multiple regression analyses were conducted. Results revealed that two control variables were significantly associated with Posttraumatic Growth. Participants, with lower levels of education, had higher scores of Posttraumatic Growth. Despite of the fact that there were limited results about education and PTG relationship, Jin and colleagues (2014) supported the findings of the present study. In addition to Education, Gender was found to be significantly associated with Posttraumatic Growth. Women participants reported more Posttraumatic growth scores than men. Similar findings were indicated in the study by Patrick and Henrie (2016). The role of gender on PTG was consistent in bereavement likewise seen other traumatic events afterwards (Swickert and Hittner 2009).

After controlling demographical variables, factors of the Quality of Relationship with the Deceased did not reveal significant associations with Posttraumatic Growth. This finding is not expected when considered the importance of event related factors in several models of PTG (Schaefer and Moos 1998; Tedeschi and Calhoun 1996). Bereaved individuals experience growth, which is independent from the how the quality of relationship with deceased is. Rather than asking quantity of the frequency of interaction, relationship quality or supportiveness, understanding their relationship and perception of the relationship might illuminate interactions with positive outcomes. Therefore, conducting qualitative studies are so important.

When considering the Five Stages of Grief, higher depression was significantly associated with Posttraumatic Growth. Among pre-acceptance stages, only depression had a significant association with Posttraumatic Growth. As expected, there are an adverse effect in depression which means the higher the depression without exclusively negative and self-punitive rumination is the more positive outcomes arise (Nolen-Hoeksema, McBride, and Larson 1997). To similar with depression literature, PTG literature overemphasizes the trauma including an intense pattern leading someone to shatter his/her assumptive world (Beder 2004). In this respect, depression, here, might be accepted as an adverse reaction afterwards a loss that causes a shift on basic assumptions.

On behind of pre-acceptance stages, and after removing their effect, moreover, Acceptance was found significantly associated with Posttraumatic Growth. Considering acceptance as a positive stage of grief, it was expected as related with Posttraumatic Growth. When comparing r square changes, while four stages explained 5% of the variance, only acceptance explained 4% of variance. These percentages revealed the importance of a single stage, acceptance, in the frame of Posttraumatic Growth. This relationship can be called as healthy-healthy relationship, which means experiencing healthy stage of grief is necessary to experience psychologically healthy outcomes.

On behind of pre-acceptance and acceptance stages of grief, lastly, Core Bereavement entered in to regression equation. Results revealed a significant association of Core Bereavement on Posttraumatic Growth. When comparing explained variances, core bereavement as mentioned above (44%) and posttraumatic growth here (18%), all variables explained lower levels of variance in Posttraumatic Growth. However, despite of the fact that core bereavement put lower r square change (almost 1%) into equation, Core Bereavement and Posttraumatic Growth association were significant. As Calhoun and colleagues (2010) mostly overemphasize the role of rumination, Core Bereavement here can be accepted as rumination about bereavement which includes intensity of grief about avoiding from memories, yearning, losing control over the life, feeling emptiness.

4.5. Testing the Model of Five Stages of Grief, Grief Intensity and Posttraumatic Growth

In order to examine the relationships Posttraumatic Growth, Core Bereavement, and the Five Stages of Grief were tested via Structural Equation Modeling based on the results of hierarchical multiple regression analyses. This model helps to understand non-linearity of stages of grief model (Kubler-Ross and Kessler 2005) and build bridge between Posttraumatic growth model with the stages of grief, and grief intensity as a way of cognitive processing (Calhoun et al. 2010). Findings of the model, point out important associations among the variables.

Firstly, any pre-acceptance stages were not directly associated with Posttraumatic Growth. Pre-acceptance stages (as being event related factors) have only indirect relationships with Posttraumatic Growth via Core Bereavement or Acceptance. Therefore, results revealed that core bereavement might serve as a way to cognitively process the event. As in previous studies, event related factors are generally associated via cognitive processing (Senol-Durak and Ayvasik 2010a; 2010b). In the present study Core Bereavement Items was used testing the intensity of bereavement. Higher scores of this measure revealed that bereaved individuals were struggling with their loss experiences. As it was emphasized by Tedeschi and Calhoun (2008) struggling with grief leads to Posttraumatic Growth for some people.

