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EXPLORING THE MEDIATING ROLE OF RUMINATION BETWEEN GUILT AND PROLONGED GRIEF SYMPTOMS

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EXPLORING THE MEDIATING ROLE OF RUMINATION BETWEEN GUILT AND PROLONGED GRIEF SYMPTOMS

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

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ABSTRACT

EXPLORING THE MEDIATING ROLE OF RUMINATION BETWEEN GUILT AND PROLONGED GRIEF SYMPTOMS

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Master of Science, Clinical Psychology

Supervisor: Assoc. Prof. Dr. Emrah Keser

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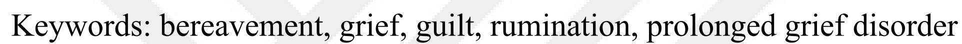
This study aims to investigate the experiences of individuals who have lost a first-degree family member due to death, focusing on psychological factors within the framework of the Cognitive Behavioral Perspective. Specifically, the study examines the mechanism of guilt feelings and how it is related to prolonged grief symptoms, with rumination serving as the mediating factor.

A total of 273 adults, aged 18 to 70 years, participated in the study. Eligibility criteria included experiencing the death of a first-degree family member (mother, father, sibling, spouse, or child) at least six months but no more than five years prior to

participation. Data were collected using the Prolonged Grief Scale (PG-13), the Bereavement Guilt Scale, and the Utrecht Grief Rumination Scale (UGRS).

Correlation and mediation analyses were performed to explore the relationships between these variables. The findings revealed that rumination mediates the relationship between guilt and PG symptoms. In other words, the findings suggest that heightened feelings of guilt are significantly associated with prolonged grief symptoms, primarily through their effect on ruminative thinking. The findings and their implications are discussed in the context of the existing literature.



Keywords: bereavement, grief, guilt, rumination, prolonged grief disorder

ÖZET

SUÇLULUK VE UZAMIŞ YAS SEMPTOMLARI ARASINDAKİ İLİŞKİDE RUMİNASYONUN ARACI ROLÜNÜN İNCELENMESİ

Amine Serra Balcı

M.Sc. Klinik Psikoloji

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January, 2025

Bu çalışma, birinci derece bir aile üyesini kaybeden bireylerin deneyimlerini, psikolojik faktörler açısından ve Bilişsel Davranışçı Yaklaşım çerçevesinde incelemeyi amaçlamaktadır. Özellikle, suçluluk duygularının mekanizması ve bu duyguların uzamış yas semptomları ile ilişkisi incelenmiş, ruminasyon bu ilişkiye aracılık eden bir faktör olarak ele alınmıştır.

Çalışmaya, yaşları 18 ile 70 arasında değişen toplam 273 yetişkin katılmıştır. Katılım kriterleri, birinci derece bir aile üyesinin (anne, baba, kardeş, eş veya çocuk) kaybının en az altı ay, en fazla beş yıl önce gerçekleşmiş olmasını içermektedir. Veriler, Uzamış Yas Ölçeği (PG-13), Suçluluk ve Yas Ölçeği ile Utrecht Ruminasyon Ölçeği (UGRS) kullanılarak toplanmıştır.

Değişkenler arasındaki ilişkileri incelemek için korelasyon ve aracılık analizleri yapılmıştır. Bulgular, suçluluk ve uzamış yas semptomları arasındaki ilişkinin ruminasyon aracılığıyla gerçekleştiğini ortaya koymuştur. Başka bir deyişle, suçluluk duygularındaki artışın, özellikle ruminatif düşünme üzerindeki etkisi yoluyla, uzun süreli yas belirtileriyle önemli ölçüde ilişkili olduğunu göstermektedir. Bulgular ve sonuçlar mevcut literatürle ilişkilendirilerek tartışılmıştır.

Anahtar Kelimeler: yas, kayıp, suçluluk, ruminasyon, uzamış yas bozukluğu

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To my lovely Cat-family…

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LIST OF ABBREVIATIONS

b	Standardized beta values
SE	Standard error
BCa CI	Confidence Intervals based on 5000 bootstrap samples
PG-13	Prolonged Grief Scale
BGS	Bereavement Guilt Scale
UGRS	Utrecht Grief Rumination Scale

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CHAPTER 1

INTRODUCTION

The loss of a loved one is among the most devastating experiences in life. Following such a traumatic event, individuals may encounter various cognitive, emotional, and behavioral symptoms that disrupt their social and occupational functioning (e.g., Bonanno & Kaltman, 2001; Prigerson et al., 2009). The debilitating effects of grief symptoms, which initially destroy the individuals' overall functioning and overwhelm their emotional states, gradually diminish and allow step-by-step regain of lost functionality. Individuals restore their thinking systems, the ability to concentrate, and the habit of continuing their daily routines with a new purpose (Stroebe & Schut, 2010). In this way, the cloud of grief dissipates, and bereaved individuals re-engage with their social networks over time, finding solace in the support and understanding of their immediate environment. However, the intense grief reactions do not diminish over time for some people. Despite the passage of time, some people's experiences of grief can have substantial and lasting effects on their cognitive, behavioral, emotional, and social functioning (Prigerson et al., 1997). Those individuals develop symptoms like preoccupation with the deceased, intense emotional pain, yearning, loneliness, disbelief about the death, feelings of meaninglessness, emotional numbness, and avoidance of reminders, which are termed as Prolonged Grief Disorder (PGD, Prigerson et al., 2009).

1.1 Prolonged Grief Disorder

Prolonged Grief Disorder (PGD) has been newly added as mental health diagnosis in DSM-5 (APA, 2022) and ICD-11 (WHO, 2018), is characterized by an intense and persistent longing for the deceased or by a focus and preoccupation with memories and thoughts about that person (Prigerson et al., 2021). Symptoms associated with PGD include yearning for deceased person, profound emotional pain or distress and difficulty re-

engaging with life such that they cannot go back into their usual routine activities like relationships maintenance or finding meaning without those people who are no longer available physically (Prigerson et al., 2021).

When the grieving process deviates from its normal course and becomes abnormal, it can have serious and long-lasting negative effects on an individual's mental, physical, and social well-being including major depression, anxiety, and suicidal thoughts (Boelen & Prigerson, 2007; Latham & Prigerson, 2004); higher risk of cardiovascular issues, cancer, and substance abuse (Prigerson et al., 1997; Prigerson et al., 2008); disruption of daily life (Boelen & Prigerson, 2007).

Extensive research over many years has been conducted empirically to understand the mechanism underlying the development of prolonged grief symptomatology. Many risk factors have been suggested and identified over this time through these studies investigating what might put someone at higher risk for experiencing more severe symptoms over an extended period following bereavement. Guilt has been emphasized as prominent risk factor in predicting prolonged grief symptoms and their severity has been demonstrated in many studies (Eisma et al., 2013; Keser et al., 2022; LeBlanc et al., 2019; Li et al., 2014). In addition to its prominence in the study of risk factors, guilt also constitutes important role in unhealthy grief processing according to many theoretical models such as Psychoanalytic Theory, Cognitive-Behavioral Theory and Attachment Theory. According to Psychoanalytic Theory, Freud (1917/1957) described grief as a state of deep sorrow, loss of interest, and inability to form new attachments experienced following the loss of a loved one. In the normal grief process, when a person acknowledges the physical absence of the deceased, libidinal energy is withdrawn from the lost object and invested in other objects (cathexis), which is necessary for the completion of the grief process. In the case of melancholia, which corresponds to prolonged grief, the person cannot transfer libidinal energy to another object. Instead, they identify with their lost loved one, making them a part of their self. As a result, the libido is drawn into the ego rather than being invested in another object. The ambivalent feelings toward the lost person are then directed inward, manifesting as extreme levels of guilt and self-blame, low self-worth, ambivalence and self-reproach. On the other hand, Cognitive-

Behavioral Theory (Boelen et al., 2006) suggests that negative beliefs and misinterpretations perpetuate symptoms of prolonged grief by increasing emotional distress related to loss, leading individuals to adopt avoidance strategies and fail to integrate autobiographical memory, therefore leading to prolonged grief. These cognitions not only exacerbate symptoms of prolonged grief but also trigger various emotional reactions. For instance, self-blaming cognitions (e.g., "He died because of my fault") are associated with higher emotional distress (Boelen et al., 2003; Boelen & Lensvelt-Mulders, 2005) such as feelings of guilt (Stroebe et al., 2014). Therefore, they are crucial in understanding prolonged grief and its treatment (Boelen & Lenferink, 2019; Skritskaya et al., 2020). Finally, Attachment Theory provides insight into the relationship between grief and guilt (Shear et al., 2007). It is suggested that survivor guilt is particularly activated during the grieving process and may cause the bereaved person to avoid pleasurable activities and refrain from forming satisfying relationships. This occurs because the surviving individual feels undeserving of happiness and fears that the joy they experience from enjoying life will intensify their feelings of guilt. Overall, guilt emerges as a key variable that requires specific investigation, as highlighted by the current study.