In addition to Core Bereavement, Acceptance represented the second track of Posttraumatic growth. By means of acceptance, theoretically as being a positive stage of grief, it may serve as a mediator with another positive variable, Posttraumatic growth. Acceptance had a mediator role in between Denial/Bargaining and Posttraumatic Growth. These results are consistent with the regression results. Lower denial and higher bargaining promotes Acceptance, which further encourage posttraumatic growth. When considering lower denial and higher acceptance relationship, this might define as prerequisite condition for real Acceptance. These individuals do not engage in returning back and considering as the loss is real or not. Moreover when considering higher bargaining and higher acceptance relationship, here bargaining had a critical role it might lead either negative stages of grief (depression) or positive stages of grief (acceptance) as reported by Kübler-Ross and Kessler (2014). The model supported the

nature of bargaining includes both negative and positive sights. If individuals in the bargaining stage are helped to promote acceptance, they can afterwards demonstrate posttraumatic growth. When considering no connection between acceptance and depression/anger/core bereavement, this can also be evaluated as acceptance is a positive stage of grief and is not lived complicatedly. Since individuals accept the reality of loss, they do not return back to mourn more and more.

In our general model of posttraumatic growth we have emphasized that trauma is, to a great extent, defined by the degree of challenge to the assumptive world, and that posttraumatic growth develops, to a significant but not exclusive degree, out of an attempt to come to new understandings of a world that no longer fits people's ideas about themselves, how others behave, what their future will be, and the like. Some bereavement circumstances are more likely to challenge these assumptions than others, and some assumptive worlds may be more vulnerable to these challenges than others.

4.6. Limitations

Through the processes of planning, hypothesizing, data collecting, data analysing, and reporting of the current study, scientific and ethical rules were fully obeyed. Consequently, the results of the study were generally as expected and satisfactory. However, there were various limitations that are explained below.

All data of the present study was collected by self-report measures via both hardcopy. When considering the significant loss experiences as one of the most important part of individuals inner lives, qualitative data via interviews and/or interventions might be more beneficial to better understand the patterns of grieving process and posttraumatic growth. Also, data was collected with cross sectional design, therefore, change in a specific time could not be observed.

In the present study, the range of time since loss was extensive. Therefore, it is suggested to collect data from participants even after loss experiences for the further studies. These might clarify possible associations about denial stage.

In the current study, all of the participants were married (N = 501). Therefore, including single individuals in to the study design will be helpful for more representative samples.

Contrary to previous findings suddenness of the death was not significantly associated with posttraumatic growth and core bereavement. This might be related with the differences between sudden/unexpected or violent nature of death. Therefore, distinguishing these two variables from each other in the further studies might be more beneficial for understanding these relationships.

4.7. Clinical Implications

The current study is the first study, which systematically examined the Five Stages of Grief on the basis of Posttraumatic Growth. In this sense, findings of the current study revealed valuable results for the researchers and clinicians who work with bereaved individuals.

According to the results, several bereaved-related (age, gender, education, and living conditions) variables have important role in terms of posttraumatic growth, intensity of bereavement, and some stages of grief. When considering gender differences, bereaved women had higher levels of core bereavement, posttraumatic growth, and acceptance than men. Therefore, clinical interventions specific to bereaved men revealed a valuable need in the field.

Another important factor is living conditions. Bereaved individuals who live with a large family had higher levels of anger and depression. Especially, during interventions with these individuals, clinicians need to be aware of their needs based on their living conditions.

When considering education levels, bereaved individuals who were higher educated had lower levels of bereavement intensity, Anger, Bargaining, and Acceptance, therefore, these results in lower Posttraumatic Growth. These results make the clinical implications important for higher educated individuals.

In addition to demographical variables, closeness to the deceased factors have important role in terms of bereavement intensity. Because of individuals who had first-degree relative, had more bereavement intensity than individuals who had second-degree relative or other loss. Therefore, clinical interventions become more critical for individuals who have first-degree relative than individuals who have other loss experiences.

In addition to bereaved-related and loss-related variables, nature of the Five Stages of Grief can be evaluated as pre-acceptance and acceptance. Clinicians might be aware of that not all bereavement experiences resulted acceptance and growth. Also, intensity of bereavement, bargaining and depression stages have important roles in this process.

Considering developed model, the model offer two pathways to bereaved individuals and clinicians. If individuals are engaging in pre-acceptance stages more and more, it might be helpful to these individuals to promote their thoughts, emotions etc. as a way to processing more and more to promote growth. If individuals are engaging in less denial and high acceptance, promoting their acceptance patterns for posttraumatic growth might be crucial.

4.8. Further Studies

Examining both bereaved-related and loss related variables are encouraged to develop intervention program for specific need of bereaved person. Also, conducting qualitative studies will be helpful to clarify loss perception or to make sense in relation to outcomes.

Considering socio-demographic variables, the role of education was found significant in the present study. Additionally, role of gender was found significant for Acceptance stage, Posttraumatic Growth, and Core Bereavement. These bereaved related socio-demographic variables can also be examined for the further studies.

In the present study, factors of the quality of relationship with the deceased were examined. The supportiveness of the relationship was associated with depression stage.

However, relationship quality and interaction frequency were not associated with variables in the present study. Further studies are encouraged to explore these relationships between variables.

Results indicated that all stages except depression are not influenced by the quality of relationship between bereaved individuals and deceased person before the death. However, this explanation needs further investigations, which aims to explain these associations.

Studies also suggested examining the social support mechanisms of the bereaved individuals. Previous studies indicated that social support was a protective factor against complicated grief reactions (King and Werner 2011; Stroebe, Abakoumkin and Stroebe 2010).

Therefore, further studies with shorter duration of loss might examine those associations.

4.9. Conclusion

In the current study, Posttraumatic Growth experiences were examined through the Five Stages of Grief and Core Bereavement Phenomenon, together with several bereaved-related factors (e.g., age, gender, education, living conditions, and receiving professional help), loss-related factors (e.g., loss gender, suddenness of loss, time since loss, and closeness to the deceased), and the factors of quality of relationship with deceased (relationship quality, interaction frequency, and supportiveness of the relationship with deceased) in the sample of bereaved individuals. The study further introduced some important factors that influence the associations of posttraumatic growth with some demographical variables (e.g., gender, education, living conditions, and closeness to the deceased), supportiveness of the relationship with deceased, five stages of grief, and bereavement intensity.

In consideration of these results, associations of the five stages of grief and intensity of bereavement with posttraumatic growth were tested with a model. In this direction, the five stages of grief model was tested empirically for the first time. The

model introduced that the nature of the five stages of grief can be evaluated as pre-acceptance and acceptance stages. While acceptance stage directly associated with posttraumatic growth, pre-acceptance stages indirectly (by the way of core bereavement) associated. Also, bargaining stage takes a junction role between positive and negative directions in grieving process. Overall, findings of the present study introduced both the linear and overlapping natures of the five stages of grief.

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APPENDICES

Appendix A: Demographic Information Form

Doğum Tarihiniz: ...../...../..... (Gün/Ay/ Yıl)

Cinsiyetiniz: Kadın ( ) Erkek ( )

Medeni durumunuz: Bekar ( ) Evli ( ) Boşanmış ( ) Dul ( )

**Evli iseniz nasıl evlendiniz?:* Görücü usulü ( ) Tanışarak ( )

**Kaç yıldır berabersiniz?* :……..

**Varsa çocuklarınız*: 1 ( ) 2 ( ) 3 ( ) 4 ( ) 5 ve daha fazlası ( )

Ailenizin aylık toplam geliri? :.....(TL)

Şu an nasıl ikamet ediyorsunuz?:
Tek Başına ( ) Çekirdek Aile ile ( ) Kalabalık Aile ile( )