1.2 Guilt in bereavement

People who lost their loved ones often experience guilt feelings (Adolfsson & Larsson, 2004; Camacho et al., 2020; Smith et al., 2011). This moral emotion that emerges after loss can manifest itself in various ways in grieving individuals (Camacho et al., 2020). For example, the grieving person may have thoughts of causing the death or being unable to prevent it. They may also criticize themselves for actions they took or failed to take in their past relationship with the deceased, or they may develop negative thoughts about survivor guilt and they may feel guilty for having positive feelings during grief (Shear et al., 2007; Miles & Demi, 1983).

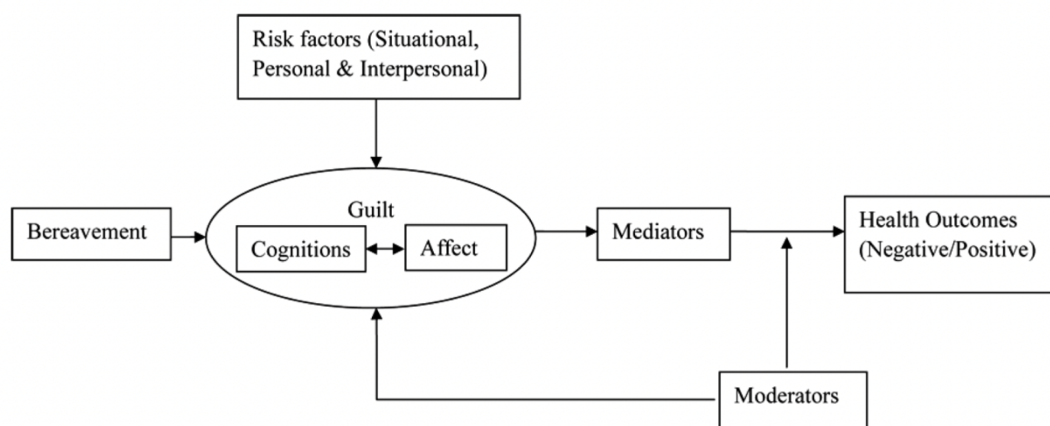
Guilt has been conceptualized as a multi-dimensional construct that involves both cognitive and emotional components (Li et al., 2014, p.166). A general definition defines grief-related guilt as "a remorseful emotional reaction in grieving, with the recognition of having failed to live up to one's own internal standards and

expectations in relationship to the deceased and/or the death" (Li et al., 2014, p.166). The complexity of this emotion is further characterized by its various aspects and subcomponents including feelings of responsibility for the death (e.g., “X might still be alive if I had done a better job.”), hurting the deceased (e.g., “I treated X with bad attitude.”), indebtedness guilt (e.g., “I did not spend enough time with X”), survivor guilt (e.g., “I think I should not be happy anymore since X has passed away.”) and guilt emphasize the multifaceted nature of grief-related guilt (Li et al., 2015).

Guilt as a risk factor has been found to be consistently associated with more severe grief symptoms in cross-sectional (LeBlanc et al., 2019), longitudinal (Field & Bonanno, 2001; Holland et al., 2013; Li, Tendeiro, & Stroebe, 2018; Stroebe et al., 2014; Torges, Stewart, & Nolen-Hoeksema, 2008). In this regard particularly maladaptive guilt in context — which means one is blaming themselves for things over which they had no control whatsoever — might obstruct grieving process (Camacho et al., 2020). The reasons why this kind of guilt may arise include an individual's failure to prevent the death, not showing enough interest in the deceased person, and enjoying life after their passing (Camacho et al., 2020). Additionally, two primary components have been found regarding structure behind bereavement-related guilt: self-blame and regret (Stroebe et al., 2014). Self-blame refers feeling responsible for another’s death (Davis et al., 1996; Weinberg, 1994) whereas regret entails negative emotion accompanying belief that one could have acted differently leading to more positive outcome either in relationship with deceased individual or events surrounding his/her death (Stroebe et al., 2014).

While etiological explanations have been provided for guilt, more scientific research is needed to specifically examine how guilt relates to grief disorder and investigate the mechanisms behind its negative effects through coping strategies.

Figure 1. *The structural model of guilt in bereavement*



Note. Adapted from "Guilt in Bereavement: A Review and Conceptual Framework" by J. Li, M. Stroebe, C. L. Chan and A. Y. M. Chow, 2014, *Death Studies*, 0, p. 5.

Li et al. (2014) developed a structural model of guilt in bereavement to offer a deeper understanding of these mechanisms. They first defined guilt in bereavement as a construct that arises from a discrepancy between an individual's internal standards and expectations for their behavior toward the deceased (e.g., what they would have done) and their actual behavior (e.g., what they did). This discrepancy leads to uncomfortable emotions (e.g., regret or remorse), which in turn shape and sustain guilt-related cognitions (e.g., self-blame). They also emphasized that the relationship between these two components (i.e., cognitive and affective) remains dynamic and bidirectional, continually interacting with each other. They then recommended exploring potential mediators and moderators between guilt and negative health outcomes, PGD, to better understand detrimental effects of guilt.

In light of this model we proposed that grief rumination could be a plausible mediator in the relationship between guilt and Prolonged Grief (PG) symptoms. As a coping mechanism, rumination tends to exacerbate maladaptive affect by reinforcing maladaptive cognitions about guilt. For example, individuals experiencing bereavement guilt may focus on “what if” scenarios or blame themselves for perceived shortcomings in preventing the death of their loved one. Ruminative processing of these maladaptive thoughts may function as a mechanism that sustains

suffering in the cycle between guilt and prolonged grief. Thus, by focusing on rumination as a mediator, we aim to respond to Li and colleagues' (2014) call to explore the underlying mechanisms linking guilt to PGD.

1.3 Rumination in Bereavement

Rumination is broadly defined as repeatedly thinking about why things happen or happened along with what caused them and their implications towards oneself (Michael et al., 2007). Rumination following loss entails perseverating thoughts about the deceased person, how they died, and emotional pain resulting from this occurrence (Boelen & van den Hout, 2008; Eisma et al., 2013; van der Houwen et al., 2010). It often focuses on feelings like loneliness, yearning anger or guilt (Li et al., 2014; Nolen-Hoeksema, 2001) which become more accessible and salient due this maladaptive way thinking thereby contributing to the onset and persistence of prolonged grief. The elements that make up grief rumination, which has been widely studied in the field of grief, are listed as follows: counterfactual thinking, (e.g., "What if I had done something different to prevent him/her from dying?"), unfairness of the loss (e.g., "Why me?" or "Why not someone else?), considering what the loss means for oneself (e.g., "I try to make sense of what it means for me"), emotional reactions towards the loss (e.g., "Do I feel like I should be feeling?"), and appraising others' reactions to one's own grief. (e.g., "I think about how I want others to react to my loss") (Eisma et al., 2014).

Grief rumination differs from depression rumination in several ways. While grief rumination specifically focuses on causes and consequences of loss, depressive rumination focuses on one's depressive symptoms or general life circumstances (Eisma et al., 2013). There are two reasons why grief rumination is more common after experiencing loss compared with depressive rumination (Eisma et al., 2014). First, the most important inconsistency in grief is that loved one is no longer alive. Secondly, if people keep reflecting upon negative emotions they experience during bereavement, then there will be many alternative affective states including yearning, guilt, anger or loneliness which can serve substitutive targets for their attention

instead of depressive feelings arising from other circumstances (Li et al., 2014; Nolen-Hoeksema, 2001).

The literature provides multiple mechanisms by which grief rumination contributes to negative mental health outcomes. There are two main theories of rumination: the Response Styles Theory (RST) and the Rumination as Avoidance Hypothesis (RAH) (RST: Nolen-Hoeksema, 2001; RAH: Stroebe et al., 2007). According to the Response Styles Theory (RST) (Nolen-Hoeksema, 2001) proposed that rumination is a maladaptive coping strategy where individuals continuously concentrate on their loss-related feelings. This ongoing focus worsens distress through raising negative thoughts, impeding problem-solving abilities, discouraging engagement in activities that might help them feel better and reducing social support. On the other hand, chronic rumination serves as a form of cognitive avoidance underlined Rumination as Avoidance Hypothesis (RAH) (Stroebe et al., 2007). People may reflect over past events so as not to face up to what has happened or accept its consequences for fear of feeling more pain than they can bear. Such strategy prevents individuals from coming terms with their loss leading complicated grieving process characterized by poor integration of personal memories into self-schema and failure to achieve closure around key issues related loss event itself.

In the following section, the relationship between guilt and rumination in grief is discussed contextually and a model is proposed.

1.4 The Interplay Between Guilt and Rumination in Grief

Guilt can lead to preoccupation with loss and trigger negative thoughts about it. This is because guilt in bereavement manifests itself responsible for someone's passing away (e.g., "If only I had not done what I did, the outcome would have been different") or failing to fulfill duties towards them when alive or acting contrary to personal values concerning the deceased or death itself (Fleming & Robinson, 2001; Kubany & Watson, 2003; Miles & Demi, 1983; Shear et al., 2007). Those bereaved individuals with guilt may retrospectively review events and imagine scenarios in which they have corrected their mistakes. Guilt can act as a barrier in this process,

hindering bereaved individuals from making progress in coping with their loss. This is consistent with studies in autobiographical memory and identity literature in which it was proposed that guilt makes it difficult to integrate what happened and accept it as part of their life story or even see any meaning in the event at all and process and store it in autobiographical memory (Libby & Eibach, 2002; Wilson & Ross, 2010). We also know that the content of rumination involves the continued or repetitive processing of negative affective material, often centering on core negative affects (McLaughlin et al., 2007; Nolen-Hoeksema, Wisco, & Lyubomirsky, 2008). Therefore, it is expected that individuals who cannot process the loss due to guilt and cannot make sense of it in their own world are more likely to engage in a repetitive thinking style that they will use for this accounting.

There are a few studies showing that rumination has a mediating role between risk factors and health outcomes. A study in depression literature indicated that rumination has a mediator role between various risk factors (such as gender, additional stress, low social support, and initial depressive reactions) and depression (Nolen-Hoeksema, Parker, & Larson, 1994). Other study conducted in grief literature found that rumination mediated the relationship between risk factors such as expectedness of the death, attachment style and grief (van der Houwen et al., 2010). However, there is still a lack of research using rumination to understand the mechanism of grief-related guilt (Li et al., 2014; Stroebe et al., 2014; van der Houwen et al., 2010).

Besides the fact that the relationship between rumination and guilt may be strong, the second question to be asked is for what reasons the rumination would play a mediating role. There could be two answers to this question. One could be a response to the heightened negative emotions caused by guilt; second could be as a mechanism to suppress and escape from guilt by diverting attention from the immediate emotional pain associated with it. We can explain these two possibilities with the help of the two theories mentioned earlier: Rumination as Avoidance Hypothesis (RAH) and The Response Styles Theory (RST).

RAH proposes that one key mechanism linking guilt and rumination is the use of rumination as a cognitive avoidance strategy (Eisma et al., 2013; Eisma & Stroebe,

2017). Instead of confronting the emotional pain associated with the loss, individuals engage in rumination to avoid accepting the permanence of the separation (Boelen et al., 2006). That is, in order to avoid deeper emotional processing, in this case, fulfilled with guilt, individuals may ruminate more on their feelings, on their own shortcomings and the circumstances of the death to distract from the reality of the loss, thus indirectly avoiding deeper emotional processing. This avoidance, facilitated by rumination, can hinder the acceptance of the loss (Boelen et al., 2006) and the processing of guilt. This can trap individuals in a cycle of prolonged distress, increasing their vulnerability to developing grief disorder. They remain "stuck" in their grief, unable to move towards healing and recovery.

RST (Nolen-Hoeksema, 2001) posits that rumination prolongs distress by keeping the focus locked on negative thoughts and feelings related to the loss. In the context of guilt, this theory suggests that dwelling on self-blame and regrets amplifies those feelings, making it more difficult to progress through the grieving process. By maintaining a focus on negative thoughts, individuals hinder problem-solving and discourage engagement in activities that could facilitate recovery. For instance, a bereaved individual experiencing guilt over unresolved conflicts might ruminate on counterfactual scenarios, imagining alternative pasts where those conflicts didn't exist.

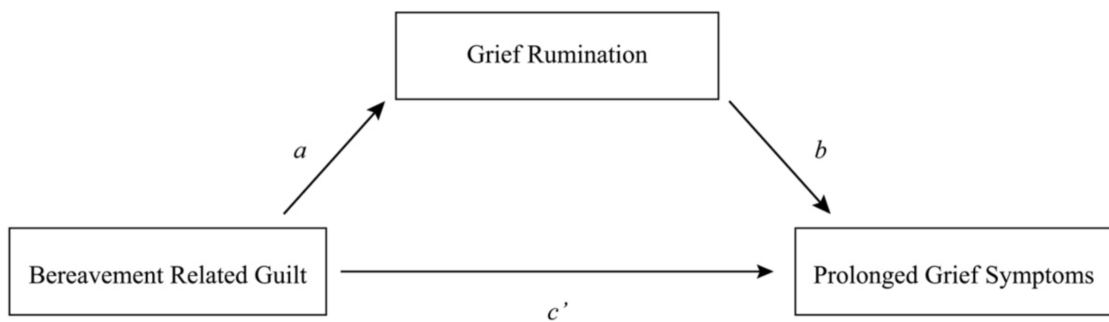
1.5 Current Study and Hypotheses

While existing research on guilt and rumination in bereavement provides valuable insights, it often lacks clarity on the pathways through which these factors exert their effects. By concurrently exploring risk factors, outcomes, and coping mechanisms, this research aims to provide a comprehensive understanding of their interplay in bereavement outcomes.

We will investigate the mediator effect of rumination was examined between guilt and PG symptoms (See Figure 2 for Proposed Model), as suggested by Li and colleagues (2014). Based on the objective of the present study, the following hypotheses will be tested:

1. There would be a significant relationship between bereavement related guilt and prolonged grief symptoms.
2. Rumination will mediate the relationship between guilt and PG symptoms. In other words, as levels of death-related guilt increase, individuals will be more likely to engage in a ruminative thinking style, leading to an increase in PG symptoms.

Figure 2. *Proposed Model Figure*



Addressing this gap and understanding the intermediate mechanisms in grief is crucial not only for theoretical advancements but also for practical applications. Specifically, identifying cognitive processes influenced by risk factors can help pinpoint targets for intervention and enhance therapeutic approaches. To the best of our knowledge, this is the very first study investigating dynamics between guilt and rumination.

CHAPTER 2

METHOD

2.1 Participants

A total of 273 adults ranging in age from 18 to 70 years (*M* = 44.92, *SD* = 11.73). According to the updated ICD-11 criteria (2018), the diagnostic timeframe for Prolonged Grief Disorder requires at least six months since the loss. Therefore, participants who had lost a first-degree family member to death at least six months and at most five years prior were included in the study. Announcements were made on social media platforms (e.g., Facebook, Instagram) to reach potential participants. Through this method, 242 females (88%) and 31 males (12%) were recruited. The mean scores, standard deviations, minimum and maximum scores and percentages regarding the demographic variables were provided in Table 1.

Table 1. *Means, Standard Deviations, Minimum and Maximum Values of Demographic Variables of Bereaved Individuals (N = 273)*

Variables	*N*	%	*M*	*SD*	*Min*	*Max*
Age	273	-	44.92	11.73	18	67
Education Level	273		4.89	1.73	1	9
1- Primary School	8	2.9				
2- Secondary School	8	2.9				
3- High School	46	16.8				
4- Undergraduate	21	7.7				
5- Graduate	136	49.8				
6- Postgraduate	54	19.7				
SES	273		1.95	.96	0	4
1- Low	30	11				
2- Belove Average	31	11.4				

3- Average	145	53.1				
4- Above Average	56	20.5				
5- High	11	4				
Marital Status	273					
1- Single	125	45.8				
2- Couple	144	52.7				
3- Other (e.g., divorce in process)	4	1.5				
Kinship	272					
1- Mother	80	29.3				
2- Father	99	36.3				
3- Sibling	46	16.8				
4- Child	14	5.1				
5- Spouse	33	12.1				
Age of deceased	273		59.83	19.43	0	94
Time since loss (month)	273		41.95	42.94	6	361
Cause of death						
1- Natural Anticipated Loss	129	47.3				
2- Natural Sudden Loss	118	43.2				
3- Violent Death	18	6.6				

2.2 Measurement Tools

In this study, a Demographic Information Form containing questions prepared by the researchers to describe the demographic information of the participants, Prolonged Grief Scale (PG-13) (Appendix D), Bereavement Guilt Scale (Appendix E), and Utrecht Grief Rumination Scale (UGRS) (Appendix F) was used. These standardized

measurement tools are frequently used in many countries of the world, especially in Europe and the USA, in loss and grief research. No information has been reported that using these measurement tools had any adverse effects on participants.

2.2.1 Prolonged Grief Scale (PG-13)

PG-13, developed by Prigerson et al. (2009), is a 5-point Likert-type measurement tool used in 11 items of the 13-item scale to evaluate the symptoms of prolonged grief. The remaining two items can be answered as yes or no, questioning the duration of symptoms and deterioration in social-occupational functionality. Higher scores on the scale reflect greater severity of prolonged grief symptoms. The original scale demonstrated an internal consistency of 0.90. The Turkish version of the PG-13, conducted by Işıklı et al. (2020), showed an internal consistency of 0.90. The current study's Cronbach alpha was found to be 0.93 within this study.