Mesleğiniz:

Memur ( )	Öğretmen/ÖğretimÜyesi ( )	
İşçi ( )	Mimar/Mühendis ( )	Yönetici ( )
Ev Hanımı ( )		Çiftçi ( )
Sağlık Personeli ( )	Esnaf ( )	Güvenlik Personeli ( )
Serbest meslek ( )	Tekniker/Teknisyen ( )	İşsiz ( )
Öğrenci ( )	Emekli()	Diğer:……

Halen çalışıyor musunuz? Evet ( ) Hayır ( ) Hiç Çalışmadım ( )

Eğitim durumunuz:

Okur-yazar ( ) İlkokul mezunu ( ) Ortaokul mezunu ( ) Lise mezunu ( ) Yüksekokul mezunu ( ) Üniversite mezunu ( ) Yüksek lisans/Doktora mezunu ( )

HERKES HAYATINDA KAYIPLAR YAŞAYABİLİR.

Aşağıdaki sorular sizin kayıp yaşantılarınızla ilgilidir.

Lütfen, **ŞU ANA KADAR** kaybettiğiniz kişileri (Birden fazla seçenek işaretleyebilirsiniz).

- o Anne
- o Baba
- o Kardeş
- o Eş
- o Çocuk
- o Dede
- o Anneanne / Babaanne
- o Amca/Dayı
- o Hala/Teyze
- o Sevdiğiniz bir kişi
- o Duygusal ilişkiniz olan bir kişi
- o Arkadaş
- o Diğer (lütfen belirtiniz) :……

Lütfen, **SON BİR YIL İÇİNDE varsa** kaybettiğiniz kişileri (eğer sizin bir kaybınız yoksa **eşinizin kaybettiği kişileri**) işaretleyiniz. (Birden fazla seçenek işaretleyebilirsiniz).

- o Anne
- o Baba
- o Kardeş
- o Eş
- o Çocuk
- o Dede
- o Anneanne / Babaanne
- o Amca/Dayı
- o Hala/Teyze
- o Sevdiğiniz bir kişi
- o Duygusal ilişkiniz olan bir kişi
- o Arkadaş
- o Diğer (lütfen belirtiniz) :……

Lütfen kaybedilen kişiler arasında kaybı sizi **EN ÇOK** etkileyen kişiyi seçiniz.

- o Anne
- o Baba
- o Kardeş
- o Eş
- o Çocuk
- o Dede
- o Anneanne / Babaanne
- o Amca/Dayı
- o Hala/Teyze
- o Sevdiğiniz bir kişi
- o Duygusal ilişkiniz olan bir kişi
- o Arkadaş
- o Diğer (lütfen belirtiniz) :……

Kaybettiğiniz kişinin cinsiyeti? Erkek: ( ) Kadın: ( )

Kaybettiğiniz kişinin vefat ettiği yaş? :……..

Yakınınızı ne kadar süre önce (kaç yıl, kaç ay önce) kaybettiniz.
Net süreyi bilmiyorsanız yaklaşık olarak yıl değeri giriniz.

Yıl: …… Ay: …… (Ör: Yıl:….**3**…. Ay:……**5**…..)

Yakınınızı kaybetme nedeniniz neydi?

- Ani hastalık (kanser, beyin kanaması vs.)
- Akut (birden bire) rahatsızlık (kalpkrizi, zehirlenme vb.)
- Kronik Hastalık (Diyabet, Alzeimer/Demans, Tansiyon vb.)
- Doğum öncesi/sırası komplikasyonlar
- Trafik kazası
- Diğer kazalar (iş/ev kazları, boğulma vb.)
- Doğal afetler (deprem, sel, çığ vb.)
- İntihar
- Biri tarafından öldürülme (cinayet, terör, saldırı, soygun vb.)
- Diğer (Lütfen detaylı olarak belirtiniz)

Kaybınız ani ve beklenmedik bir şekilde mi gerçekleşti? Evet ( ) Hayır ( )

Kaybınızdan sonra bir psikiyatrist ya da bir psikologdan profesyonel bir yardım aldınız mı?