2.2.2 Bereavement Guilt Scale (BGS)

Developed by Li et al. (2017), BGS is a 14-item, 5-point Likert-type measurement tool that evaluates loss-related guilt and guilt-related cognitions. Higher scores on the scale reflect greater level of guilt feeling. The scale consists of five subscales: responsibility for death, hurting the deceased, survivor guilt, indebtedness guilt, and guilt feeling. The sub-dimensions of the original scale demonstrated internal consistencies ranging from 0.74 to 0.92. The overall scale showed an internal consistency of 0.92. Keser et al. (2022) translated this measurement tool into Turkish. The subscales—survivor's guilt, feeling indebted, feeling responsible for the death, hurting the deceased, and feelings of guilt—demonstrated internal consistencies of 0.86, 0.77, 0.88, 0.70, and 0.80, respectively. The overall scale demonstrated an internal consistency of 0.88. The Cronbach's alpha for the current study was found to be 0.91.

2.2.3 Utrecht Grief Rumination Scale (UGRS)

The Utrecht Grief Rumination Scale (UGRS) was developed by Eisma et al. (2014). The scale is a 5-point Likert-type measurement tool comprising 15 items to measure grief rumination. Higher scores on the scale reflect greater level of grief rumination. The scale consists of 5 subscales: (1) meaning, (2) relationships, (3) counterfactuals, (4) injustice, and (5) reactions. The original form demonstrated an internal consistency of 0.90, with sub-dimensions ranging from 0.74 to 0.89. Tekin and Kırlıoğlu (2019) translated this measurement into Turkish. The scale demonstrated an internal consistency of 0.94, with sub-dimensions ranging from 0.80 to 0.89. The current study's Cronbach alpha was found to be .94 within this study.

2.3 Procedure

First, ethical approval was taken from TED University Human Research Ethics Committee. The participants were called with the announcement text presented in Appendix A. Participation was entirely voluntary, and participants was able to leave the study whenever they want. The data of the participants leaving was deleted. The participants were provided with consent form including brief explanation for the study. When they agreed to participate and criteria for participation in the research, age (18-70), loss of experience, and voluntarism, were met, the participants were directed to the questionnaires on Qualtrics. They were presented with demographic form, Prolonged Grief Scale (16 items), Utrecht Grief Rumination Scale (16 items) and the Bereavement Guilt Scale (15 items). The survey took around 20-30 minutes to complete. The experimenter downloaded the responses from Qualtrics and edited them personally, ensuring the confidentiality of the data. After the participants filled out the questionnaire, all data was reviewed. There are 178 people who completed it in an extremely short time, only selected the same option or stop filling out the scale, identified and removed from the data. While applying the scales, no identifying information such as name or address was requested from the participants.

2.4 Analysis Plan

Within the current study, all statistical analyses were run through IBM SPSS Statistisc version 27. Descriptive statistics, including participant numbers, means, standard deviations, and minimum and maximum scores were conducted to gain a comprehensive understanding of the data and initial associations among the variables under investigation. Additionally, bivariate correlation analyses were conducted to see the relationships among the predictor and control variable utilized in this study. Then, mediation analysis using model 4 PROCESS v4.0 in SPSS was used to investigate the indirect effect of guilt on prolonged grief symptoms through rumination while also considering deceased age as a control variable. The steps were (1) conducting a regression analysis with guilt as the independent variable, rumination as the mediator, and prolonged grief symptoms as the dependent variable as well as including the deceased age as a control variable in the analysis, (2) testing the significance of the direct effect of guilt on prolonged grief symptoms, (3) testing the significance of the indirect effect of guilt on prolonged grief symptoms through rumination. Utilize bootstrapping with 5000 resamples was performed to estimate the confidence intervals and significance of the indirect effect. Before the analysis, all assumptions of each statistical test, such as normality and linearity, were checked.

CHAPTER 3

RESULTS

First, descriptive statistics, ANOVA tests, t- tests and bivariate correlations among the study variables were examined. Following, the mediation analyses result for the hypothetical model were presented.

3.1 Descriptive Statistics and Bivariate Correlations

Following data screening, descriptive statistics for total scores of PG-13 (Prolonged Grief Scale), BGS (Bereavement Guilt Scale), UGRS (Utrecht Grief Rumination Scale) are examined. Mean, SD, min and max values of the study variables are presented in Table (1).

Table 2. *Descriptive Statistics of Study Variables (N=273)*

Variables	Mean	SD	Min	Max
PG-13 Total Scores	38.25	11.76	12	60
BGS Total Scores	27.58	11.39	14	70
UGRS Total Scores	41.90	15.05	16	75

Note. PG-13 = Prolonged Grief Scale, BGS = Bereavement Guilt Scale, UGRS = Utrecht Grief Rumination Scale

Bivariate correlations were investigated to see the relationship between all variables including Total scores of PG-13, BGS, UGRS, demographic variables such as age, SES, Deceased age, time since loss and education level. Results of bivariate correlations were presented in Table 2. It indicated that the deceased's age and education level were found to be negatively correlated with the total scores of PG-13. Since only the deceased's age was significantly correlated with both PG and BGS, it

was assigned as a control variable in the mediation analyses. Moreover, time since the loss was found to be associated with rumination, but not with PG or guilt.

Table 3. *The Pearson Correlation Coefficients Indicating the Relationships Between the Variables*

	1	2	3	4	5	6	7	8
1. PG-13 Total Scores	1							
2. BGS Total Scores	.49**	1						
3. UGRS Total Scores	.79**	.60**	1					
4. Age	-.09	-.23**	-.14*	1				
5. SES	-.10	-.19**	-.10	.03	1			
6. Deceased Age	-.23**	-.18**	-.30**	.40**	.07	1		
7. Time since loss	-.09	-.01	-.12*	.14*	-.02	-.10	1	
8. Education Level	-.16*	-.07	-.17**	-.14*	.32**	.03	.02	1

Note. * $p < .05$; ** $p < .01$, PG-13 = Prolonged Grief Scale, BGS = Bereavement Guilt Scale, UGRS = Utrecht Grief Rumination Scale

3.2 Comparison of Demographic and Bereavement Related Variables in Terms of Scale Scores

Firstly, PG-13, BGS and UGRS total scores were analyzed in terms of gender variable. Independent samples t-test analysis was applied to the data and the results are given in Table 4.

Table 4. *Independent Samples t-Test Results by Gender*

	Group	N	Xmean	S	df	t
PG-13	Female	242	39.31	11.49	271	4.29***
	Male	31	29.97	10.64		
BGS	Female	242	28.1	11.63	271	2.13*
	Male	31	23.52	8.36		
UGRS	Female	242	43.41	14.78	271	4.78***
	Male	31	30.19	11.77		

*Note. *p<.05; ***p<.001* PG-13 = Prolonged Grief Scale, BGS = Bereavement Guilt Scale, UGRS = Utrecht Grief Rumination Scale

Participants were first asked about all losses they experienced from their first-degree family members, and then the loss experience they were most affected by. Accordingly, participants were classified into five groups (mother, father, sibling, child and spouse) in terms of the person they were most affected by. ANOVA was applied to the data to test whether the participants' PG-13, BGS and UGRS total scores differed in terms of the person who was most affected by the loss.

Details of the analysis are presented in Table 5. Mean and standard deviation values of the variables used in the analysis are given in Table 6.

Table 5. *ANOVA Results for Kinship*

	Sum of Squares	*df*	Mean Square	F	Post-hoc Tukey
PG-13					
Between Groups	1376.658	4	344.165	2.556* (p=.039)	Spouse > Mother, Father
Within Groups	35956.151	267	134.667		
Total	37332.809	271			
BGS					
Between Groups	81.456	4	20.364	.155 (p=.961)	
Within Groups	35179.941	267	131.76		
Total	35261.397	271			
UGRS					
Between Groups	3407.188	4	851.797	3.927* (p=.004)	Spouse > Mother, Father
Within Groups	57909.695	267	216.89		
Total	61316.882	271			

*Note. *p<.05;* PG-13 = Prolonged Grief Scale, BGS = Bereavement Guilt Scale, UGRS = Utrecht Grief Rumination Scale

Accordingly, it is shown that those who have experienced the loss of a spouse have the highest total score averages in PG-13 and UGRS. No difference was observed between the BGS total scores.

Table 6. *Mean and Standard Deviation Values of Variables Used in ANOVA (Kinship)*

	Mother (N=80)	Father (N=99)	Sibling (N=46)	Child (N=14)	Spouse (N=33)
PG-13	36.28 (12.11)	37.23 (11.72)	39.87 (10.74)	38.21 (10.74)	43.30 (11.36)
BGS	27 (11.98)	27.95 (11.61)	27.51 (10.05)	29.29 (13.39)	27.45 (10.83)
UGRS	40 (14.45)	39.52 (16.08)	42.48 (13.71)	48.42 (11.18)	49.58 (13.70)

Note. PG-13 = Prolonged Grief Scale, BGS = Bereavement Guilt Scale, UGRS = Utrecht Grief Rumination Scale

Finally, scale scores were examined in terms of the cause of death of the deceased, which is another factor related to the experience of loss. The causes of death were classified into three groups by researchers based on the participants' responses, rather than predefined categories, following the categorization used by Cesur (2012) in the literature. The first group was called “Natural Anticipated Loss”, which includes deaths due to chronic diseases and old age. The second group was defined as “Natural Sudden Loss”, which includes deaths due to sudden diseases. The last group was grouped as “Violent Death”, which includes deaths caused by accidents (such as traffic, home, work), suicide, natural disasters or human intervention.

Details of the analysis are presented in Table 7. Mean and standard deviation values of the variables used in the analysis are given in Table 8.

Table 7. *ANOVA Results for Cause of Death*

	Sum of Squares	*df*	Mean Square	F	Post-hoc Tukey
PG-13					
Between Groups	927.219	2	463.609	3.45*	Violent death > Natural
Within Groups	35209.287	262	134.387	(p=.065)	anticipated loss
Total	36136.506	264			
BGS					
Between Groups	777.149	2	388.574	3.015*	Violent death > Natural
Within Groups	33766.592	262	128.88	(p=.051)	anticipated loss
Total	34543.741	264			
UGRS					
Between Groups	1352.988	2	676.494	3.090**	Violent death > Natural
Within Groups	57368.921	262	218.965	(p=.047)	anticipated loss
Total	58721.909	264			

*Note. *p<.10; **p<.05*, PG-13 = Prolonged Grief Scale, BGS = Bereavement Guilt Scale, UGRS = Utrecht Grief Rumination Scale

Table 8. *Mean and Standard Deviation Values of Variables Used in ANOVA (Cause of death)*

	Natural Anticipated Loss N=129	Natural Sudden Loss N=118	Violent Death N=18
PG-13	36.71 (11.93)	39.46 (11.52)	43.27 (9.23)
BGS	26.28 (11.24)	28.59 (11.32)	32.56 (12.40)
UGRS	40.40 (15.61)	42.78 (14.28)	49.28 (11.75)

Note. PG-13 = Prolonged Grief Scale, BGS = Bereavement Guilt Scale, UGRS = Utrecht Grief Rumination Scale

Accordingly, it is observed that the group with the highest total score averages for PG-13, BGS, and UGRS consists of those who experienced a loss classified as *violent death.*

3.3 Main Analysis: Mediator Role of Grief Rumination

Mediation analysis was performed to test the hypothesis that bereaved individuals' rumination scores would mediate the relationship between their guilt feelings and PG symptom levels after controlling the effects of deceased age. Mediation analysis was conducted via Hayes' PROCESS SPSS addition, Model 4 (Hayes, 2017).

According to results of mediation analysis, after controlling deceased age, total effect of bereavement guilt on PG symptoms severity was significant (B = .49, SE = .056, p =.00). All the direct effects in the model (paths a, b, and c') were presented in Table 9. The direct effect of bereavement guilt on PG was not significant (path c') once the grief rumination was considered as mediating variable (B = .03, SE = .049, p =.49). Moreover, when a bereaved individuals' guilt for experienced loss increases, so does their tendency to ruminate (path a) (B = .76, SE = .065, p =.000), which in turn increased prolonged grief scores (path b) (B = .60, SE = .038, p =.000).

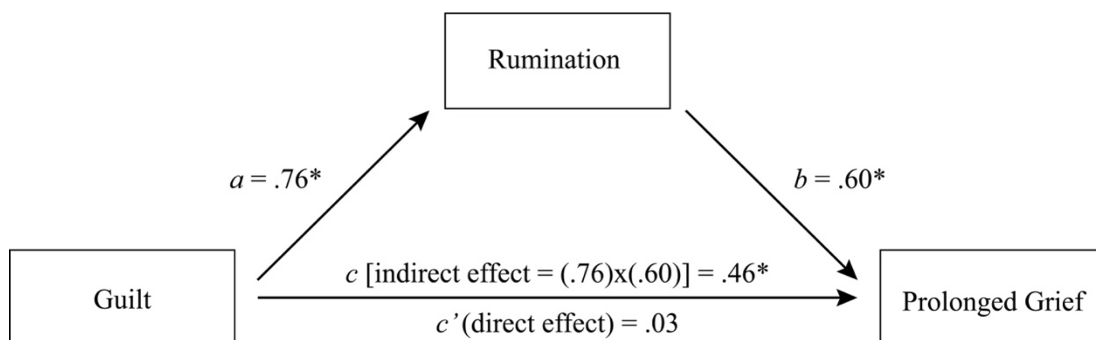
Table 9. *Mediation Model Coeffients of path a, b and c'*

	b	SE	BCa CI 95%	
			Lower	Upper
Model I				
Total effect	.49*	.06	.38	.60
Path a	.76*	.07	.63	.89
Path b	.60*	.04	.53	.68
Path c'	.03	.05	-.06	.13
Indirect effect (a × b)	.46*	.05	.36	.57

Note. $*p < .001$; b = Standardized beta values; SE = Standard error; BCa CI = Confidence Intervals based on 5000 bootstrap samples.

To assess the mediating role of grief rumination scores, the indirect effect (a x b) was calculated and found to be significant (B = .458, SE = .053, 95% CI [.363, .573]). It is concluded that after controlling the effects of deceased age indirect effect of guilt on PG through rumination was significant. The model was found to be significant $F(5, 267) = 37.58$, $p < .000$. Lastly, the model explained 63% of the variance in prolonged grief (PG) due to guilt through rumination (See Figure 3 for the result of the Simple Mediation Model).

Figure 3. *The result of the Simple Mediation Model*



Note. $*p < .001$.

CHAPTER 4

DISCUSSION

The current study presents a mediation model that investigates the relationship between guilt, ruminative thinking style, and Prolonged Grief (PG) symptoms in individuals who have lost a first-degree family member. The model is based on the structural model of guilt proposed by Li and colleagues (2014) and aims to explore the mediating variables through which guilt leads to PG symptoms. Considering the literature, we suggested that ruminative thinking style may play a mediating role in this relationship; that is, guilt could be associated with PG symptoms through rumination. The findings indicated that there is a significant relationship between guilt and PG symptoms and this relationship is mediated by rumination. In other words, as levels of death-related guilt increase, individuals are more likely to engage in ruminative thinking, resulting in an increase in PG symptoms.
In the following sections, demographic findings will be discussed first, followed by a discussion of the findings of the mediation model considering the literature.

4.1 Discussion on Demographic Variables

Analyses conducted to determine the correlation values between the prolonged grief symptom severity and age, socio-economic status, educational level, deceased age, time since the loss, guilt and rumination (See Table 3). According to the findings, age of the deceased, education level, guilt and rumination levels were found to be significantly correlated with the severity of prolonged grief symptom. In other words, the severity of prolonged grief symptoms was found to increase with lower levels of education, as well as with lower age of the deceased, and greater frequency of guilt feelings and ruminative thinking. These findings are consistent with various studies conducted in different samples and in different countries to date.

It has been observed that younger age (Cesur, 2012; Killikelly et al., 2019), lower education level (Reed, 1998; Johannesson et al., 2009), higher guilt level (Li, Tendeiro, & Stroebe, 2018; Stroebe et al., 2014) and higher rumination level (Boelen & van den Hout, 2008; Eisma et al., 2013) are significantly related to the prolonged

grief symptoms.). In the current study, the results indicated that the time since loss has negatively associated with rumination but not with the level of guilt and severity of PG symptoms. The latter is in line with other cross-sectional studies (Kowalski & Bondmass, 2008; Akiyama, Numata, & Mikami, 2010). However, in longitudinal studies, a short period of time since the loss has been found to be associated with PG symptoms (He et al., 2014) and guilt (Bohannon, 1991; Lang, Gottlieb, & Amsel, 1996). We assume that this contradiction is due to differences in research design. Regarding the negative association between time since loss and rumination, our findings highlight an important result: as the time since the loss increases, individuals' levels of rumination decrease. Since rumination is a coping style, it is expected to be more intense in the early stages of grief and to diminish over time.

Moreover, it was shown that the guilt experienced after loss was significantly related to the age, socio-economic level and age of the bereaved person. In other words, as the age of the bereaved person decreases, the socio-economic level decreases and the deceased age decreases, the level of guilt increases. Some studies have found that the age of the deceased has an effect on level of guilt but have not controlled for possible confounding variables. For instance, the younger the age of the deceased, the more likely it was found to be a risk factor for guilt. However, its validity has been questioned, as unnatural causes generally involve deaths at a young age (Gamino et al., 2000). In the current study, violent death group revealed higher level of PG, guilt, and rumination scores. Consistent with the literature, violent or unnatural deaths and unexpected deaths were found to be risk factors for the development of PG symptoms, as these types of losses can increase the severity of PG symptoms (Stroebe et al., 2006; Kaltman & Bonanno, 2003). Violent death has also been considered a risk factor associated with higher levels of guilt in bereavement (Gamino, Sewell, & Easterling, 2000; Camacho, 2020).

The current study also revealed a higher correlation between the age of the bereaved person and guilt and rumination scores, but not PG symptoms. In light of the framework proposed by Li et al. (2014), the age of the bereaved individual is a personal risk factor for the development of guilt. The lack of association between the age of the bereaved and PG symptoms aligns with previous studies (Stroebe et al.,

2006). One explanation for this non-significant result could be the presence of a U-shaped relationship, rather than a linear one, between the age of the bereaved and PG symptoms. This suggests that both younger and older individuals may be at higher risk for elevated levels of PG symptoms.