- Yardım almadım
- Psikoterapi
- Psikiyatrik yardım/ İlaç tedavisi
- Psikoterapi + ilaç tedavisi

Lütfen bu bölümü geçen yıllar içinde kaybından **en çok etkilendiğiniz kişiyi düşünerek** doldurunuz (bir önceki soruda işaretlediğiniz kişiyi düşünerek).

Kaybettiğiniz kişiyle ilişkinizin kalitesi, kaybınızdan önce nasıldı?

	Çok kötü					Çok iyi
İlişkinizin kalitesi?	1 ( )	2( )	3( )	4( )	5( )	6( )

Kaybınızdan önce, onunla ne sıklıkta etkileşim halindeydiniz?

	Hiç					Çok Sık
Etkileşim düzeyiniz?	1 ( )	2( )	3( )	4( )	5( )	6( )

Kaybınızdan önce, onunla olan ilişkinizde birbirinize ne derece destek olurdunuz? Kaybınızdan önce, ilişkiniz ne derece destekleyiciydi?

	Hiç destekleyici					Tamamen değil destekleyici
İlişkinizin destekleyiciliği	1 ( )	2( )	3( )	4( )	5( )	6( )

Kaybınızı ne dereceye kadar kontrol edilemez olarak değerlendirirsiniz? (Yaşanılan kayıpne derece önlenebilirdi?)

Hiç Kontrol Edilemez					Tamamen Kontrol Edilebilir
1 ( )	2( )	3( )	4( )	5( )	6( )

Appendix B: Posttraumatic Growt Inventory - X Version

Aşağıda yer alan her cümleyi dikkatle okuyunuz. Yukarıdaki sorularda bahsettiğiniz **sizin ya da eşinizin kaybından sonra**, kayba bağlı olarak ne derece değiştiğinizi, aşağıdaki ölçekte uygun gelen seçenekle işaretleyiniz.

Not: Eğer bir kaybınız yoksa soruları genel yaşam durumunuza göre değerlendiriniz.

Examples of Items

1.Hayatımda neyin önemli olduğu ile ilgili önceliklerimi değiştirdim.

2.Hayatımın değerini daha çok takdir ediyorum.

9. Duygularımı ifade etmeye daha istekliyim.

17. Değişmesi gereken şeyleri değiştirmeyi denemeye daha istekliyim.

29. Dünya ile aramdaki uyum daha anlamlı gelmeye başladı.

Appendix C: Core Bereavement Inventory

Aşağıdaki sorular bir süre önce **sizin ya da eşinizin** kaybetmiş olduğunuz sevdiğiniz kişiyle alakalı olarak yaşadıklarınız ve hissettikleriniz hakkındadır. Kaybettiğiniz kişi sorularda **"O"** ile belirtilmiştir.

Examples of Items

1. O'nun vefatına ilişkin olaylarla ilgili hayaller zihninizde canlanıyor mu?

7. O'nun tekrar yanınızda bulunduğunu ya da tekrar bir araya geldiğinizi düşündüğünüz oluyor mu?

12.Herhangi bir sebepten dolayı O'nun artık geri gelmeyeceği gerçeği ile yüzleştiğinizde acı çekiyor musunuz?

17. Fotoğraf, müzik, bazı yerler ve durumlar gibi O'nu hatırlatan şeyler hayattan yeterince zevk alamamanıza neden oluyor mu?

Appendix D: The Five Stages of Grief Scale

Yaşanan bir kaybın ardından, kaybı yaşayan kişiler tarafından düşünülen ve söylenen en yaygın ifadeler aşağıda örneklendirilmiştir. Sizden bu ifadelerin **ŞU AN** size ne kadar uygun olduğunu derecelendirmeniz istenmektedir.

Examples of Items

1. ‘Hayır, o ölmedi, ölemez.' ' Gerçekten ölmüş olmaz, bu duyduğum/yaşadığım' doğru değil.' 'Sanki şimdi şu kapıdan içeri girecekmiş gibi.'

2. ‘İşte şimdi bittim ben. Hayat benim için anlamsızlaştı. Şu an hiç bir şey hissetmiyorum.'

7. 'O geri gelsin onu asla ve asla üzmeyeceğim. Üzerine titreyeceğim. Bunu garanti ediyorum.'

10. 'Onsuz yasam çok anlamsız.' 'Yaşamdan tat alamıyorum'. 'Onu bana hatırlatan her şey (fotoğraf, film, müzik vs.) hayattan zevk almamı engelliyor.' ' Tüm ümidimi kaybettim.'

14. 'Hayat devam ediyor ve ben daha iyiyim.' 'Eskisine göre kendimi daha güçlü hissediyorum.'

17. 'Artık onu anımsatan şeylerden kaçınmıyorum', ' 'Onu artık daha güzel anımsıyorum'. 'Onu, kendimi ve diğerlerini affettim.'

Appendix E: Informed Consent Form

Abant İzzet Baysal Üniversitesi Sosyal Bilimler Enstitüsü Klinik Psikoloji Anabilim Dalı'nda Yüksek Lisans Tezi olarak Doç. Dr. Emre Şenol-Durak danışmanlığında yürütülmekte olan "Kayıp Yaşantısı Olan Bireylerde Travma Sonrası Gelişim ve Temel Yas Unsurları: Yasın Beş Aşamasının İncelenmesi" adlı tez çalışmasına davet edilmektesiniz.

Karar vermeden önce çalışmanın neden ve nasıl yapılacağını anlamanız oldukça önemlidir. Bu nedenle lütfen biraz zaman ayırarak aşağıdaki bilgileri dikkatlice okuyunuz ve isterseniz başkalarıyla tartışınız. Açık olmayan bir bölüm varsa veya daha ayrıntılı bir bilgiye ihtiyaç duyarsanız lütfen arayınız.

Araştırmaya katılmayı kabul eden kişilere yaşadıkları kaybın doğası, duygusal başa çıkma, sosyal destek ve genel sağlıkla ilgili sorular yöneltilecektir. Toplam katılımcı sayının 500 olması beklenmektedir. Araştırma anketlerine yanıt vermek ortalama olarak 20 dk. sürmektedir.

Çalışmaya katılmak tamamen **GÖNÜLLÜK** ve **GİZLİLİK** esasına bağlıdır. Çalışmaya katılmamakta veya herhangi bir zamanda herhangi bir nedenle ya da neden göstermeksizin araştırmadan çekilme durumunda size yönelik olumsuz hiçbir sonuç bulunmamaktadır. Çalışmaya vermiş olduğunuz **cevaplar ve kişisel bilgiler** sadece araştırma amacıyla kullanılacaktır.

Bu çalışmaya katılımınızdan dolayı hiçbir fiziksel, psikolojik, sosyal, ekonomik vb. risk ya da rahatsızlık yaşamayacağınız öngörülmektedir. Ancak, katılım sırasında sorulardan veya başka bir nedenden dolayı kendinizi kötü hissederseniz çalışmayı yarıda bırakma hakkına sahipsiniz. Bunun yanı sıra, bu çalışmanın size verdiği rahatsızlığı dilerseniz konuşabiliriz.

Bu çalışma sonunda elde edilen bilgiler sadece bilimsel amaçla kullanılacak ve hiçbir kimlik bilginiz paylaşılmayacaktır. Eğer siz de bu çalışmanın sonuçları hakkında bilgilendirilmek isterseniz bilgiler sizinle de paylaşılacaktır.

Çalışma hakkında her türlü bilgi ve sorularınızı Abant İzzet Baysal Üniversitesi Araştırma Görevlisi ***Samet Baş'*** a iletebilirsiniz.

Çalışmaya vermiş olduğunuz destekten dolayı çok teşekkür ederiz.

Not: Bu araştırma Abant İzzet Baysal Üniversitesi İnsan Araştırmaları Etik Kurulu tarafından onaylanmıştır.