Regarding the findings for gender, it is found that women have higher levels of guilt, rumination, and prolonged grief compared to men. According to previous studies, this finding aligns with studies showing that being female is a risk factor for prolonged grief, as it is for many other pathologies (Burke & Neimeyer, 2013). These results can be interpreted as an explanation related to the different roles that gender norms impose on women and men. It is also known that women are more vulnerable and sensitive to negative events and, thus, perceive stressors as more threatening (Lazarus & Folkman, 1984), which makes it predictable that guilt levels are higher in women. Moreover, regarding rumination, this can be explained by the fact that women are more likely to use emotion-focused coping strategies, which are known to be less effective in dealing with negative experiences, compared to men (Matud, 2004). This could contribute to their exhibiting more symptoms during the grieving process.

Lastly, the results of the study indicate that the loss of a spouse has the most significant impact on rumination, guilt, and prolonged grief compared to the loss of a mother, father, or sibling. Previous studies have shown that individuals who experience the loss of a spouse are at a higher risk for complicated grief (Prigerson et al., 2002). In fact, it has been previously found that the loss of a spouse carries a higher risk for complicated grief compared to the loss of a parent or sibling (Fujisawa et al., 2010). These findings align with the results of our study.

These findings highlight the importance of investigating risk factors in longitudinal research settings. Such studies are necessary to address and clarify existing inconsistencies.

4.2 Discussion of the Mediation Model

The structural model of guilt proposed by Li and colleagues (2014) suggested that mediators could be investigated to understand the relationship between guilt and PG symptoms. The aim behind this suggestion was to gain a deeper understanding of the mechanisms underlying the harmful effects of guilt. Building on this goal, we hypothesized that rumination could mediate this relationship, and our findings supported this hypothesis. Although previous researchers have suggested that rumination could serve an effective mediating role in their discussion sections, especially when examining the risk factors of PG symptoms (van der Houwen et al., 2010), no study has been conducted to explore this in the grief literature. A study in the depression literature indicated that rumination plays a mediating role between various risk factors (such as gender, additional stress, low social support, and initial depressive reactions) and depression (Nolen-Hoeksema, Parker, & Larson, 1994). Through this study, we not only uncovered rumination's mediating role in prolonged grief but also contributed to the understanding of the mechanisms underlying the relationship between guilt and PG symptoms.

Our mediation model provides insights into the interplay between guilt and rumination. Bereaved individuals may experience guilt for specific reasons, such as having thoughts of causing the death or being unable to prevent it. They may also criticize themselves for actions they took or failed to take in their past relationship with the deceased, or they may develop negative thoughts related to survivor guilt and experiencing positive feelings in the absence of the deceased (Miles & Demi, 1983; Shear et al., 2007). At the same time, guilt makes it difficult to integrate the loss, accept it as part of their life story, or even see any meaning in the event, thereby hindering its processing and storage in autobiographical memory (Libby & Eibach, 2002; Wilson & Ross, 2010). Grief rumination, on the other hand, is a general coping mechanism that involves the continued or repetitive processing of negative affective material, often centering on core negative emotions (McLaughlin et al., 2007; Nolen-Hoeksema, Wisco, & Lyubomirsky, 2008). Based on the results of our mediation model, we can conclude that rumination may serve as a coping mechanism when individuals are unable to make sense of the loss or integrate it into their

autobiographical memory due to guilt. This results in the unresolved loss being repeatedly revisited in the mind, preventing the individual from letting go of it.

Why would bereaved individuals with guilt feelings engage in ruminative thinking? Although it is difficult to provide a definitive answer within the scope of this study, we will attempt to explain it using the two theoretical approaches mentioned earlier. Firstly, according to the Rumination as Avoidance Hypothesis (RAH: Eisma et al., 2013; Eisma & Stroebe, 2017), rumination may serve as a strategy of avoidance in this context. In other words, an individual may repeatedly reflect on past events in order to avoid facing the emotional distress caused by guilt. As a result, individuals become "stuck" in their grief, unable to move forward in the grieving process or begin the journey of recovery. On the other hand, according to Response Styles Theory (RST) (Nolen-Hoeksema, 2001), individuals might ruminate over their loss because of being triggered by emotional distress of guilt. In other words, individuals may engage in ruminative thinking as a response to this intense emotion, guilt.

4.3 Clinical Implications

Understanding the mediating pathways through which guilt contributes to prolonged grief symptoms is important for developing more effective therapeutic interventions (Li et al., 2014). The current study highlights the importance of cognitive and behavioral interventions that focus on coping strategies and emotion management in clinical settings. Based on the relationship between guilt and rumination, it may be suggested to challenge maladaptive thoughts associated with guilt in clinical settings or to help individuals reduce rumination by encouraging their awareness. The study provides evidence that guilt, a significant risk factor for prolonged grief, can be directly addressed, preventing it from turning into negative outcomes and reducing its destructive impact on the grief process. At the same time, techniques aimed at reducing rumination, such as cognitive restructuring or strengthening coping strategies, can also mitigate the negative effects associated with guilt and help grieving individuals process their loss more adaptively. Clinicians may consider

integrating these approaches into treatment plans by using assessment tools to identify clients at risk due to high levels of guilt and rumination.

It is important to note that these recommendations should be evaluated considering the limitations of the study and that further research is needed to improve these interventions and evaluate their long-term effectiveness.

4.4 Limitations and Directions for Future Research

The study has some methodological limitations. A major limitation is its cross-sectional design, which collects data at a single point in time. This design limits our ability to draw causal conclusions between guilt, rumination, and PG symptoms, as well as to understand their temporal relationships. Without longitudinal data it becomes difficult to observe change over time or establish long term consequences of guilt or rumination upon PG symptoms. Longitudinal studies, which collect data from the same subjects repeatedly over a period, would allow for a more nuanced understanding such as whether guilt leads to increased rumination, which in turn exacerbates PG symptoms, or if the relationships between these variables are more complex and bidirectional. Therefore, due to being carried out in a short period of time, researchers were not able to identify relationships between variables, so highlighting the need for future research utilizing longitudinal designs to elucidate these relationships more comprehensively. Another notable limitation of this study is its primary focus on the negative or maladaptive aspects of rumination, without adequately considering its potential adaptive aspects. Adaptive rumination is defined as persistent, inward-focused thinking aimed at understanding one’s emotional reactions to depression and loss (Eisma et al., 2015). Future research could explore how specific types of rumination may help individuals process their grief, find meaning in their loss, and ultimately promote grief recovery.

4.5 Conclusion

The current study investigated the mechanism of bereavement related guilt and how it is related to PG symptoms, with rumination serving as the mediating factor. The results indicated that bereavement related guilt is associated with PG symptoms via mediator role of rumination. This perspective provides a deeper understanding of how guilt and rumination interact to sustain PG symptoms and emphasizes the role of cognitive processes in the grieving experience. By identifying rumination as a mediator, this study underscores the importance of addressing both guilt and ruminative thinking in therapeutic settings to facilitate healing and promote adaptive coping strategies.

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APPENDICES

Appendix A: Social Media Announcement Text and Poster

Merhaba,

Ben Psikolog Serra Balcı, TED Üniversitesi Psikoloji Bölümü, Gelişim Odaklı Klinik Çocuk ve Ergen Psikolojisi yüksek lisans programında, Dr. Emrah Keser danışmanlığında, ölüme bağlı olarak birinci dereceden aile üyesini kaybeden bireylerin kayıp sonrası deneyimleyebileceği duygu, düşünce ve davranışları incelemeyi amaçlayan tez araştırması yapmaktayım.

Aşağıdaki kriterleri karşılıyorsanız sizi araştırmama katılmaya davet ediyorum:

- 18-70 yaş aralığında olmak
- Son 5 yıl içerisinde birinci dereceden aile üyesini ölüm sebebiyle kaybetmiş olmak
- Kaybın üzerinden en az 6 ay geçmiş olması

Sizden bir takım anket soruları cevaplamanız istenecektir. Katılımınız Türkiye'de kayıp ve yas yaşantılarının bütüncül olarak bilimsel bir zeminde anlaşılması açısından büyük değer taşımaktadır. Araştırmaya ilişkin ayrıntılı bilgiye ve ankete aşağıda verilen bağlantı adresine tıklayarak ulaşabilirsiniz.

Ayrıca soru ve yorumlarınız için bana . e-posta adresi üzerinden ulaşabilirsiniz.

Zaman ayırdığınız için şimdiden teşekkür ederim.

Amine Serra Balcı

Appendix B: Informed Consent Form

Sayın katılımcı,

Bu araştırma, TED Üniversitesi, Psikoloji Bölümü, Gelişim Odaklı Klinik Çocuk ve Ergen Psikolojisi Yüksek Lisans öğrencisi Serra Balcı tarafından Dr. Emrah Keser danışmanlığında yürütülmektedir. Bu araştırmanın amacı, ölüme bağlı olarak birinci dereceden aile üyesini kaybeden bireylerin kayıp sonrası deneyimleyebileceği duygu, düşünce ve davranışları incelemektir. Çalışmada, kayba ilişkin duyguları anlamaya yönelik bazı sorular sorulmaktadır.

Aşağıdaki kriterleri karşılıyorsanız sizi çalışmamıza katılmaya davet ediyoruz:

18-70 yaş aralığında olmak.
Son 5 yıl içerisinde birinci dereceden aile üyesini ölüm sebebiyle kaybetmiş olmak
Kaybın üzerinden en az 6 ay geçmiş olması

Söz konusu araştırmanın etik ilkelere uygunluğu, TED Üniversitesi İnsan Araştırmaları Etik Kurulu tarafından değerlendirilmiş ve onaylanmıştır. Çalışmaya katılım tamamen gönüllük esasına dayanmaktadır. Anket sorularının doldurulması yaklaşık 25-30 dakikanızı alacaktır. Bu araştırmada size, son 5 yıl içinde ölüme bağlı olarak kaybetmiş olduğunuz birinci dereceden aile üyenizle (örneğin, anne, baba, evlat, eş, ağabey, abla, kardeş) ilgili sorular sorulacaktır. Soruların doğru ve yanlış cevabı yoktur. Bu yüzden, soruları içtenlikle cevaplamanız önemlidir. Bu soruları cevaplarken zaman zaman üzüntü, keder gibi olumsuz duygular yaşamanız oldukça normaldir. Çalışmanın herhangi bir noktasında devam edemeyecek düzeyde bir rahatsızlık hissederseniz herhangi bir açıklama yapmaksızın araştırmayı yarıda bırakabilirsiniz ve araştırmacılarla iletişime geçip bir görüşme talep edebilirsiniz. Çalışmayı yarıda bıraktığınız durumda, sağladığınız veriler silinecek ve çalışmada kullanılmayacaktır.

Bu çalışmada sizden kişisel bilgileriniz istenmeyecektir. Verdiğiniz bilgiler, tüm katılımcılardan toplanan bilgilerle birlikte toplu olarak değerlendirilecek ve yalnızca bilimsel amaçlarla kullanılacaktır. Elde edilen veriler araştırmacıların kişisel bilgisayalarında şifreli bir program vasıtasıyla korunacaktır.

Bu çalışma, uzamış yas belirtisi gösteren bireyleri teşhis etmeye, yas tutma sürecinde uyumu etkileyen değişkenleri belirlemeye ve etkili psikoterapi protokolleri geliştirmek amacıyla yapılacaktır. Çalışma hakkında daha fazla bilgi almak ve iyi hissetmediğiniz durumda görüşme talep etmek için Serra Balcı ile
(iletişim kurabilirsiniz.

Yukarıdaki şartları okudum. Bu araştırmaya gönüllü olarak katılmayı kabul ediyorum.

☐ Onaylıyorum **☐ Onaylamıyorum**

Appendix C: Socio Demographic Information Form

1) **Yaşınız: _______**

2) **Cinsiyetiniz:**

☐ Erkek

☐ Kadın

☐ Belirtmek istemiyorum

3) **Eğitim durumunuz (Son aldığınız diplomaya göre):**

☐ Okur-yazar değil

☐ İlkokul mezunu

☐ Ortaokul mezunu

☐ Lise mezunu

☐ Üniversite

☐ Yüksek lisans

☐ Doktora

4) **Mesleğiniz: ___________**

5) **Aylık geliriniz:**

☐ 5000 veya daha az

☐ 5000TL – 10000 TL arası

☐ 10000 TL – 15000 TL arası

☐ 15000 TL ve üstü

6) **Medeni durumunuz:**

☐ Bekar

☐ Evli

☐ Boşanmış

☐ Birlikte yaşıyor

☐ Eşini kaybetmiş

☐ Diğer (Lütfen belirtiniz ______________________)

7) **Her birimiz yaşamımızın herhangi bir döneminde sevdiğimiz bir yakınımızı ölüme bağlı olarak kaybedebiliriz. Sizin de <u>son 5 yıl içinde</u> birinci derece yakınlarınızdan kaybettiğiniz kişi ya da kişiler olduysa, aşağıdaki listeden bu kişi ya da kişilerin hepsini işaretleyiniz.**

☐ Anne ☐ Eş ☐ Ağabey

☐ Baba ☐ Küçük kardeş ☐ Abla

☐ Evlat/Çocuk

8) **Eğer yukarıdaki soruda (7. Soruda) yalnızca bir kişiyi işaretlediyseniz aşağıdaki listede de aynı kişiyi işaretleyiniz. Eğer yukarıdaki soruda (7. Soruda) birden fazla kişiyi işaretlediyseniz, aşağıdaki listede <u>KAYBI SİZİ EN FAZLA ETKİLEYEN</u> kişiyi işaretleyiniz.**

☐ Anne ☐ Eş ☐ Ağabey

☐ Baba ☐ Küçük kardeş ☐ Abla

☐ Evlat/Çocuk

Bundan sonraki sorulara kaybının sizi en çok etkilediğini düşündüğünüz kişiyi, yani 8. maddede işaretlediğiniz kişiyi düşünerek yanıt veriniz.

KAYBETTİĞİNİZ KİŞİNİN;

9) **Yaşı: ________ Ölüm tarihi: ___________________**

10) **Ölüm nedeni:**

☐ Trafik kazası

☐ İş kazası

☐ Kanser

☐ Kalp Krizi veya beyin kanaması gibi ani ölümle sonuçlanan hastalık

☐ İntihar

☐ Cinayet

☐ Deprem, sel gibi doğal afetler

☐ Terör, saldırı, çatışma gibi insan eliyle kasıtlı olarak gerçekleştirilen ölüm

☐ Diğer **(Lütfen açıklayınız:_______________________________________)**

11) **Bu kayıp sizin için ne kadar beklendikti?**

☐ Hiç beklendik değildi

☐ Pek beklendik değildi

☐ Kısmen beklendikti

☐ Tamamen beklendikti

12) Kaybınızdan sonra bir profesyonelden psikiyatrik/psikolojik yardım aldınız mı?

☐ Evet

☐ Hayır

Evet ise lütfen ne tür bir yardım (psikoterapi, ilaç gibi) aldığınızı yazınız:

____

13) Şu anda herhangi bir psikiyatrik hastalığınız var mı?

☐ Evet

☐ Hayır

14) Mensup olduğunuz bir din var mı?

☐ **Evet (Lütfen belirtiniz) ____________**

☐ **Hayır**

☐ **Belirtmek istemiyorum**

15) Kendinizi ne kadar dindar biri olarak nitelendirirsiniz?

☐ Çok dindarım

☐ Oldukça Dindarım

☐ Orta derecede dindarım

☐ Pek dindar değilim

☐ Hiç dindar değilim

☐ Belirtmek istemiyorum

16) İnandığınız dinin (eğer inanıyorsanız) gerekliliklerini ne ölçüde yerine getiriyorsunuz?

☐ Dinimin gerekliliklerini yerine getirmiyorum

☐ Dinimin gerekliliklerinden bazılarını yerine getiriyorum

☐ Dinimin gerekliliklerini çoğunlukla yerine getiriyorum

☐ Dinimin gerekliliklerini tamamen yerine getiriyorum

Appendix D: Prolonged Grief Scale (PG-13)

<u>BÖLÜM 1</u>

<u>AÇIKLAMA</u>: LÜTFEN AŞAĞIDAKİ HER BİR MADDE İÇİN SİZE EN UYGUN OLAN SEÇENEĞİ İŞARETLEYİNİZ.

1.Geçtiğimiz ay içerisinde, ölen yakınınızın özlemini ve hasretini ne sıklıkla duydunuz?

( ) Hiç

( ) En az bir kere

( ) En az haftada bir kere

( ) En az günde bir kere

( ) Günde birçok kere

2.Geçtiğimiz ay içerisinde, ölen yakınınızla ilgili olarak ne sıklıkla duygusal ızdırap, yoğun üzüntü ya da keder hissettiniz?

( ) Hiç

( ) En az bir kere

( ) En az haftada bir kere

( ) En az günde bir kere

( ) Günde birçok kere

3. Kaybınızın ardından en az 6 ay geçmesine rağmen, Soru 1 veya 2' deki belirtilerin herhangi birini, ''en az günde bir kere'' olmak üzere yaşadınız mı?

( ) Evet   ( ) Hayır

4.Geçtiğimiz ay içerisinde, size ölen yakınınızı hatırlatan şeylerden ne sıklıkla kaçınmaya çalıştınız?

( ) Hiç

( ) En az bir kere

( ) En az haftada bir kere

( ) En az günde bir kere
( ) Günde birçok kere

5.Geçtiğimiz ay içerisinde, ne sıklıkla kaybınız nedeniyle afallamış, hayrete düşmüş ya da şaşkına dönmüş hissettiniz?

( ) Hiç
( ) En az bir kere
( ) En az haftada bir kere
( ) En az günde bir kere
( ) Günde birçok kere

BÖLÜM 2

AÇIKLAMA: AŞAĞIDAKİ SORULARI ŞU ANDA KENDİNİZİ NASIL HİSSETTİĞİNİZİ GÖZ ÖNÜNDE BULUNDURARAK YANITLAYINIZ.

6. Yaşamınızdaki rolünüzle ilgili kafa karışıklığı ya da benlik duygunuzda bir azalma (bir parçanızın öldüğü gibi) hissediyor musunuz?

( ) Hiç ( ) Çok az ( ) Biraz ( ) Çok ( ) Oldukça çok

7. Kaybınızı kabullenmekte güçlük çektiniz mi?

( ) Hiç ( ) Çok az ( ) Biraz ( ) Çok ( ) Oldukça çok

8. Bu kaybı yaşadığınızdan beri, başkalarına güvenmek sizin için zor oldu mu?

( ) Hiç ( ) Çok az ( ) Biraz ( ) Çok ( ) Oldukça çok

9. Kaybınız nedeniyle buruk hissediyor musunuz?

( ) Hiç ( ) Çok az ( ) Biraz ( ) Çok ( ) Oldukça çok

10. Artık hayatınıza devam etmenin (örneğin, yeni arkadaşlar edinmek, yeni ilgi alanları oluşturmak vb.) sizin için zor olacağını hissediyor musunuz?

( ) Hiç ( ) Çok az ( ) Biraz ( ) Çok ( ) Oldukça çok

11. Bu kaybı yaşadığınızdan beri duygusal olarak hissizleşmiş gibi hissediyor musunuz?

( ) Hiç ( ) Çok az ( ) Biraz ( ) Çok ( ) Oldukça çok

12. Bu kaybı yaşadığınızdan beri hayatın boş ya da anlamsız olduğunu, doyum vermediğini hissediyor musunuz?

( ) Hiç ( ) Çok az ( ) Biraz ( ) Çok ( ) Oldukça çok

BÖLÜM 3

AÇIKLAMA: AŞAĞIDAKİ MADDEYİ SİZE UYGUN SEÇENEĞE İŞARET KOYARAK CEVAPLAYINIZ.

13. Sosyal, mesleki veya diğer önemli alanlar açısından işlevselliğinizde önemli bir azalma yaşadınız mı? (Örneğin evdeki sorumluluklarınızı yerine getirememek gibi)

( ) Evet ( ) Hayır

Appendix E: Bereavement Guilt Scale (BGS)

Aşağıdaki maddeler, bireylerin yas sürecinde deneyimleyebilecekleri duygu ve düşüncelerle ilgilidir. Lütfen geçen ayki deneyiminizi düşünün ve her bir cümlenin sizin durumunuza ne kadar uyduğunu belirtiniz. ("O" ölen aile üyenizi temsil eder.)

1= Beni hiç tanımlamıyor

2= Beni az tanımlıyor

3= Beni orta derecede tanımlıyor

4= Beni iyi tanımlıyor

5= Beni çok iyi tanımlıyor

Maddeler					
1. Ona kötü davrandım.	1	2	3	4	5
2. O öldüğünden beri, 'artık mutlu olmamalıyım' diye düşünüyorum.	1	2	3	4	5
3. Onun ölümünden beri, yaşıyor olmaktan dolayı suçluluk duyuyorum.	1	2	3	4	5
4. İlişkimizi düzeltmek için elimden gelen her şeyi yapmadım.	1	2	3	4	5
5. O yaşarken, onun için yapmadığım çok şey oldu.	1	2	3	4	5
6. Onun bana verdiklerinin karşılığını yeterince veremedim gibi geliyor.	1	2	3	4	5
7. Benim yüzümden mutsuzdu.	1	2	3	4	5
8. Kendimi onun ölümünden sorumlu hissediyorum.	1	2	3	4	5
9. Onun ölümünden beri ne zaman mutlu olsam kendimi kötü hissediyorum	1	2	3	4	5

10. Geçmişte keşke farklı yapmış olsaydım dediğim şeyleri düşündüğümde kendimi üzgün hissediyorum.	1	2	3	4	5
11. Kendimi suçlu bulduğum konuları hatırladıkça canım yanıyor.	1	2	3	4	5
12. Bazı şeyleri doğru düzgün yapsaydım, o hala hayatta olabilirdi.	1	2	3	4	5
13. Onunla yeteri kadar zaman geçirmedim.	1	2	3	4	5
14. Bazı şeyleri farklı yapmış olsaydım, o gün ölmüş olmazdı.	1	2	3	4	5

Appendix F: Utrecht Grief Rumination Scale (UGRS)

İnsanlar sevilen birinin ölümünden sonra sıklıkla çeşitli şeyleri düşünür. Son bir ay süresince aşağıdaki sorularda yer alan ifadeleri ne sıklıkla düşündüğünüzü öğrenmek istiyoruz. 1 "Hiç" anlamına gelmekte iken 5 "Çok Sık" anlamına gelmektedir. Bu bağlamda vereceğiniz cevapları 1'den 5'e kadar derecelendirerek cevap veriniz.					
1. Son bir ay süresince onun ölümünün sizin yaşamınıza etkisini ne sıklıkla düşündünüz.	1	2	3	4	5
2. Son bir ay süresince kaybın sizin için ifade ettiği anlamı ne sıklıkla sorguladınız.	1	2	3	4	5
3. Son bir ay süresince aile üyelerinden gereken desteği alıp almadığınızı ne sıklıkla sorguladınız.	1	2	3	4	5
4. Son bir ay süresince onun ölümünü önleyip önleyemeyeceğinizi ne sıklıkla düşündünüz.	1	2	3	4	5
5. Son bir ay süresince bu kaybı hak edecek ne yaptığınızı kendinize ne sıklıkla sordunuz.	1	2	3	4	5
6. Son bir ay süresince bu kayıp hakkında tam olarak ne hissettiğinizi ne sıklıkla düşündünüz.	1	2	3	4	5
7. Son bir ay süresince bu kayba normal tepki verip vermediğinizi ne sıklıkla sorguladınız.	1	2	3	4	5

8. Son bir ay süresince eğer koşullar farklı olsaydı onun ölümünün önlenip önlenemeyeceğini kendinize ne sıklıkla sordunuz.	1	2	3	4	5
9. Son bir ay süresince arkadaşlarınızdan ve tanıdıklarınızdan yeterli desteği alıp almadığınızı kendinize ne sıklıkla sordunuz.	1	2	3	4	5
10. Son bir ay süresince eğer başkaları farklı davransaydı onun ölümünün önlenip önlenemeyeceğini kendinize ne sıklıkla sordunuz.	1	2	3	4	5
11. Son bir ay süresince bu durumun neden bir başkasının değil de sizin başınıza geldiğini ne sıklıkla düşündünüz.	1	2	3	4	5
12. Son bir ay süresince bu kaybın adil olmadığı hakkında ne sıklıkla düşündünüz.	1	2	3	4	5
13. Son bir ay süresince kayıpla ilgili duygularınızı ne sıklıkla anlamaya çalıştınız.	1	2	3	4	5
14. Son bir ay süresince diğer insanların kaybınız ile ilgili nasıl davranmalarını istediğiniz hakkında ne sıklıkla düşündünüz.	1	2	3	4	5
15. Son bir ay süresince onun ölümüyle hayatınızın nasıl değiştiğini ne sıklıkla düşündünüz.	1	2	3	4	5

Appendix G: Post-Participation Information Form

Öncelikle çalışmamıza katkılarınız için teşekkür ederiz. Bu araştırma daha önce de belirtildiği gibi TED Üniversitesi Psikoloji Bölümü, Gelişim Odaklı Klinik Çocuk ve Ergen Psikoloji programı yüksek lisans öğrencisi Serra Balcı tarafından Dr. Öğr. Üyesi Emrah Keser danışmanlığındaki yüksek lisans tezi kapsamında yürütülmektedir. Çalışmanın amacı, ölüme bağlı olarak birinci dereceden aile üyesini kaybeden bireylerin kayıp sonrası deneyimleyebileceği duygu, düşünce ve davranışları incelemektir.

Bu çalışmadan alınacak ilk verilerin Aralık 2023 sonunda elde edilmesi amaçlanmaktadır. Çalışma boyunca vermiş olduğunuz bilgiler adınız veya herhangi bir kimlik bilginiz ile eşleştirilmeyecektir. Elde edilen veriler araştırmacıların kişisel bilgisayalarında şifreli bir program vasıtasıyla korunacaktır ve bu bilgiler **sadece** bilimsel araştırma ve yazılarda kullanılacaktır. Bu araştırmaya katıldığınız için tekrar çok teşekkür ederiz.

Çalışma ile ilgili sorularınız varsa veya çalışma hakkında daha fazla bilgi almak isterseniz lütfen benimle iletişime geçin:

Serra Balcı (   )

Çalışmaya katkıda bulunan bir gönüllü olarak katılımcı haklarınızla ilgili veya etik ilkelerle ilgi soru veya görüşlerinizi TED Üniversitesi İnsan Araştırmaları Etik Kurulu'na iletebilirsiniz

E-posta: