

PROLONGED GRIEF AND POSTTRAUMATIC GROWTH FOLLOWING THE
LOSS OF A RELATIVE FROM COVID-19: ROLE OF PANDEMIC GRIEF RISK
FACTORS, RUMINATIONS, AND PERCEIVED SOCIAL SUPPORT

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ABSTRACT

PROLONGED GRIEF AND POSTTRAUMATIC GROWTH FOLLOWING THE LOSS OF A RELATIVE FROM COVID-19: ROLE OF PANDEMIC GRIEF RISK FACTORS, RUMINATIONS, AND PERCEIVED SOCIAL SUPPORT

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The present study explored COVID-19-caused bereavement outcomes of individuals. Correspondingly, the predictor roles of pandemic grief risk factors (PGRF), intrusive rumination, deliberate rumination, perceived social support and its subfactors (i.e., support from family, friends, and significant other) on prolonged grief (PG) symptoms and posttraumatic growth (PTG) were investigated. The potential buffering role of perceived social support on PTG was also investigated. The sample consisted of 144 bereaved people living in Turkey who had lost their loved ones due to COVID-19, reached through purposive and snowball sampling methods on social media. Data collections tools were the Demographic Information Form, the Pandemic Grief Risk Factors (PGRF) Inventory, the Event-Related Rumination Inventory, the Multidimensional Scale of Perceived Social Support, the Prolonged Grief Disorder-13, and the Post Traumatic Growth Inventory. First, a confirmatory factor analysis was performed for the Turkish-adapted PGRF inventory. The obtained data were then analyzed by performing hierarchical regression analyses and moderated mediation analyses. Findings indicated the predictor role of traumatic perception of loss, PGRF, and friends support on PG symptoms, the predictor role of age and deliberate rumination on PTG, and finally, the moderator role of family support on PTG. Within the framework of the literature, findings were discussed.

Keywords: Prolonged Grief, Posttraumatic Growth, Pandemic Grief Risk Factors, Event-related Ruminations, Perceived Social Support

ÖZ

COVID-19 SEBEPLİ YAKIN KAYBI SONRASI UZUN SÜRELİ YAS VE TRAVMA SONRASI GELİŞİM: PANDEMİ DÖNEMİ YAS RİSK FAKTÖRLERİNİN, RUMINASYONLARIN VE ALGILANAN SOSYAL DESTEĞİN ROLÜ

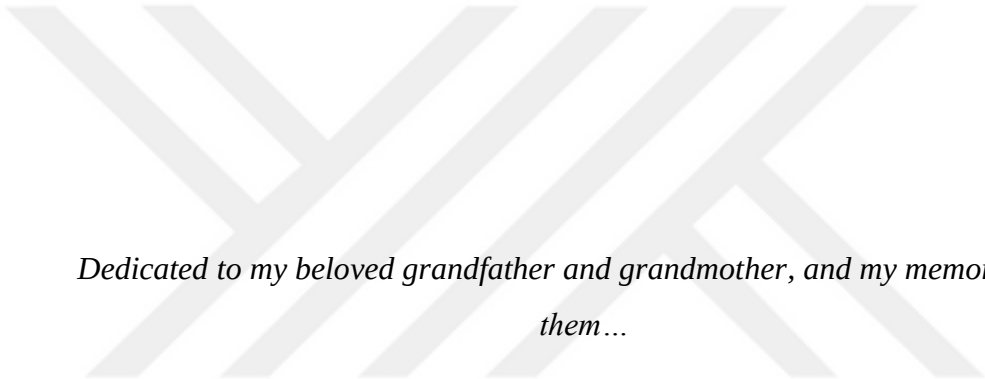
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Bu çalışma, bireylerin COVID-19 kaynaklı yas sonuçlarını araştırmıştır. Buna bağlı olarak, pandemi dönemi yas risk faktörleri (PDYRF), istemsiz ruminasyon, istemli ruminasyon, algılanan sosyal destek ve alt faktörlerinin (aile, arkadaşlar ve önemli diğer kişilerden destek) uzamış yas (UY) semptomları ve travma sonrası gelişim (TSG) üzerindeki yordayıcı rolleri araştırılmıştır. Algılanan sosyal desteğin TSG üzerindeki potansiyel düzenleyici rolü de araştırılmıştır. Örneklem, Türkiye'de yaşayan ve yakınlarını COVID-19 nedeniyle kaybetmiş 144 kişiden oluşmaktadır ve bu kişilere sosyal medya üzerinden amaçlı ve kartopu örnekleme yöntemleriyle ulaşılmıştır. Veri toplama araçları Demografik Bilgi Formu, Pandemi Dönemi Yas Risk Faktörleri (PDYRF) Envanteri, Olay İlişkili Ruminasyon Envanteri, Çok Boyutlu Algılanan Sosyal Destek Ölçeği, Uzamış Yas Bozukluğu-13 ve Travma Sonrası Gelişim Envanteri'dir. İlk olarak, Türkçe uyarlaması yapılan PDYRF envanteri için doğrulayıcı faktör analizi yapılmıştır. Elde edilen veriler daha sonra hiyerarşik regresyon analizleri ve moderatörlü aracılık analizleri yapılarak analiz edilmiştir. Bulgular, travmatik kayıp algısının, PDYRF'nin ve arkadaş desteğinin UY semptomlarını yordadığını, yaşın ve kasıtlı ruminasyonun TSG'yi yordadığını ve son olarak aile desteğinin TSG üzerindeki düzenleyici rolü olduğunu göstermiştir.

Anahtar Kelimeler: Uzamış Yas, Travma Sonrası Gelişim, Pandemi Dönemi Yas Risk Faktörleri, Olay İlişkili Ruminasyonlar, Algılanan Sosyal Destek



*Dedicated to my beloved grandfather and grandmother, and my memories with
them...*

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TABLE OF CONTENTS

PLAGIARISM PAGE	iii
ABSTRACT	iv
ÖZ	v
DEDICATION	vi
ACKNOWLEDGMENTS.....	vii
TABLE OF CONTENTS	viii
LIST OF TABLES	xi
LIST OF FIGURES.....	xii
LIST OF ABBREVIATIONS	xiii
CHAPTER I	1
INTRODUCTION.....	1
CHAPTER II.....	3
THEORETICAL BACKGROUND	3
2.1. COVID-19 Pandemic and Grief	3
2.2. Normal vs. Pathological Grief.....	5
2.2.a. Normal Grief	5
2.2.b. Pathological Grief	6
2.2.c. ICD-11 Diagnostic Criteria for PGD.....	7
2.2.d. DSM-5-TR Diagnostic Criteria for PGD	8
2.2.e. Symptom Criteria Differences Between PGD Diagnoses Of ICD- 11 and DSM-5-TR.....	9
2.2.f. Prevalence of PGD.....	10
2.2.g. Prevalence of PGD during the COVID-19 Pandemic	10
2.3. An Overview of Grief Theories	11
2.3.a. Dual Process Model (DPM) of Grief	14
2.3.b. DPM in the Context of the COVID-19 Pandemic	16
2.4. COVID-19 Pandemic-Related Risk Factors of Grief.....	17
2.5. The Potential of Growth After the Death of a Loved One	18
2.6. Posttraumatic Growth.....	19
2.6.a. Growth Theories	20

2.6.a.i. Functional Descriptive Model of PTG	20
2.6.a.ii. Conceptual Model for Understanding Life Crises and Transitions	23
2.6.b. Posttraumatic Growth After Losing a Loved One Due To COVID- 19.....	24
2.7. Processing of Grief.....	25
2.7.a. Ruminations.....	25
2.7.a.i. Ruminations and Grief.....	26
2.7.a.ii. Ruminations and Posttraumatic Growth.....	28
2.7.a.iii. Ruminations Within the Context of Bereavement Due to COVID-19	29
2.7.b. Social Support	30
2.7.b.i. Social Support and Grief	30
2.7.b.ii. Social Support and Posttraumatic Growth	33
2.7.b.iii. Social Support Within the Context of Bereavement Due to COVID-19	34
2.8. The Aim and The Hypotheses of The Study	35
CHAPTER III.....	39
METHOD.....	39
3.1. Sample.....	39
3.2. Instruments.....	41
3.2.a. Demographic Information Form	41
3.2.b. Pandemic Grief Risk Factors (PGRF).....	42
3.2.c. Event-Related Rumination Inventory (ERRI).....	43
3.2.d. The Multidimensional Scale of Perceived Social Support (MSPSS).....	44
3.2.e. Prolonged Grief Disorder-13 (PG-13).....	44
3.2.f. Posttraumatic Growth Inventory (PTGI)	45
3.3. Procedure.....	46
3.4. Statistical Analysis	47
CHAPTER IV	49
RESULTS	49
4.1. Confirmatory Factor Analysis for PGRF	49
4.2. Descriptive Statistics	50
4.2.a. Examining Loss through Descriptive Statistics of Related Variables	50

4.2.b. Exploring the Primary Variables with Descriptive Statistics	51
4.3. Evaluation of Categorical Variables	52
4.4. Evaluation of Patterns of Bivariate Correlation among Continuous Study Variables	57
4.5. Hierarchical Regression Analyses Results	61
4.5.a. Predictors of PG Symptoms	61
4.5.b. Predictors of PTG.....	63
4.6. Moderated Mediation Analyses Results.....	65
4.6.a. Moderated Mediation Analysis Result While the Moderator was Total PSS.....	68
4.6.b. Moderated Mediation Analysis Result While the Moderator was Family Support.....	70
4.6.c. Moderated Mediation Analysis Result While the Moderator was Friends Support	73
4.6.d. Moderated Mediation Analysis Result While the Moderator was Significant Other Support	75
4.7. Summary of Moderated Mediation Analyses	77
CHAPTER V.....	79
DISCUSSION	79
5.1. Grieving in COVID-19 Pandemic: Demographic Characteristics, Loss- Related Experiences, and Bereavement Outcomes of the Sample	80
5.2. Predictors of PG Symptoms	82
5.1. Predictors of PTG.....	89
5.4. The Buffering Role of Family Support on PTG.....	93
5.5. Overview of Predictors of PG Symptoms and PTG.....	96
5.6. Limitations and Suggestions for Future Research	97
5.7. Strengths and Clinical Implications	99
CHAPTER VI	103
CONCLUSION	103
BIBLIOGRAPHY	105
APPENDIX	127

LIST OF TABLES

Table 3.1. Socio-Demographic Variables of The Participants	40
Table 4.1. Results of CFA for PGRF	49
Table 4.2. Loss-related Variables	51
Table 4.3. Descriptive Characteristics of the Measures	52
Table 4.4. Independent Samples T-test Results for PG symptoms	54
Table 4.5. Independent Samples T-test Results for PTG	55
Table 4.6. Independent Samples T-test Results for Intrusive Ruminations	56
Table 4.7. Independent Samples T-test Results for Deliberate Ruminations	57
Table 4.8. Correlation Between Variables as Determined by Pearson's Correlation Coefficient.....	60
Table 4.9. Results of a Hierarchical Regression for PG Symptoms.....	63
Table 4.10. Results of a Hierarchical Regression for PTG	65
Table 4.11. Regression Results of Moderated Mediation Analysis While the Moderator was Total PSS.....	69
Table 4.12. Regression Results of Moderated Mediation Analysis While the Moderator was Family Support.....	72
Table 4.13. Regression Results of Moderated Mediation Analysis While the Moderator Was Friends Support	74
Table 4.14. Regression Results of Moderated Mediation Analysis While the Moderator was Significant Other Support	76

LIST OF FIGURES

Figure 2.1. Dual Process Model of Coping with Bereavement (Strobe & Schut, 1999)	15
Figure 2.2. Revised Model of Posttraumatic Growth (Tedeschi et al., 2018).....	22
Figure 2.3. Conceptual Diagram of Hypothesized Moderated Mediation Model 1	37
Figure 2.4. Conceptual Diagram of Hypothesized Moderated Mediation Model 2	38
Figure 4.1. Conceptual Diagram of Moderated Mediation Model 1 (Moderator is Total PSS)	67
Figure 4.2. Conceptual Diagram of Moderated Mediation Model 2 (Moderator is Family Support)	67
Figure 4.3. Conceptual Diagram of Moderated Mediation Model 3 (Moderator is Friends Support).....	67
Figure 4.4. Conceptual Diagram of Moderated Mediation Model 4 (Moderator is Significant Other Support)	68
Figure 4.5. Statistical Diagram of Moderated Mediation Model 1 Results (Moderator is Total PSS)	70
Figure 4.6. Moderating Effect of Family Support on the Relationship Between PGRF and Deliberate Rumination	71
Figure 4.7. Statistical Diagram of Moderated Mediation Model 2 Results (Moderator is Family Support).....	72
Figure 4.8. Statistical Diagram of Moderated Mediation Model 3 Results (Moderator is Friend Support)	74
Figure 4.9. Statistical Diagram of Moderated Mediation Model 4 Results (Moderator is Significant Other Support)	76

LIST OF ABBREVIATIONS

CFA	: Confirmatory factor analysis
CFI	: Comparative fit index
CG	: Complicated grief
DoK	: Degree of kinship
DPM	: Dual Process Model
DR	: Deliberate rumination
DSM	: Diagnostic and Statistical Manual of Mental Disorders
DSM-5	: Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition
DSM-5-TR	: Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition, Text Revision
ERRI	: Event-Related Rumination Inventory
FS	: Friends support
ICD-11	: International Classification of Diseases 11th Revision
IR	: Intrusive rumination
MS	: Marital status
MSPSS	: Multidimensional Scale of Perceived Social Support
PCBD	: Persistent complex bereavement disorder
PG	: Prolonged grief
PG-13	: Prolonged Grief Disorder-13
PGD	: Prolonged grief disorder
PGRF	: Pandemic Grief Risk Factors
PHfL	: Professional help for loss
PTG	: Posttraumatic growth
PTGI	: Posttraumatic Growth Inventory
RMSEA	: Root-mean-square error of approximation
SCwD	: Subjective closeness with deceased
SES	: Socioeconomic status
SPSS	: Statistical Package for the Social Sciences
SRMR	: Standardized root mean square residual
STLL	: Subjective traumatic level of loss

TG : Traumatic grief
TLI : Tucker-Lewis index
UoD : Unexpectedness of death



CHAPTER I

INTRODUCTION

The current study aims to investigate the bereavement outcomes of individuals who have suffered the loss of their loved ones as a consequence of COVID-19. In this regard, firstly, the role of threats created by COVID-19 on the grieving processes of people will be reviewed. Secondly, since one of the bereavement outcomes examined in this thesis is prolonged grief (PG) symptoms, the distinction between normal and pathological grief will be introduced, and grief theories and pandemic grief risk factors (PGRF) will be reviewed. Thirdly, in order to better comprehend the second bereavement outcome of the study, posttraumatic growth (PTG), the potential of growth after the death of a loved one will be addressed and PTG theory will be reviewed. Afterwards, rumination and social support, which are the possible key factors in the processing of grief, and the relationship between these two variables will be reviewed in light of the literature. Finally, the aim and hypothesis of the study will be stated and the methodology, the results of the statistical analyses, the discussion of the results, and the conclusions will be given in the next chapters.



CHAPTER II

THEORETICAL BACKGROUND

2.1. COVID-19 Pandemic and Grief

Declaration of the COVID-19 pandemic, a result of SARS-CoV-2, by the World Health Organization (WHO, n.d.) was made in March 2020 and the devastating outcome of this pandemic persists to be evident worldwide. At the time of writing this thesis, the number of deaths due to COVID-19 in the world is approximately 7 million (WHO, 2023) and approximately 102 thousand of this number belongs to Türkiye (Turkish Ministry of Health, 2023). Research conducted by Verdery et al. (2020) in the USA demonstrated that an approximate number of nine people mourn after the COVID-19-related death of one individual. This finding implies that around one million people who have lost a loved one due to COVID-19 may be going through the process of grieving in Türkiye.

The death toll from the COVID-19 pandemic has been substantial; however, assessing its devastating effects solely on the basis of these statistics would be extremely inaccurate since the threats it poses have had an impact on how people die and how their relatives mourn and grieve (Breen, 2020). Therefore, the main aim of this thesis is to investigate the role of these threats created by COVID-19 on the grieving processes of people.

Primarily, the circumstances of the deaths changed because of this virus. Considering the rapid worsening of the disease and the sudden, unforeseen, and relatively unavoidable nature of the death of people infected with COVID-19, individuals were caught unprepared mentally or emotionally for the deaths of loved ones (Goveas & Shear, 2020; Mayland et al., 2020). The quarantines and drastic

restrictions on visiting hospitalized patients imposed by the state due to the contagiousness of the disease caused people to die alone and their relatives could not say goodbye for the last time (Andrist et al., 2020; Hanna et al., 2021; LeRoy et al., 2020). Furthermore, since patients are unrestful, have difficulty breathing and are therefore intubated, and die in social isolation, COVID-19 deaths are cited as an instance of "bad deaths" (Carr et al., 2020). Being aware of the loved one suffering and that he/she did not die peacefully is a heartache and is likely to cause a more distressing grief process.

The context of death is another factor that has changed. As an agonizing precaution to contain the spread of the virus, physical distancing policies implemented by several countries restricted, postponed, or blocked traditional and religious rituals (Gabay & Tarabeih, 2022; Government of Türkiye, 2021; Hamid & Jahangir, 2020; Myers & Donley, 2022). While their loved ones, who were suddenly lost, were buried; relatives of the deceased couldn't be near them for the last time and couldn't touch and say goodbye to them (Hamid & Jahangir, 2022; Hernández-Fernández & Meneses-Falcón, 2022). In cases where funerals took place, only a limited number of family members or friends could attend the funerals due to social restrictions and travel restraints (Aguiar et al., 2022). Thus, the grieving process may have become more painful and anger or disenfranchised feelings may have arisen due to these limitations and prohibitions related to the rituals (Amy & Doka, 2021; Gabay & Tarabeih, 2022).

Furthermore, some individuals may have experienced concurrent losses in the process of losing their close relative (e.g., multiple deaths, financial loss, or additional non-death loss, etc.), and felt guilty if they have also been infected but survived (Amy & Doka, 2021) or had the fear of losing other loved ones from the

contamination (Firouzkouhi et al., 2021). All these COVID-19 pandemic-related factors hindered the normal grieving process of the relatives of the deceased and the grief became complicated (LeRoy et al., 2020). Thus, the next section explores the difference between normal and pathological grief reactions.

2.2. Normal vs. Pathological Grief

2.2.a. Normal Grief

“Grief” can be broadly defined as a natural, universal, and humanistic response that arises after “bereavement” which refers to the state of losing a loved one (Bonanno & Kaltman, 2001; Zisook & Shear, 2009). Common grief responses encompass bodily, emotional, and mental reactions (Worden, 2008). A mourner may display somatic distress after the loss and have recurrent intrusive thoughts or mental images regarding the deceased. Acute feelings of sadness, anger, guilt, loneliness, fatigue, shock, and yearning are the frequent emotional reactions after the loss. Moreover, the griever may have sleep and appetite disturbances in the initial stages of the grief process. Within around one year after the death of a loved one, these acute reactions involving intense levels of distress progress towards lower levels, the person returns to normal levels of functioning, and no therapeutic intervention is required in this usual grief process (Jordan & Neimeyer, 2003). On the other hand, the persistence and intensity of these reactions vary among bereaved individuals (Zisook & Shear, 2009). This divergence in the grief process led to the need to distinguish of normal and prolonged grief and to understand their differences.

2.2.b. Pathological Grief

In the literature, the grieving processes of individuals who experience a more intense and out-of-normal duration of mourning are named with several different terms such as pathological grief (Horowitz et al., 1993), complicated grief (CG) (Horowitz et al., 1997), traumatic grief (TG) (Prigerson & Jacobs, 2001), persistent complex bereavement disorder (PCBD) (APA, 2013), and prolonged grief disorder (PGD) (APA, 2022; WHO, 2018). Regarding the underlying descriptive features of these terms, it is common in the literature to use these terms interchangeably referring to an abnormal grief response pattern after the loss (Solano, 2011; Ray & Prigerson, 2007). However, the meaning of the term traumatic grief is assumed to be different since it is used as a grief response after losing someone from a traumatic event (Ray & Prigerson, 2007).

Regarding the validity of the criteria of these terms to identify disturbed grieving individuals, there are several conflicting findings in the literature. For instance, a study comparing the tests of CG, PCBD_{DSM-5}, and PGD_{ICD-11} found that the PCBD and PGD distinction is merely semantic indicating that these two terms refer a sole basic diagnosis and have high predictive validity while CG is found to possess weak diagnostic precision and predictivity (Maciejewski et al., 2016). On the contrary, other researchers suggested that the predictive validity of PCBD_{DSM-5} was better in contrast to PGD_{ICD-11} (Boelen et al., 2019b), but they do not differ in their concurrent validity (Boelen et al., 2018, 2019a, 2019b, 2020). Considering the evoked meanings, the word "complex" in PCBD_{DSM-5} term was criticized as confusing, it was thought that the word "prolonged" in the term PGD_{ICD-11} better served the underlying descriptive features of the diagnosis (Maciejewski et al., 2016).

As the findings of validity criteria as well as the evoked meanings of terms are taken into consideration, diagnostic criteria for PGD_{ICD-11} and PGD_{DSM-5-TR}, which include the most recent diagnosis of pathological grief in the literature, and the differences in criteria between them are explored in the next section.

2.2.c. ICD-11 Diagnostic Criteria for PGD

The official introduction of prolonged grief disorder (PGD) to the 11th revision of the International Classification of Diseases (ICD-11) was made in 2018 (WHO, 2018). According to ICD-11 (WHO, 2018), individuals with PGD have a constant and extensive sense of yearning for the lost person and/or are constantly thinking about the dead person; symptoms accompanied by a minimum of one of ten additional symptoms (e.g., feeling of sadness, guilt, anger, etc.) cause the griever to lose functionality in daily life for at least six months after the loss.

Despite the resemblance between reactions during the natural grief process and PGD symptoms, a distinction is that PGD symptoms do not diminish eventually, but on the contrary; the mourner experiences functional impairment with intense distress and requires specific therapeutic intervention (Prigerson et al., 2021a; Reed et al., 2022). Thus, this diagnosis is invaluable in terms of distinguishing griever at risk in a standardized approach and encouraging studies on evidence-based therapy approaches to provide the necessary interventions. Also, after the inclusion of PGD into the ICD-11, the diagnosis called "PCBD" under the "Conditions for Further Studies" title of Diagnostic and Statistical Manual of Mental Disorders, 5th edition (DSM-5), Section III (APA, 2013) was changed to "PGD" and added to Section II within DSM-5 Text Revision (APA, 2022) (Prigerson et al., 2021a). Regarding this change, pathological grief is now formally part of Diagnostic and Statistical Manual of Mental Disorders (DSM) diagnoses (Boelen et al., 2020), and this change is

achieved through the empirical findings from several research studies that the symptom cluster of PGD are well-defined and discrete from the generalized anxiety, depression, and posttraumatic stress disorder symptoms (Boelen et al., 2010, 2020; Lenferink et al., 2020; Prigerson et al., 2021a; Tsai et al., 2018).

2.2.d. DSM-5-TR Diagnostic Criteria for PGD

Albeit the precise same terms used, differences between diagnostic criteria of PGD between ICD-11 and The Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition, Text Revision (DSM-5-TR) are noticed (Boelen et al., 2020). According to DSM-5-TR (APA, 2022), a minimum of 12 months needs to have elapsed following the death of a loved one in order to be diagnosed with PGD (Criteria A); one or two of attachment disturbance symptoms (e.g., intense yearning and constant thinking about the deceased) (Criteria B) and a minimum of three of eight additional symptoms displaying emotional suffering (Criteria C) should arise almost in a daily basis at least during the last month. Additionally, intense distress or functional impairment should be observed (Criteria D), length and intensity of symptoms are required to take place outside of the borders of the culture of the griever (Criteria E), and lastly, any other mental illness, substance use, or medical condition cannot justify the symptoms experienced after this loss (Criteria F).

Thanks to this formal addition of PGD to DSM-5 and the establishment of diagnostic uniformity between ICD-11 and DSM-5, improvement in estimations of prevalence rates, preventive practices, and treatments; also in return, increment in the resource distribution is expected (Boelen et al., 2020; Reed et al., 2022). This improvement is crucial, when we consider that research on this subject is scarce and has poor external validity due to defining pathological grief in several different ways in the field (Boelen et al., 2020).

2.2.e. Symptom Criteria Differences Between PGD Diagnoses Of ICD-11 and DSM-5-TR

Despite the optimistic expectations, as mentioned earlier, there is a difference between the symptom criteria of ICD-11 and DSM-5TR for PGD diagnosis which are 6 months longer duration after death and a higher threshold for meeting accessory symptoms in DSM-5-TR compared to ICD-11 (Prigerson et al., 2021). The effect of this difference on diagnosing disturbed bereaved people was investigated by the researchers and the following conflicting findings were revealed.

According to a study conducted by Haneveld et al. (2022), while the diagnostic rate of disturbed grief was 76% with ICD-11 criteria, it was found to be 52% with DSM-5-TR, so that these criteria of two diagnostic tools appear to be not concurrent. Also, earlier some researchers had some concerns that the low-level symptom threshold of ICD-11 in contrast to PCBD in DSM-5 led to disproportionate false positives in the diagnosis (Boelen et al., 2018; Comtesse et al., 2020; Maciejewski et al, 2016). However, Rosner et al. (2022) found that although the diagnostic concurrence between $PGD_{DSM-5-TR}$ and PGD_{ICD-11} is best when PGD_{ICD-11} with the threshold of four extra symptoms, it is also close to perfect with the single additional symptom threshold. Similarly, regarding the discordance between them, it was revealed by Haneveld et al. (2022) that only the lower time criterion of ICD-11 compared to DSM-5-TR may significantly affected the ICD-11 to have a high diagnostic rate of PGD. Hence, the difference in time criterion appears to be more important in terms of the difference in diagnosis rate, rather than the difference in additional symptom thresholds.

2.2.f. Prevalence of PGD

Considering both the difference in diagnostic criteria between ICD_{PGD} and DSM-5-TR_{PGD} and the fact that previous prevalence studies may have lost their validity because of these novel diagnostic criteria (Trembl et al., 2022), PGD prevalence findings of studies conducted according to both ICD-11 and DSM-5-TR which are the preeminent diagnostic tools will be reported in this section. Further, in order to eliminate selection bias and to learn about the general population, only population-based studies will be described first, and then research conducted during the COVID-19 pandemic period will be examined.

According to the population-based study conducted by Rosner et al. (2021), the prevalence rate of PGD in the overall population is 1.5% and 4.2% among grieving individuals for PGD_{ICD-11} whereas 1.2% in overall population and 3.3% among the grieving individuals for PGD_{DSM-5-TR}. Also, the authors suggested that PGD with a single additional symptom is also both common and leads to a significant extent of impairment among bereaved individuals. Similarly, in a recent population-based study, a 3.4% prevalence of PGD in accordance with DSM-5-TR criteria was found among deceased individuals (Trembl et al., 2022). Respecting the substantiality of PGD in the overall population demonstrated by the epidemiological data of prolonged grief, the screening of individuals with a disturbed grieving process should be meticulously done by mental health professionals for the allocation of resources (Rosner et al., 2021; Trembl et al., 2022).

2.2.g. Prevalence of PGD during the COVID-19 Pandemic

With regard to concerns that the circumstances of the pandemic will lead to pathological grief responses among COVID-19-related bereaved individuals (Breen, 2020; Eisma et al., 2020), researchers began investigating the rate of PGD among

these individuals. As stated in the study by Tang and Xiang (2021), the prevalence rate of PGD is 37.8% among individuals who lost a close one due to COVID-19 or related complications. Besides, in a study conducted among COVID-19-related bereaved people who actively seek information about their grief process, this rate was found to be considerably elevated at 66.53% (Gang et al., 2022).

Comparing the probable PGD prevalence between COVID-19 deaths, natural (e.g., protracted illness,) and unnatural deaths (e.g., homicide, accidents, etc.), it was found that the rate of probable PGD in COVID-19 deaths was higher than in natural deaths, whereas it was less than in unnatural deaths (Eisma et al., 2021; Eisma & Tamminga, 2022; Gang et al., 2022). Since unexpectedness escalates the severity of grieving (Doering et al., 2022), this difference was justified by this finding. Namely, COVID-19 deaths are recognized as less unexpected than unnatural deaths in terms of having symptom duration allowing one to be prepared for the loss, but more unexpected than natural deaths (Eisma et al., 2021; Gang et al., 2022).

PGD has adverse health consequences such as functional impairment (Nielsen et al., 2020), suicide ideation, etc. (Ma et al., 2022) so detecting individuals at risk of probable PGD is crucial. Notably, considering the high PGD prevalence among COVID-19-related bereaved individuals, it is necessary to determine pandemic risk factors elevating grief intensity (Gang et al., 2022). Prior to explaining these COVID-19-related risk factors of PGD, it will be useful to examine theories of grief.

2.3. An Overview of Grief Theories

In the pioneering work of “Mourning and Melancholia”, Freud (1917) asserted that mourning is a process in which the mourner confronts the loss of an

object. If mourner finds a way to progressively cathect his/her libido to another object from the psychic enactment of the loved one, distressing but usual process as grief work occurs in “mourning”. Thus, establishing new relationships and adapting to life events becomes possible by realizing that the lost object is no longer present and breaking ties with the object. Otherwise, as a consequence of the introjection of unsteady libido into the ego and the unsettled conflicts with the lost object, mourners suffer from “melancholia”.

As one of the most prominent theories of loss, Bowlby’s (1961) Attachment Theory was formed by monitoring the reactions of abandoned and institutionalized children to the separation from the caregiver. Albeit the similar emphasis on unsettled emotions, Bowlby’s view is distinct from Freud’s in the way that the disturbed grief is not a result of unresolved conflicts but emerges from the attribution of the abandonment to being rejected by the loved one (Prigerson et al., 2021b). This theory involves four patterns for the pathological grief process in which the mourner feels an intense longing for the deceased, has consistent anger toward the self and those around, identifies with and is compulsively concerned with another grieving individual, cannot accept the phenomenon of the loss (Bowlby, 1963). Further, Bowlby and Parkes (1970, 1980), by expanding this theory, proposed the antecedent stage theory of grief in which the course of grief includes the following four stages: “(1) mourner experience disturbance, feel a sense of numbness, and reject the reality of loss, (2) suffer intense yearning, protest the absence of the loved object, and seek him/her, (3) feel despair and lastly (4) recovery process begin and the mourner reintegrates into the life”.

In the light of the ideas of Bowlby (1961, 1980) and Parkes (1972) that grief progresses gradually and their stage theory of grief (Bowlby & Parkes, 1970), the

five-stage model of grief was introduced by Kübler-Ross (1969) and the theory respectively involve these phases of grief: (a) denying the death of a loved person, (b) feeling intense anger at the fact that the loved person is dead, (c) bargaining to reverse the phenomenon of death, (d) becoming hopeless and depressed and (e) accepting the loved one is died and will not return back.

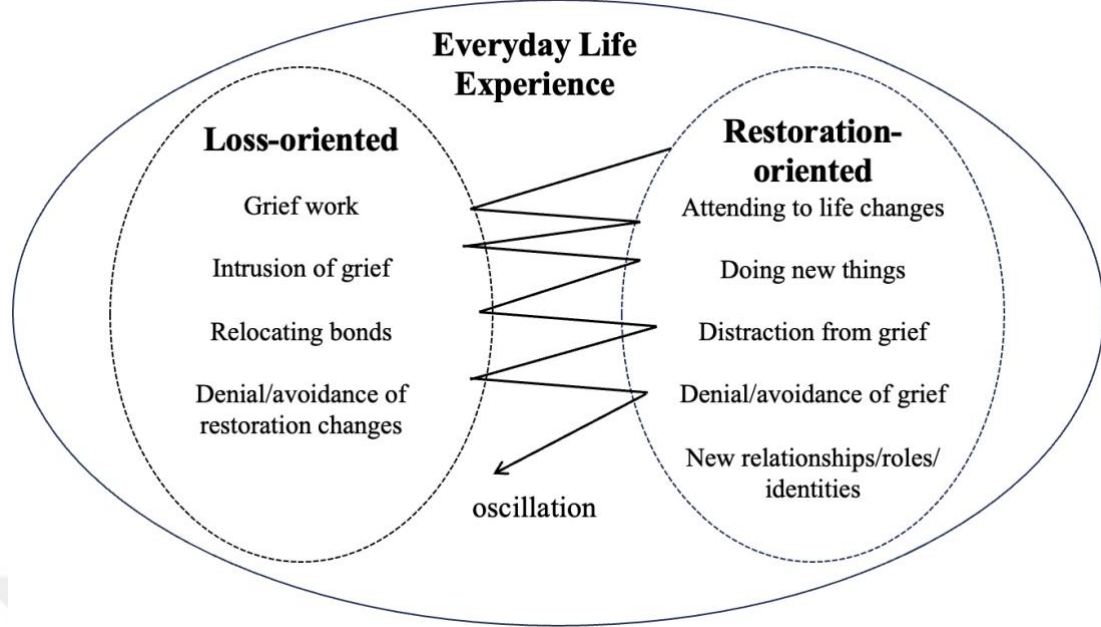
Noticing alterations in the theories about the nature of grief since the theory of Freud, one of the most remarkable of them is the questioning of “detachment” from the deceased and “stage” approaches (Baker, 2001; Milar & Lopez-Cantero, 2022). As a revolutionary paradigm of Klass et al. (1996) in their Continuing Bonds theory of grief, it is claimed that the grief process never resolves by rupturing bonds, instead, it persists by redefining the relationship with the loved one. The linear progression of the grieving process in steps or phases was rejected, and visiting the grave, continuing rituals, or keeping remembrances were cited as examples of maintaining a griever’s bond with the deceased.

Another contribution to emerging approaches to understanding grief was made by constructivist theories indicating that bereaved people pursue to find or reconstruct the meaning by engaging in an active attempt as an essence of grief work (Neimeyer, 2001). After the death of a loved one, disruption is observed in the assumptive world, the core belief of themselves, and thus the self-narrative of the life story related to the lost one. “Sensemaking, benefit finding, and identity change” were outlined as three main processes that the griever undertake for the rebuilding of disrupted meaning (Neimeyer, 2001; Neimeyer & Anderson, 2002). These activities will be discussed in more detail under the heading of “The Potential of Growth After the Death of a Loved One”.

2.3.a. Dual Process Model (DPM) of Grief

The model of Stroebe and Schut (1999, 2010) contributes to emerging theories of understanding bereavement by illustrating the coping process of bereaved individuals. It has two dimensions that refer to the endeavors of the bereaved individual to manage the stressors associated with the incident of loss. The first, “loss-oriented coping”, centers on the stressors of the loss experience and the bond with the lost person. It comprises behaviors of yearning and various affectional reactions about the deceased together with the griever’s ruminations about the lost one, the life spent together, and death-related circumstances. Although the intensity and timing of the emotions vary from person to person, negative emotions are prone to be salient in the initial period of bereavement, but diminish over time, giving way to positive emotions. The second, “restoration-oriented coping”, addresses the secondary outcome of loss which add significant stress to the grieving process. An example of a task of restoration is taking on new roles or conducting new activities in the lost one's absence. In a similar way to loss orientation, as the bereaved carry out these responsibilities, a wide range of emotional responses can be observed. For instance, one person taking on the financial burden of the household may feel proud while another may feel anxious. In addition to the individual level, the loss is also experienced at the family level and the bereaved people also cope with family-related stressors, e.g., mourning together with family members and having support or additional difficulties in the loss-oriented coping orientation (Stroebe & Schut, 2010).

Figure 2.1. Dual Process Model of Coping with Bereavement (Stroebe & Schut, 1999)



According to DPM, “oscillation” is the core element of this model (Stroebe & Schut, 1999, 2010) (see Figure 2.1). The basis for healthy coping with post-loss stressors is posited as the griever's oscillation between loss orientation and restoration orientation so that the griever faces or avoids these stressors, and in return, emotion regulation occurs along with the process of positive versus negative appraisals as the grieving process unfolds (Stroebe & Schut, 1999, 2021). Also, coping is a part of life, but not the sole occupation of the time of the mourner (Stroebe & Schut, 1999). Occasionally, “time-off” occurs; the griever prefers distraction because facing certain situations may be excessively distressing or is required to attend to nonbereavement-related things and denial takes place on a conscious or unconscious level.

On the other hand, complicated grief results in a griever's intense reactions and pervasive fixation on one orientation of coping while avoiding the other, often with no time-offs (Stroebe & Schut, 2016). Besides, there is a probability that a bereaved person cannot cope because of the “overload” of multiple stressors in one

or both orientations. Accumulation of nonbereavement-related stressors in life may also intensify the overload. Reducing the overload could occur through the open expression of mourners regarding their individual needs in order to get social support from the people around them. Thus, grief is a dynamic process involving the experiences associated with bereavement, restorative adjustments, coping with the accumulation of stressors at the individual and family-based levels, as well as time off (Stroebe & Schut, 2010, 2016).

This theory will be utilized for the introduction of COVID-19-related bereavement regarding its' appropriate way of addressing the grief risk factors during the COVID-19 period, consideration of the possible overload, the role of social support, and coping ways of bereaved individuals.

2.3.b. DPM in the Context of the COVID-19 Pandemic

The circumstances and context of the COVID-19 pandemic affecting the grieving process have been summarized by Stroebe and Schut (2021) using the DPM framework to understand the bereavement experiences of COVID-19 deaths. In this model, the sudden and traumatic nature of death, being unable to say goodbye, and isolation of the patient was listed under the loss-oriented stressors while the other consequences of the pandemic such as financial burden, isolation policies-related struggles, and worries about the infective nature of virus were specified as restoration-oriented stressors. Moreover, loneliness resulting from policies, feeling responsible for loved one's death, or anger toward the authorities are considered loss-oriented reactions whereas the increase in anxiety level and feelings of insecurity as restoration-oriented reactions.

The possibility of overload was highlighted as it poses a risk to health (Stroebe & Schut, 2021). Mostly at the family level, multiple losses in a short period,

prolonged stay in the same household, or painful detachment from family and friends are considered factors that lead to "overload". It was pointed out that there is little mention in the literature of the situations providing oscillation, with examples of the establishment of community support groups and the utilization of modern technology. Thus, the need for mourners to balance their attempts to cope with co-occurring loss and restorative stressors was highlighted.

2.4. COVID-19 Pandemic-Related Risk Factors of Grief

Given the unique circumstances of loss created by the pandemic, the pioneer empirical analysis of Neimeyer and Lee (2022) found 10 risk factors (Pandemic Grief Risk Factors, PGRF) predicting elevated levels of prolonged grief symptoms among bereaved persons due to COVID-19. These risk factors are (1) feeling of guilt about not being with the deceased in the last moments, (2) dying of the deceased alone or suffering, (3) prohibition of funerals and rituals, (4) having thoughts about preventing the disease, (5) sense of emotional distance resulting from the conditions surrounding the death, (6) worrying about that other loved ones may also die from the infection, (7) intrusive images of the loved one on life support, (8) resentment toward doctors for being left unaware of the loved one's health condition, (9) loneliness in grief as a result of social restrictions, and lastly (10) perception of punishment by God or the universe. Moreover, an assessment of these risk factors in a Peruvian sample demonstrated that PGRF is a valid psychometric tool for various populations and at diverse stages of the pandemic (Caycho-Rodriguez et al., 2022).

Various other factors, including the unexpectedness of death (Eisma & Tamminga, 2022), loneliness (Zou et al., 2022), a sense of unfinished business, conflict in a relationship (Lee et al., 2022; Tang & Xiang, 2021), feelings of regret

and shame (Lee et al., 2022), close relationship with the lost one, and experiencing more trauma due to the loss (Tang & Xiang, 2021) were also found to be significant predictors of dysfunctional grief symptoms. Conversely, a few findings are controversial regarding some factors, including saying goodbye at the last moment (Eisma & Tamminga, 2022; Zou et al., 2022), ritual attendance (Simsek-Arslan & Buldukoglu, 2021; Zou et al., 2022), kinship (Gang et al., 2022; Lee et al., 2022; Tang & Xiang, 2021), and time since death (Gang et al., 2022; Lee et al., 2022). While some of these studies found that these factors are predictive of grief intensity, others did not. Hence, in addition to the circumstances brought on by the COVID-19 period, some additional factors appear to exacerbate the intensity of grief.

The grief experienced following a loved one's death constitutes the topic of this chapter. As another bereavement outcome, the possibility of growth after losing a loved one will be explored in the following chapter.

2.5. The Potential of Growth After the Death of a Loved One

Crises in life, such as the death of a loved one, are considered, with the impetus they provided, as a "dangerous opportunity" - that is, a gateway to growth that possess a significant risk (Balk, 2004). The journey after bereavement is one of loss and gain that unfolds over time, intertwined with lingering grief and the reintegration of the bereaved person into life. One's struggle with loss and the shattered assumptive world is a significant part of this growth process (Tedeschi & Calhoun, 2008). Hence, meaning reconstruction by the bereft occur in order to reconstruct this shattered assumptive world (Neimeyer, 2001).

In the process of meaning-making, there are three main activities posited by the constructivist theorists (Neimeyer, 2001; Neimeyer & Anderson, 2002). Firstly,

the griever's efforts to comprehend the reason and make sense of the death serve as a restoration of the predictability and safety feelings in life. Also, grievers strive to positively reappraise their experience of loss and find the benefit in this experience, not often immediately after death, but in the future process. Lastly, while the meaning of life was reconstructed, one inevitably reconstructs the identity, and throughout this experience, despite the suffering in agony, the griever could also experience posttraumatic growth (Gillies & Neimeyer, 2006).

In the following section, the concept of posttraumatic growth and the growth theories will be presented, also focusing on the context of the COVID-19 pandemic, in order to gain deeper insight into the adaptive change process that arises after the death of a loved one.

2.6. Posttraumatic Growth

The concept of posttraumatic growth (PTG) was introduced for the first time by Tedeschi and Calhoun (1995, 1996), that is, after confronting traumatic or burdensome life events, long-term positive changes in cognitions, emotions, and consequently behaviors of sufferers emerge. The groundwork of PTG is based on the approaches from the far-reaching existentialist tradition considering its prospect on suffering and guide to the meaning attributed to circumstances, as well as the constructivist tradition, which includes the work of Janoff-Bulman (1992), Kelly (1995), and Neimeyer (1993) (Tedeschi & Calhoun, 2018). The constructivist perspective indicates that individuals construct their own sets of schemas for comprehending experience as well as their core beliefs regarding themselves, the world, and the future. Regarding this perspective, theorists argued that PTG results in response to demolished assumptions of individuals after challenging events (Tedeschi & Calhoun, 2018). In the aftermath of trauma, some people are capable of

reconstructing their assumptions leading them to think, feel, and act in new patterns. Thus, the degree of challenge to one's assumptive world as well as the extent of this challenge triggers cognitive processes centered on the traumatic events and consequences that they entail are the two main determinants for growth (Cann et al., 2009).

2.6.a. Growth Theories

2.6.a.i. Functional Descriptive Model of PTG

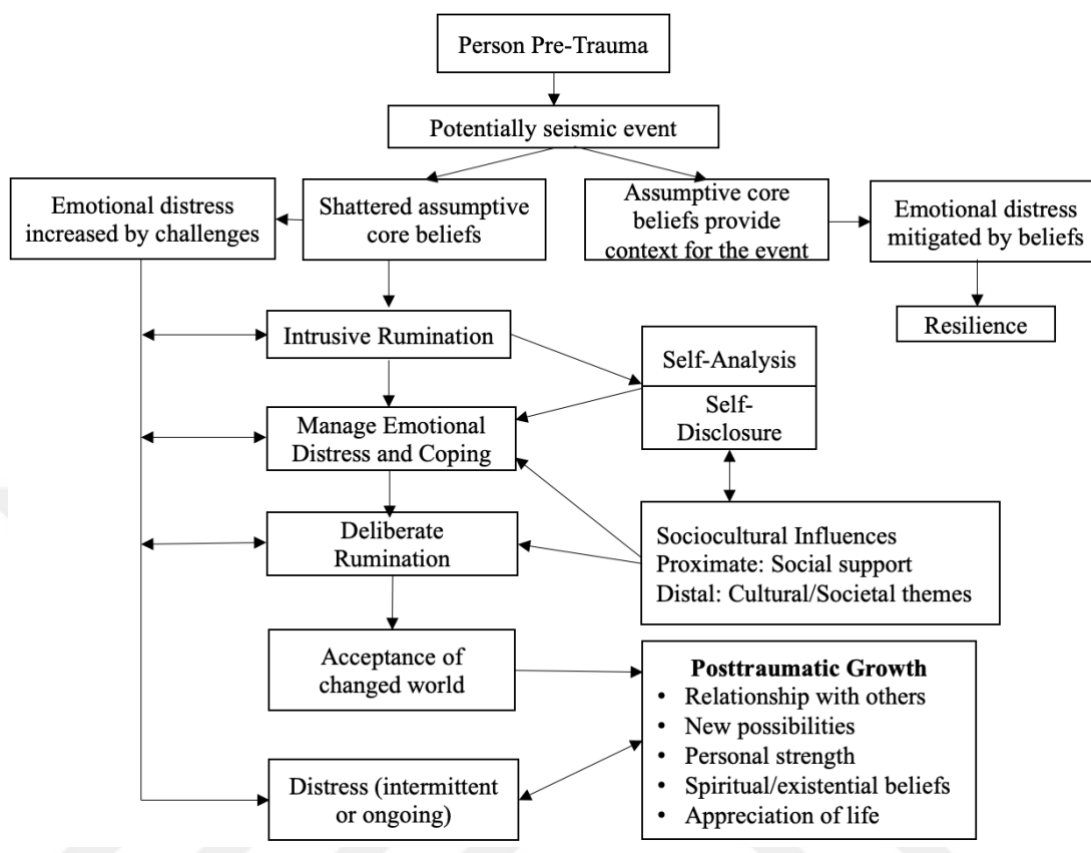
There have been some revisions to the posttraumatic growth model proposed by Tedeschi and Calhoun in 1995 to date (Tedeschi et al., 2018), but the core ideas have been preserved regardless of the diagrams used (see Figure 2.2). The basis of the theory encloses the cognitive struggle of the individual initiated by the shattered assumptions after the seismic traumatic event, following intrusive and deliberate ruminations, coping success, and resulting PTG. An earthquake analogy was used to illustrate demolished core beliefs with the devastation it unleashes in an unexpected moment and an unexpected place (Calhoun & Tedeschi, 2013). A person's beliefs are reconstructed by cognitive work following a traumatic event, similar to functioning as a city that is rebuilt after a disaster. Growth, albeit not a definite result of this cognitive processing, is remarkably prevalent under growth-enhancing circumstances (Calhoun et al., 2010).

The latest PTG model (Tedeschi et al., 2018), explains the path to growth and describes how individuals experience it similar to preceding ones but also involves following changes. According to the model, both distress and positive changes can be experienced at the same time within the process of growth. Specifically, this emotional distress that exists when the person ruminates intrusively after traumatic

events and core beliefs are shattered is also present when the person deliberately ruminates, but a different meaning is transferred to the occurrence. Also, whereas some individuals ruminate intrusively after their core beliefs are shattered by the traumatic event, in return, resulting in deliberate rumination, the core beliefs of others may not be challenged by the same event thus not leading to psychological growth.

Apart from these changes, the PTG model (Tedeschi et al., 2018), like previous versions (Calhoun & Tedeschi, 1998, 2006; 2013; Calhoun et al., 2010; Tedeschi & Calhoun, 1995, 2004), includes the characteristics prior to the trauma of the person that can have an impact on the probability of PTG and it involves factors such as demographic characteristics, traits of personality, and mental health condition. Especially, the role of social support is highlighted in this model. It is indicated that the presence of social support affects ruminative cognitive processes, increasing the probability of PTG (Calhoun et al., 2010). Furthermore, other factors affecting PTG such as self-disclosure and sociocultural influences were illustrated in the model as shown in Figure 2.2.

Figure 2.2. Revised Model of Posttraumatic Growth (Tedeschi et al., 2018)



Lastly, the recent model (Tedeschi et al., 2018) explains the five domains of experiencing PTG. The first one is “personal strength”: individuals perceive themselves as a survivor instead of a victim, the participation in challenges increases, with an elevated sense of confidence. The second one, the “relating to others” domain, displays both the improvement experienced by the person in their relationship with others and the improvement in behaviors in the relationship, such as reflecting more emotions. The third one, the “new possibilities” domain, is visible in people’s moving in a new direction in life such as discovering new interests or establishing a new profession. The fourth one, “appreciation of life”, involves feeling blessed to have a second chance in life and behaving accordingly, such as spending more time with loved ones. Lastly, “spiritual and existential change”,

indicates the experiences of both religious and non-religious individuals such as an enhanced understanding of existential issues. Hence, after a traumatic event, individuals may experience posttraumatic growth in some or all these domains.

2.6.a.ii. Conceptual Model for Understanding Life Crises and Transitions

The conceptual model of Schaefer and Moos (1998) addresses the positive adaptation and personal growth of individuals that takes place in the aftermath of life crises such as illness, war, and loss. A series of factors that are linked to this growth experience is represented in this model. According to this model, crises in life as well as their consequences are influenced by the factors of environmental (e.g., social support and human relations) and personal system (e.g., sociodemographic features, resilience, the experience of previous crises, etc.). As a result of these factors, personal growth and positive transition may occur, as they affect individuals' way of appraising and dealing with crises.

In this model, event-related factors refer to the scope, duration, intensity, and timing of the stressful event. Also, coping responses comprise two types of responses which are approach and avoidance. While appraisal coping is more functional, such as evaluating the event with a logical and positive perspective and trying to solve it with the support of people, avoidance coping involves behaviors of underestimating the difficulty and thinking that the problem cannot be changed. Lastly, the model consists of feedback loops between factors, that is, all factors are interrelated. Hence, the nature of an individual's positive change after experiencing a life crisis, affected by personal and environmental factors, is explained with this feedback-based model.

2.6.b. Posttraumatic Growth After Losing a Loved One Due To COVID-19

The literature regarding COVID-19-related bereavement largely emphasized the negative psychological impact of bereavement, but some scholars stated that even in the face of stress factors associated with COVID-19, such as the death of relatives, people can cope (Pfefferbaum & North, 2020). Further, families' shared efforts of comprehending the loss in the meaning reconstruction process were highlighted as a coping way for the loss of a loved one during the pandemic by Walsh (2020).

Despite these opinions, empirical findings are scarce in the literature regarding posttraumatic growth experienced following the death of a loved one due to COVID-19. According to a qualitative study conducted by Abdekhodaie (2023), some of the COVID-19-related bereaved individuals in their sample indicated that they try to acquire new meaning regarding the loss they experience and in their life. Thus, these individuals reported that they make every moment count, sense greater mastery over life and alter their perspectives on their lives, and lastly experience relationship improvements.

When we explore the amount of PTG experienced by bereaved people due to COVID-19, different findings are observed in the literature. For instance, one study found a lower level of PTG ($M = 30.22$) among their sample of bereaved individuals (Carson et al., 2021) whereas other studies found that their bereaved participants experienced high levels of PTG with mean scores of 58.86 (Qian et al., 2022) and 66.81 (Chen & Thang). On the other hand, although we know that these individuals experience PTG, it is important to identify the factors that contribute to the development of PTG during the COVID-19 pandemic. The study conducted by Chen and Tang (2021) identified that being a partner of the deceased, the deceased's older age, closer relationship, and lower conflict with the deceased are the variables that

predict an increase in levels of PTG. Another study found that the expectedness of death and meaning making are positively associated with PTG (Qian et al., 2022). Lastly, being a younger bereft and having high levels of coping skills are detected to be related to higher levels of PTG (Carson et al., 2021).

Considering these findings in the literature, in this thesis, the predictor roles of ruminations and social support on the development of PG symptoms and PTG will be explored by controlling other confounding factors. Hence, the next section will consider the descriptions of ruminations and social support and the relationship of these variables with PG symptoms and PTG.

2.7. Processing of Grief

2.7.a. Ruminations

A ruminative act is defined as contemplating information in a repetitive manner, pondering its significance, or meditating on it (Cann et al., 2011). An analogy could be drawn between rumination and mental “chewing the cud”. Despite its negative undertone in the past such as “negative repeated cognitive reflection on symptoms” (e.g., Nolen-Hoeksema et al., 1997), the possibility of different types of ruminative thinking has been acknowledged by many authors, and the substantial distinction between them was established (Cann et al., 2011; Nolen-Hoeksema et al., 2004; Segerstrom et al., 2003; Tedeschi et al., 2018; Treynor et al., 2003). Also, since the ruminations initiated by a crisis in life can consist of both automatic/uncontrolled and reflective/controlled recurrent thinking (Watkins, 2008), “intrusive rumination” and “deliberate rumination” as two main styles of event-related rumination were differentiated and proposed by Cann et al. (2011). In the current study, we focused on these event-related ruminations involved in the PTG

model (Tedeschi et al., 2018). As the term implies, intrusive ruminations are uninvited thoughts that invade one's mental space-thoughts arising out of an experience one is not willing to recall. On the other hand, it is possible to engage in deliberate ruminations, which are carried out voluntarily, reflectively, and constructively, with the purpose of gaining a deeper understanding of the events (Cann et al., 2011). In the PTG model (Tedeschi et al., 2018), both of these event-related ruminations are triggered by a distressing experience in one's life. For this reason, the role of rumination in the grief process is examined in detail in the next subtitle.

2.7.a.i. Ruminations and Grief

Bereavement literature has placed a lot of emphasis on the phenomena of recurrent thinking since the remark of Freud (1917) that those who have lost a loved one frequently reflect on the deceased, their sorrow, and the altered environment they presently inhabit (Eisma et al., 2014). The adaptation of the bereaved throughout the grieving process was anticipated to be significantly influenced by this way of thinking. In studies, rumination was primarily considered as only a maladaptive process (Watkins, 2008), and it was found that depressive rumination (Boelen & Lenferink, 2020; Nolen-Hoeksema et al., 1994, 1997) and grief rumination (Eisma et al., 2013, van der Houwen et al., 2010) increases symptoms of psychopathology following bereavements such as depression and complicated grief. Also, the processes of grief are considered to be normal or pathological based on the degree of self-criticism and pessimism expressed in ruminations (Moyaeddin & Markowitz, 2015). Meanwhile, academics have pursued to examine and differentiate the adaptive and maladaptive styles of ruminating (Watkins, 2008). Studies demonstrated that adaptive types of rumination such as “reflection” and “a rumination on reactions”

have benign effects on the grieving process wherein maladaptive types (e.g., brooding) increases the intensity of pathological grief (Boelen, 2012; Eisma et al., 2014, 2015). According to Eisma (2015), a key characteristic of functional forms of repetitive thinking is distinguished by being neutral, concrete to some extent, and self-centered with a comprehension of emotional responses associated with the loss.

Considering the above-mentioned previous findings as well as the theoretical background, the predictor role of event-related ruminations on the grieving process will be investigated in this thesis. In the light of the theoretical framework of event-related ruminations, an inference can be made that those who engage in intrusive rumination frequently dwell on the unpleasant facets of loss rather than addressing other matters, which may exacerbate the already complex grieving process (Huh et al., 2020). Also, since the loss fractures the world of meaning, perceiving grieving as a process of remaking the meaning via deliberate rumination may provide a structure to comprehend the connection between deliberate rumination and grief (Calhoun et al., 2010). Irrespective of whether one is prone to ruminate intrusively or deliberately, both types of thinking can be triggered by a distressing experience in one's life (Calhoun et al., 2000). Moreover, intrusive thoughts may be a catalyst for efforts at ruminating more deliberately (Cann et al., 2011; Tedeschi et al., 2018), and ruminations of either form may co-occur, or one may alternate between them (Stroebe & Schut, 1999). Thus, understanding the function of these two forms of rumination in the grieving process is essential.

In the literature, there are two studies examining the relationship between event-related rumination and pathological grief symptoms. First off, Chukwuorji et al. (2018) showed that exacerbation of prolonged grief symptoms is predicted by both intrusive and deliberate rumination. However, the findings suggested that

ruminating intrusively increases prolonged grief symptoms more strongly than ruminating deliberately. In another study, there was no evidence of a correlation between deliberate rumination and pathological grief, although there was a positive correlation between intrusive rumination and symptoms of pathological grief (Huh et al., 2020). Based on the PTG theory (Calhoun et al., 2000, 2010; Tedeschi et al., 2018) indicating that intrusive rumination exacerbates grief by dwelling on negatives, while deliberate rumination helps to find meaning, these results may lead to the interpretation that intrusive rumination during the grieving process is more dysfunctional than deliberate rumination. Thus, the roles of event-related rumination in grief process of bereaved individuals will be investigated in this thesis.

2.7.a.ii. Ruminations and Posttraumatic Growth

The PTG model contends that growth and, possibly, a further nuanced understanding of the world and the people are linked to ultimate progress in reconstructing belief systems after the death of a loved one (Calhoun et al., 2010). In this reconstruction, ruminations serve a function. Deliberate ruminations are preceded by intrusive rumination albeit their distressing side, and this ruminating deliberately serves meaning-seeking efforts which eventually enables one to have a more profound understanding of life (Tedeschi et al., 2018).

According to the empirical findings of studies on people experiencing a distressing life event, thinking deliberately is typically linked to PTG (Cann et al., 2011; Gul & Karanci, 2017; İkizer et al., 2021; Morries & Shakespeare-Finch, 2011), although differences in correlational power are observed based on the timing and the participants of the research (Tedeschi et al., 2018). On the other hand, growth arises only if intrusive ruminations emerge immediately following the event and fade or disappear after some time (Taku et al., 2008; Taku et al., 2009). Lower levels

of growth which is linked to recent intrusive thoughts may be a sign of unsuccessful efforts to reestablish the belief systems (Calhoun et al., 2010).

Regarding empirical research on PTG following a loss, a study conducted by Huh et al., (2020) found a positive correlation only between deliberate rumination and PTG, while other studies identified a positive correlation between both forms of event-related ruminations and PTG (Ryninks et al., 2022; Záhorcová & Prielomková, 2020). However, the strength of the association between deliberate rumination and PTG is substantially stronger, according to the study's findings, which showed a positive relationship between the two forms of rumination and PTG (Ryninks et al., 2022; Záhorcová & Prielomková, 2020). Further, Záhorcová and Prielomková (2020) found that PTG is significantly predicted by deliberate thoughts following bereavement but not by intrusive thoughts.

2.7.a.iii. Ruminations Within the Context of Bereavement Due to COVID-19

A few conclusions concerning the cognitive processes of COVID-19-related bereaved individuals can be drawn even though no research has been done on the association between rumination and prolonged grief, or posttraumatic growth, among those people. For instance, since risk factors such as "Guilt of not being there" among the pandemic grief risk factors they identified revealed a strong link with pathological grief, Neimeyer and Lee (2022) noted that these feelings of guilt may stimulate ruminations about the deceased. Further, Breen et al. (2022) found that disturbed meaning serves as a partial mediator between pandemic grief risk factors and pathological grief symptoms. Thus, it is expected that rumination may be generated by these risk factors and serve as a mediator in the relationship between PGRF and PTG in light of these prior findings and knowledge of the role of

rumination as a part of the meaning-making process (Greenberg, 1995; Park & George, 2013).

2.7.b. Social Support

Social support refers to the emotional, informational, and instrumental support a person receives from others in his or her interpersonal network (Vachon & Stylianou, 1988). As the term implies, social support displays an individual's overall perception of being loved and valued, as well as trust in others under challenging circumstances (Thoits, 2011). There are many sources of social support, such as friends, family, romantic partners, co-workers, and community groups (Heaney & Israel, 2002). Also, the construct of social support is multifaceted as “perceived social support” and “received social support”: perceived social support is defined as the perception of having social connections that are sufficient and accessible, whereas the concept of received social support emphasizes the amount and nature of the support provided (Rodriguez & Cohen, 1998; Vangelisti, 2009). A substantial amount of research indicates that the association between received support and perceived social support is weak (Haber et al., 2007). Further, it is well established that poor psychological well-being is associated with lower perceptions of social support (Cipolletta et al., 2022; Kafetsios & Sideridis, 2006), but there is just a tenuous link between social support received and psychological consequences (Son et al., 2008). In light of these findings, this thesis will investigate the role of perceived social support in the grief process.

2.7.b.i. Social Support and Grief

Cohen and Will (1985) discussed the effects of social support on psychological outcomes by presenting two different models. The first model

indicates the main effect of social support. It suggests that wellbeing of the individual may be enhanced by social support because it gives a sense of being valued, of not being alone, and consequently of self-worth. A person's life may also become more predictable and stable, and being a part of social roles may shield one from adverse circumstances like financial hardships. Thus, in the context of bereavement, perceiving social support, the bereft may be less inclined to experience complicated grief (Stroebe et al., 2005).

The social support buffering hypothesis, which is the second model, posits two assumptions that emphasize the protective function of social support in the wake of a significant stressor (Cohen & Wills, 1985). Considering from the perspective of loss, the first assumption is that an effective social support network can help the bereft feel better after a loss since it can reduce the stress reactions and affect the way one appraises the loss (Cohen & Wills, 1985; Stroebe et al., 2005). It may be comforting to have an awareness that one can rely on friends and members of the family for support and will not be alone in the future, so the detrimental effects of loss may be attenuated (Stroebe et al., 2005). The second assumption is that with social support, one can develop healthy coping mechanisms, and this prevents risky behaviors (Cohen & Wills, 1985; Stroebe et al., 2005). In this regard, although the presence of social support might not be capable of safeguarding the person from the direct consequences of loss, it might empower ways to cope and speed up readjustment (Stroebe et al., 2005). In parallel, this empowering role of social support is also included in PTG theory (Tedeschi et al., 2018). The theory proposes that the expression of automatic, intrusive thoughts with a confidant may encourage one to appraise events in an optimistic or adaptive manner and promote deliberate thinking.

Literature regarding the relationship between ruminations and social support indicates that sharing the most intimate and intrusive thoughts regarding a traumatic event, such as losing a loved one, to empathetic others, leads to enduring lowering of long-term psychological outcomes than not sharing (Pennebaker, 1993, 1995; Lepore et al., 1996). Pertaining to this, social support may act as a buffer in the association between ruminative thinking and symptoms of depression, according to Nolen-Hoeksema and Davis' (1999) research on grieving parents. They may find more efficient ways to manage their pain associated with their loss (e.g., attending to active problem-solving), reappraise the meaning of loss (Greenberg, 1995), or alter the narrative in accordance with their belief patterns (Janoff-Buiman, 1992) by receiving support from a social network, reducing the distress level as a result. In the same vein, a more recent study conducted by van der Houwen et al. (2010) indicated that a lack of social support led to a greater tendency for individuals to ruminate more often, resulting in more severe signs of depression and bereavement as well as less positivity.

Reviewing the studies investigating the role of social support on the normal grief process in the literature, Stroebe et al. (2005) reflected that it is natural for those who lost a loved one to process their sorrow at their own pace and in their own manner when their grief is not pathological. On the other hand, research on prolonged grief reveals that social support has a positive impact on the pathological grieving process. For instance, social support appears to alleviate the symptoms of prolonged grief disorder in parents who have lost their only child (Song et al., 2023), bereaved university students (Al-Gamal et al., 2019), bereaved African American adults (Boulware & Bui, 2016), bereaved refugees in Germany (Comtesse et al., 2022), and bereaved family caregivers of cancer patients. (Tsai et al., 2016). In light

of all these findings, it would appear that examining the function of social support in the grieving processes of those who are anticipated to experience pathological grief is crucial.

2.7.b.ii. Social Support and Posttraumatic Growth

According to Functional Descriptive Model (Tedeschi et al., 2018), the phenomenon of posttraumatic growth is influenced by the interpersonal environment, and a comprehension of the phenomenon requires a full appreciation of the surrounding circumstances. Sharing one's automatic, intrusive thoughts with a confidante may encourage one to view events differently, optimistically, or adaptably. In addition to providing unique viewpoints, listeners may also act as role models. This is particularly true if they have had comparable experiences. Hence, in the aftermath of a burdensome life event, deliberate ruminations may be encouraged, and the reconstruction of assumptions may be initiated by social support (Calhoun & Tedeschi, 2013).

A variety of studies on participants with a traumatic experience including bereavement, which revealed a favorable relationship between social support and PTG, have validated the functional effect of social support posited in theory (e.g., Dirik & Karanci, 2008; Dominick et al., 2021; Ryan & Ripley, 2021; Yilmaz & Zara, 2016). Further, a meta-analysis of 217 empirical research studies conducted by Ning et al. (2023) revealed that social support significantly raises PTG levels in all forms of traumas. In both cross-sectional and longitudinal investigations, this impact was found to be significant. Thus, considering the constructive effects of social support both in the short term and in the long term, its role in the development of PTG is crucial.

2.7.b.iii. Social Support Within the Context of Bereavement Due to COVID-19

A paradox proposed by Carr et al. (2020) is that the public health measures designed to impede virus transmission and deaths (e.g., social distancing policies) may have also exacerbated grief-related anguish brought on by the COVID-19 epidemic. As a result of these policies, bereaved relatives were prohibited to mourn together with other people (Menichetti Delor et al., 2021), thereby leaving the bereaved to suffer in silence with no help or care, which disrupted the bereaved one's normal grieving process (Hamid & Jahangir, 2022). They had no opportunity to carry out their duties, connect with other family members, or express their emotions (Şimşek & Arslan, 2021) and more than half of them reported requiring emotional support (Harrop et al., 2021). Thus, all these limitations of communicating sorrow as well as the problems of receiving enough social support were both created by social isolation during the pandemic (Guité-Verret et al., 2021).

Due to these social constraints during the pandemic, the issue of social support via telephone or web-based methods emerged and there are conflicting opinions in the literature regarding this topic. Menichetti Delor et al. (2021) indicated that support from social networks, regardless of whether it was face-to-face or not, is crucial in providing protection during the grieving process. In this regard, several people found it beneficial to receive and provide support via telephone or the Internet as well as to honor the memory of their deceased loved ones (Testoni et al., 2021). On the other hand, in a study conducted by Harrop et al. (2021), individuals stated that they received numerous calls in the initial weeks following their loss, with a drop as the months passed along. Further, since the communications established in these mediums maintained a distance from others (Guité-Verret et al., 2021), it is not unexpected that most of them admitted that they were in need of physical comfort

and an “embrace” and found it challenging to be honest about their sentiments with family and friends (Harrop et al. 2021). Even if remote interaction is raised, people still felt lonely and depressed; thus, in order to sustain psychological well-being, it is claimed that remote modalities of communication cannot take the place of face-to-face interactions (Hawkley et al. 2021).

In light of the effects of pandemic circumstances on the nature of social support, it has been argued that social support may play a different role in the grieving process during this pandemic period (Grace & VanHeuvelen, 2022). In this period, it is thought that people may be frustrated by thinking about the social support they might have received in the absence of the pandemic, or in cases where they can receive higher levels of social support, being exposed to the anguish of a bereavement shared by friends and relatives may have stress-exacerbating effects. In accordance with their hypothesis, it was found that increased perceptions of support amplify the links between COVID-19-related bereavement and psychological suffering (Grace & VanHeuvelen, 2022). On the contrary, especially in a time when it can be so challenging to receive social support, feeling supported might have an even greater positive impact on people. In other words, having social support available can be very crucial at this time. Accordingly, the outcomes of another study in the literature point in this direction by demonstrating how higher levels of perceived social support may diminish symptoms of severe grieving due to COVID-19-related deaths (Skalski et al., 2022).

2.8. The Aim and The Hypotheses of The Study

The present study aims to explore the bereavement outcomes of bereaved individuals due to COVID-19, specifically prolonged grief (PG) symptoms and

posttraumatic growth (PTG). The predictor role of pandemic grief risk factors (PGRF), event-related ruminations (i.e., intrusive rumination and deliberate rumination), and perceived social support and its subfactors (i.e., support from family, friends, and significant other) on PG symptoms and PTG will be explored. In light of this research aim, firstly, two hierarchical multiple regression analyses will be conducted in order to find if there is a predictor role of PGRF, event-related ruminations, and perceived social support on PG symptoms and PTG. Secondly, if the main effect of social support could not be detected, the potential buffering effect will be explored based on the social support buffering hypothesis (Cohen & Wills, 1985). That is, for the outcome variable in which perceived social support has no main effect, moderated mediation analyses will be conducted with process macro model 7 (Hayes, 2013) in order to find the potential buffering effect of social support. Model 7 was specifically selected based on PTG theory (Tedeschi et al., 2018). Considering the relationship between social support and event-related rumination proposed by the theory, the possible moderator role of social support is expected to be observed between PGRF and rumination, and ultimately will be associated with bereavement outcome. Accordingly, the hypotheses of these analyses are as follows.

1) Hypotheses for hierarchical multiple regression models:

H₁: PGRF and intrusive rumination will positively predict PG symptoms while deliberate rumination, perceived social support, and its subfactors (i.e., family support, friends support, and significant other support) will negatively predict PG symptoms.

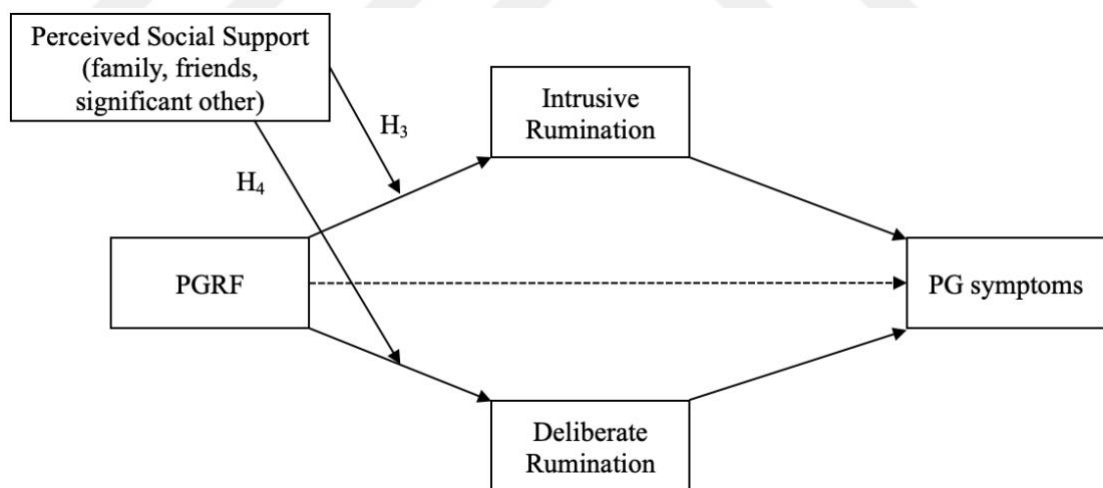
H₂: PGRF, intrusive rumination, deliberate rumination, and perceived social support and its subfactors (i.e., family support, friends support, and significant other support) will positively predict PTG.

2) Hypotheses for moderated-mediation model 1 when outcome is PG symptoms (see Figure 2.3):

H₃: The mediating effect of intrusive rumination between PGRF and PG symptoms will be weakened by perceived social support and its three subfactors (i.e., family support, friends support, and significant other support).

H₄: The mediating effect of deliberate rumination between PGRF and PG symptoms will be strengthened by perceived social support and its subfactors (i.e., family support, friends support, and significant other support).

Figure 2.3. Conceptual Diagram of Hypothesized Moderated Mediation Model 1

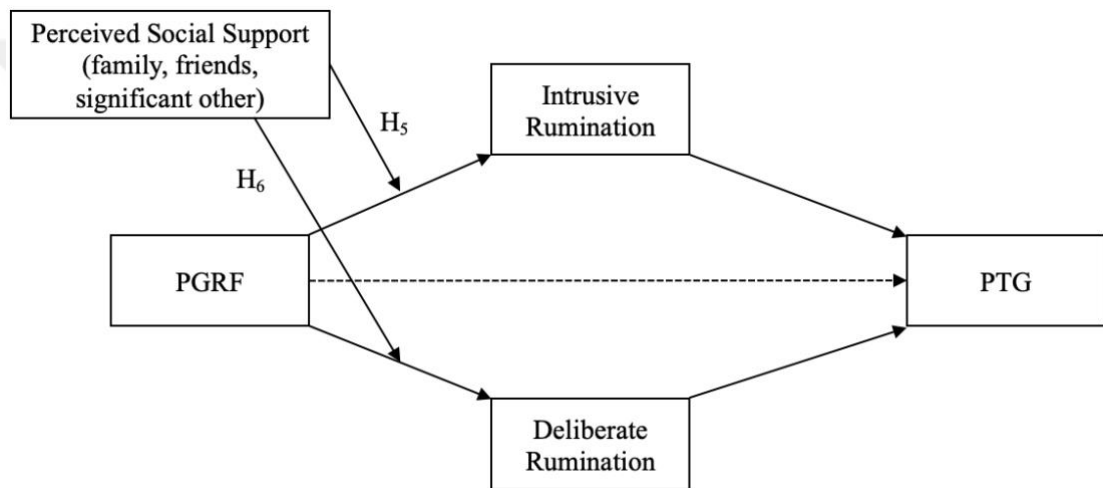


3) Hypotheses for moderated-mediation model 2 when outcome is PTG (see Figure 2.4):

H₅: The mediating effect of intrusive rumination between PGRF and PTG will be weakened by perceived social support and its three subfactors (i.e., family support, friends support, and significant other support).

H₆: The mediating effect of deliberate rumination between PGRF and PTG will be strengthened by perceived social support and its three subfactors (i.e., family support, friends support, and significant other support).

Figure 2.4. Conceptual Diagram of Hypothesized Moderated Mediation Model 2



CHAPTER III

METHOD

3.1. Sample

Data was collected between 5 October 2022 and 4 February 2023. The current research sample comprised of 148 bereaved people living in Türkiye who had lost their loved ones due to COVID-19. Data from four individuals were excluded from the analysis due to outliers in multivariate data, and the analysis continued with 144 individuals. The sample size was calculated at the end of data cleaning using the G*Power 3.1.9.7 program (Faul et al., 2007). Accordingly, when a medium effect size and alpha error of 0.05 was taken, the power in the hierarchical regression models tested for two different dependent variables was found to be .93 for both models. Likewise, the power was tested for the moderated mediation model and the power was found to be .95.

Among the participants, 71.5% were female ($N = 103$) and 28.5% were male ($N = 41$), age ranged between 20 and 67 ($M = 34.42$, $SD = 11.06$). Individuals with bachelor's degrees ($N = 63$, 43.8%) constituted the majority of the sample and most of the participants were single/divorced/widowed ($N = 83$, 57.6%). In order to measure the perceived socio-economic state (SES) of the participants, the participants were presented with a ladder rung between 1-10 (1 = having the worst conditions and 10 = having the best conditions) and asked to indicate at which point of the rung they are at. Most participants ($N = 37$, 25.7%) identified themselves as being at a SES level of 7 out of ten. Detailed information on demographic information is provided in Table 1.

<i>Variables</i>	<i>M</i>	<i>SD</i>	<i>N</i>	<i>%</i>
<i>Age</i>	34.42	11.06		
<i>Gender</i>				
Female			103	71.5
Male			41	28.5
<i>Education</i>				
Primary School			1	.7
Secondary School			0	0
High School			25	17.4
Bachelor's Degree			63	43.8
Master's Degree			39	27.1
Doctorate Degree			16	11.1
<i>Marital Status</i>				
Singe/Divorced/Widowed			83	57.6
Married/Cohabitation			61	42.4
<i>SES</i>				
1			2	1.4
2			2	1.4
3			7	4.9
4			13	9
5			27	18.8
6			27	18.8
7			37	25.7
8			19	13.2
9			6	4.2
10			4	2.8
<i>Prior Traumatic Event(s) History</i>				
Yes			63	43.8
No			81	56.3
<i>List of Prior Traumatic Event(s)^a</i>				
Accident			7	8.64
Earthquake			4	4.94
Loneliness			3	3.70
Loss of a loved one(s)			14	17.28
Health problems of self			6	7.41
Psychological problems of self			5	6.17
Health problems of a loved one			2	2.47
Psychological problems of a loved			2	2.47
Sexual abuse			2	2.47
Psychological abuse			7	8.64
Physical abuse			3	3.70
Witnessing physical abuse			1	1.23
Severe/ terminal illness of a loved			7	8.64
Separation			2	2.47
Relocation			1	1.23
Covid-19 pandemic			3	3.70
Job loss/financial loss			1	1.23

Note. ^a Participants were able to write more than one traumatic event.

Table 3.1. Socio-Demographic Variables of The Participants

3.2. Instruments

The following instruments were used to collect data in the current study. The first step was using a Demographic Information Form, which asked specific questions about the participant, the deceased, and the loss experienced. Secondly, Pandemic Grief Risk Factors (PGRF) Inventory, Event-Related Rumination Inventory (ERRI), Multidimensional Scale of Perceived Social Support (MSPSS), Prolonged Grief Disorder-13 (PG-13) and Post Traumatic Growth Inventory (PTGI) were used.

3.2.a. Demographic Information Form

The Demographic Information Form, prepared by the researcher, was divided into three subsections. The first section of the form collected information regarding the socioeconomic characteristics of the participants. Questions about participants' age, gender, education level, socio-economic status, and marital status were included in this section. In addition, the participants were asked if they had ever experienced a traumatic event, and if so, to write the kind of event(s) they had experienced. In the second section, participants were asked to specify who or whom they have lost due to the coronavirus and the person whose death had affected them the most. Lastly, the questions in the third part focused on the characteristics of this deceased and the loss experience of the participants. The age of the deceased, date of death, gender of the deceased, professional help after the loss, type of professional help, the unexpectedness of death, subjective traumatic level of loss, subjective closeness with the deceased, and conflict with the deceased were asked (see Appendix).

3.2.b. Pandemic Grief Risk Factors (PGRF)

Pandemic Grief Risk Factors (PGRF) was developed by Neimeyer and Lee (2022) and aims to evaluate an individual's experience of circumstantial risk factors in terms of severity and deterioration of grief during the COVID-19 pandemic. The inventory consists of 10-item and the participants are expected to respond on a 4-point scale ranging from 0 (*Not at all*) to 3 (*Nearly every day*). Some of the items of this scale are “*I felt guilty about not being able to be there for the deceased before he/she died.*” and “*I kept having images of the deceased struggling for life on some machine.*” A higher level of perceived risk factors is indicated by greater scores on this inventory. Internal consistency reliability of the PGRF was found as $\alpha = .88$ (Neimeyer & Lee, 2022).

PGRF was adapted into Turkish for this study following approval from the author. In this adaptation process, the method of Bracken and Barona (1991)'s translation-back translation was applied. Firstly, the scale was translated into Turkish by two master's students of clinical psychology, proficient in Turkish and English. Once translated, the most accurate translation in terms of meaning was determined by comparing each item in two different translations. Following the decision on the translated items, the items were backtranslated into English by two academics (a professor of clinical psychology and a research assistant in psychology) to assure that the meaning was maintained. Lastly, the scale was reviewed by a professor of Turkish language and literature and final feedback was acquired. Based on this feedback, the adaptation to Turkish was completed and PGRF was utilized to conduct the research. After the data collection phase was over, confirmatory factor analysis was conducted for the Turkish adaptation of PGRF before proceeding to the main analysis of data (see Chapter IV for the results).

For the present study, Cronbach's alpha coefficient was calculated to assess the internal consistency coefficient of the PGRF, which was $\alpha = .86$ for the one-factor structure of the scale.

3.2.c. Event-Related Rumination Inventory (ERRI)

Event-Related Rumination Inventory (ERRI) was constructed by Cann et al. (2011) and aims to assess rumination linked to a stressful life circumstance in two subscales which are intrusive rumination and deliberate rumination and each one has 10 items. Participants rate their answers on a 4-point Likert scale (0 = *not at all* to 3 = *often*). Sample items contain “*Thoughts about the event came to mind and I could not stop thinking about them.*” for the intrusive rumination subscale and, “*I thought about whether I have learned anything as a result of my experience*” for the deliberate rumination subscale. Means of the scores are calculated for each subscale and higher scores demonstrate higher levels of intrusive or deliberate rumination in the related subscale with scores ranging between 0-30. Internal consistencies of each subscale were indicated as high ($\alpha = .94$ for intrusive, $\alpha = .88$ for deliberate) (Cann et al., 2011).

Adaptation of ERRI into Turkish was conducted by Haselden (2014). Internal reliability of the adapted full scale was found as .96 and the Cronbach alphas for each subscale (i.e., intrusive rumination and deliberate rumination) were indicated as .96 and .91 respectively. In the current study, the internal reliabilities were .97 for intrusive and .93 for deliberate rumination subscales, while the internal reliability of the full scale was found to be .97.

3.2.d. The Multidimensional Scale of Perceived Social Support (MSPSS)

Zimet et al. (1988) developed the Multidimensional Scale of Perceived Social Support (MSPSS) to measure the perceived social support provided by a variety of sources, including family, friends, and significant others. Accordingly, the measure consists of three subscales (i.e., family, friends, and significant other), each of which has four items and is scored on a 7-point Likert-type scale (1 = *strongly disagree* to 7 = *strongly agree*). Higher scores demonstrate higher levels of perceived social support in the related subscale with scores ranging between 4-28 and a total score ranging between 12-84. The MSPSS was shown to have good internal consistency reliability, with the entire scale's Cronbach's alpha value ranging from 0.84 to 0.92, and the subscales for family, friends, and significant other ranged from 0.81 to 0.90, 0.90 to 0.94, and 0.83 to 0.98, respectively (Zimet et al., 1990).

Adaptation to Turkish of MSPSS was conducted by Eker and Arkar (1995). Eker et al. (2001) reported that the Turkish translation of the scale had a Cronbach's alpha between .80 and .95. In the present study, the family, friend, and significant other subscales each had Cronbach's Alpha values of .91, .95, and .95, respectively. The entire scale had a Cronbach's Alpha value of .92.

3.2.e. Prolonged Grief Disorder-13 (PG-13)

The Prolonged Grief Disorder-13 (PG-13), constructed by Prigerson et al. (2009), is a one-dimensional assessment tool designed to assess the severity of the symptoms associated with prolonged grief as well as to diagnose prolonged grief disorder. There are 13 overall items in the questionnaire, 2 of which are yes-or-no questions and 11 of which are 5-point Likert-type questions (1 = *Not at all* to 5 = *Several times a day* or 1 = *Not at all* to 5 = *Overwhelmingly*). The 11 items assess symptoms such as yearning for the deceased, sorrow, anguish, role confusion,

difficulty accepting the loss, and emotional numbness, meaningless. The severity of prolonged grief symptoms is indicated by an increase in total scores on these items. Also, the 'yes-no' questions on the scale are designed to determine the length of symptom duration and whether social and occupational functioning are affected.

PG-13 includes 5 criteria (A to E) for the diagnosis of PGD (Prigerson et al., 2009). In order to be diagnosed with PGD, the person must meet the criteria of an event (A), separation distress (B), cognitive, emotional, and behavioral symptoms (C), duration (D), and impairment (E). However, in the present study, no diagnosis was made; only the severity of prolonged grief was measured by using 11 Likert-type items.

As reported by Prigerson et al. (2009), the comparison between diagnoses of PGD made with PG-13 and diagnoses based on clinical interviews demonstrated that the specificity and sensitivity of diagnoses made using the algorithm in the PG-13 were found to be 1.0 and .99, respectively.

The Turkish adaptation of the scale was conducted by Işıklı et al. (2020) and it was shown to be a valid and reliable scale. For the 11 Likert-type items in the PG-13, Cronbach's alpha value was 0.90. In this regard, the PG-13 appears to have a high degree of internal consistency. According to the current study, internal consistency was found to be .94 for the 11 Likert-type items in the PG-13.

3.2.f. Posttraumatic Growth Inventory (PTGI)

The Post Traumatic Growth Inventory (PTGI) is an instrument developed by Tedeschi and Calhoun (1996) that measures the beneficial changes that arise as a result of coping with extremely difficult life circumstances. It consists of 21 items arranged in the form of a 6-point Likert-style scale (0 = *I did not experience this change as a result of my crisis* to 5 = *I experienced this change to a very great*

degree). A total of five subscales which are designed to assess specific aspects of positive change are included in this assessment (New Possibilities, Relating to Others, Personal Strength, Spiritual Change, and Appreciation of Life). Higher scores demonstrate higher levels of posttraumatic growth with a total ranging score between 0-105. It was reported by Tedeschi and Calhoun (1996) that PTGI is a reliable instrument with a Cronbach's alpha value of .90 and its test-retest reliability was found to be acceptable at .71. Also, Cronbach's alpha values of subscales were determined as .84 for New Possibilities, .85 for Relating to Others, .72 for Personal Strength, .85 for Spiritual Change, and .67 for Appreciation of Life. The construct validity of PTGI was likewise determined to be sufficient.

PTGI was adapted into Turkish by Dirik and Karanci (2008) utilizing Kılıç's (2005) translation and answer structure, with some modifications. In their study, a three-factor structure was found. The scale was found to have a Cronbach alpha of .94, while the Cronbach alpha values of the sub-scales were .86, .87, and .88, respectively (Relationship with Others, Philosophy of Life, and Self-Perception). In the current study, the internal consistency of the PTGI was determined as .95.

3.3. Procedure

The full battery was administered after getting the approval of the TOBB ETÜ Human Research Evaluation Board (see Appendix). Strategies of “purposive sampling” and “snowball sampling” was used for participant selection. Participants were reached by sharing poster with information about the research (see Appendix) on social media platforms (e.g., Facebook, Twitter, LinkedIn, Whatsapp, etc.). Additionally, an invitation to participate in the study was sent out via TOBB ETÜ's ogr, ogr-y, and akad email lists. Research data was collected using quantitative and

cross-sectional methods. In other words, data was collected from the participants at once via the research link on SurveyMonkey®.

Participants accessed the link to the research from their mobile phones or computers. First, the consent form was expected to be carefully read and approved (see Appendix). In this form, they were informed about the aims, scope, confidentiality, and voluntary nature of participation in the research. In addition, at this stage, the condition of having lost a relative from COVID-19 was required in order to participate in the research. Participants who meet this condition first answered the Demographic Information Form after they voluntarily agree to participate in the study. After this stage, participants answered the question set consisting of scales. These scales were completed by the participants in mixed order through the utilization of counterbalance. It took approximately 15-20 minutes to complete the scales.

After the survey questions were completed, a Debriefing Form was given to the participants (see Appendix). Due to the sensitive nature of the questions on death and emotions which may remind the participants of some distressing memories about their loss or arouse different emotions and thoughts that they may have difficulty in coping with. For this reason, information that is thought to be useful in dealing with losses was shared with the participants. Thesis study of Yilmaz (2014) and the article of Neimeyer & Harris (2016) were utilised in the formation of this form.

3.4. Statistical Analysis

First, confirmatory factor analysis was conducted with 148 participants for the PGRF that was adapted into Turkish. Afterwards, outlier and missing value analyses were conducted and 4 people were removed from the data as they were

multivariate outliers. The analyses were conducted using Statistical Package for the Social Sciences (SPSS) version 28.0 program and PROCESS version 4.2 (Hayes, 2022) software commonly used in the social sciences. All scales and their subscales were examined for reliability prior to conducting the analyses.

Before conducting the main analyses of the study, the relationships between the study variables were investigated via independent sample t-tests and Pearson's bivariate correlation analysis. Then, two hierarchical multiple regression analysis was conducted in order to find if there is a main effect of PGRF, event-related ruminations, and perceived social support and its subfactors (i.e., family, friends, and significant other support) on PG symptoms and PTG. Lastly, for PTG, where there was no main effect of perceived social support, moderated mediation analyses were conducted with process macro model 7 (Hayes, 2013) to find the possible buffering effect of social support.

CHAPTER IV

RESULTS

The results chapter of the present thesis is divided into six parts. Firstly, confirmatory factor analysis results for the adaptation of PGRF to Turkish are presented. Then, descriptive statistics for variables related to loss experience and the primary variables of the study are reported in the second part. In the third part, independent sample t-test results of categorical variables are presented. In the fourth part, bivariate correlations among variables are presented. The results of the hierarchical multiple regression analyses for PGD and PTG are given in the fifth part. Lastly, an examination of moderated-mediation analyses for PTG is reported in the sixth part.

4.1. Confirmatory Factor Analysis for PGRF

A confirmatory factor analysis (CFA) was performed using lavaan 0.6-12 in the R statistical programming language prior to the testing of the hypotheses to assess the validity and confirm the factor structure of the Turkish-adapted PGRF inventory. Table 4.1 presents the results of the CFA.

Model	χ^2	df	χ^2/df	CFI	TLI	RMSEA	SRMR
Single Factor	47.11	33	1.43	.97	.96	.05	.05

Note. CFI = comparative fit index; TLI = Tucker-Lewis index; RMSEA = root-mean-square error of approximation; SRMR = standardized root mean square residual.

Table 4.1. Results of CFA for PGRF

The CFA model results indicated a very good model fit for one factor PGRF structure ($\chi^2(33)=47.11$, $p = .053$, RMSEA=.05, TLI = .96, CFI=.97, SRMR = .05).

Considering the results, the model appears to be well fitted based on the values used as a reference. That is, χ^2/df value is lower than 2 (Ullman, 2001), CFI and TLI values are greater than .95 (Hooper et al., 2008), and RMSEA and SRMR values are less than .08 (Kline, 2015).

4.2. Descriptive Statistics

4.2.a. Examining Loss through Descriptive Statistics of Related Variables

Among the participants, 105 participants lost one relative due to COVID-19, while 39 participants lost two or more relatives. The subsequent descriptive statistics on loss are about the loss that had the greatest impact on the participants. The age of the deceased ranged from 25 to 93 years ($M = 66.61$, $SD = 15.20$) and among them 59 were males and 85 were females. The mean time since the participants' loss was 16.22 months ($SD = 7.33$). A total of 36 participants reported losing an immediate family member. Table 4.2. provides specific details about all loss-related variables.

Variables	<i>M</i>	<i>SD</i>	<i>N</i>	%
<i>Number of Loss</i>				
1			105	72.9
2			30	20.8
>2			9	6.3
<i>Age of the Deceased</i>	66.61	15.20		
<i>Gender of Deceased</i>				
Male			59	41.0
Female			85	59.0
<i>Time Since Loss (Months)</i>	16.22	7.33		
<i>Degree of Kinship with the Deceased</i>				
Parent, child, sibling, or spouse			36	25.0
Other			108	75.0
<i>Unexpectedness of Death^a</i>	3	1.47		
<i>Subjective Traumatic Level of Loss^a</i>	3.70	1.14		
<i>Subjective Closeness with Deceased^a</i>	3.93	1.04		

Variables	<i>M</i>	<i>SD</i>	<i>N</i>	%
<i>Conflict with Deceased^a</i>	1.28	0.62		
<i>Professional Help for Loss</i>				
Yes			20	13.9
No			124	86.1
<i>Type of Professional Help</i>				
Psychotherapy/Psychological counseling			13	65
Psychiatric help/Medication			3	15
Psychotherapy and medication together			4	20

Note. ^a These variables are measured with one item and the possible range of scores is between 1-5.

Table 4.2. Loss-related Variables

4.2.b. Exploring the Primary Variables with Descriptive Statistics

The current study's measurements and their subscales (Pandemic Grief Risk Factors (PGRF); Event-Related Rumination Inventory (ERRI): Intrusive Rumination, Deliberate Rumination; Multidimensional Scale of Perceived Social Support (MSPSS): Family, Friends, and Significant Other, Prolonged Grief Disorder-13 (PG-13); Post Traumatic Growth Inventory (PTGI) were all reported with their means, standard deviations, possible ranges, and skewness and kurtosis values in Table 4.3.

Measures	<i>M (SD)</i>	<i>Possible Range</i>	<i>Skewness</i>	<i>Kurtosis</i>
<i>Pandemic Grief Risk Factors (PGRF)</i>	1.39 (.73)	0 - 3	.22	-.80
<i>Event-Related Rumination Inventory (ERRI)</i>		0 - 3		
Intrusive Rumination	1.98 (.95)	0 - 3	-.55	-1.02
Deliberate Rumination	1.58 (.86)	0 - 3	-.21	-1.01
<i>Multidimensional Scale of Perceived Social Support (MSPSS)</i>	4.83 (1.5)	1 - 7	-.42	-.75
Family Support	5.09 (1.71)	1 - 7	-.67	-.67
Friends Support	5 (1.78)	1 - 7	-.69	-.60
Significant Other	4.39 (2.2)	1 - 7	-.26	-1.41
<i>Prolonged Grief Disorder-13 (PG-13)</i>	2.65 (1.09)	1 - 5	.48	-.82

Measures	<i>M (SD)</i>	<i>Possible Range</i>	<i>Skewness</i>	<i>Kurtosis</i>
<i>Post Traumatic Growth Inventory (PTGI)</i>	1.82 (1.2)	0 - 5	.14	-1.22

Table 4.3. Descriptive Characteristics of the Measures

4.3. Evaluation of Categorical Variables

The study's five dichotomous variables are as follows: gender, marital status, prior traumatic event(s) history, degree of kinship, and having professional help for loss. These dichotomous variables were tested with independent samples t-tests to determine whether there were significant differences between the categories of these variables in relation to outcome variables.

Examining whether the t-test assumptions are met to test these variables with independent sample t-test, normality and homogeneity of variance assumptions were checked. Firstly, it was observed that the skewness values of all categorical variables are between -2 and +2 and kurtosis values of all categorical variables are between -3 and +3 on outcome variables. According to Hair et al. (2010), if the skewness and kurtosis of the data are between “-2 and +2” and “-7 and +7”, respectively, the data is regarded as normal. Thus, these values of the current research are acceptable for approximately normal distribution. Secondly, Levene’s test results showed that the variances in the distribution of some categorical variables on each outcome variable were equally distributed while others were not. Also, groups of these categorical variables have unequal sample sizes. In such a case, Skovlund and Fenstad (2001) argued that the t-test is the method of choice even if the sample size was not equal when the variances were equally distributed, and a normal distribution was ensured. Also, they indicated the use of the Welch t-test is acceptable when normal distribution was ensured but the variances were not equally distributed, and the sample size was not equal. Thus, based on the information that the second row in the

t-test result table of SPSS gives the Welch t-test results, two independent samples t-tests were conducted for two main outcome variables as PG symptoms and PTG. Also, two more independent sample t-tests were conducted for intrusive rumination and deliberate rumination because of their outcome variable role in the moderated-mediation models.

Firstly, regarding the PG symptoms, results indicated that there is a significant difference between participants losing their parent, child, sibling, or spouse ($M = 3.61$, $SD = 1.01$) and participants losing other types of relatives ($M = 2.39$, $SD = .96$), $t(142) = -6.11$, $p < .001$, $95\%CI = [-1.62, -.83]$. According to this finding, people who lost a parent, child, sibling, or spouse experienced more PG symptoms than participants who lost other types of relatives. In contrast, the analysis revealed no statistically significant differences between females ($M = 2.75$, $SD = 1.19$) and males ($M = 2.40$, $SD = .73$), $t(142) = 1.74$, $p = .09$; being single/divorced/widowed ($M = 2.60$, $SD = 1.09$) and married/cohabitant ($M = 2.72$, $SD = 1.10$), $t(142) = -.65$, $p = .52$; having a prior traumatic event(s) history ($M = 2.64$, $SD = 1.03$) or having no prior traumatic event(s) history ($M = 2.65$, $SD = 1.14$), $t(142) = -.07$, $p = .95$; having professional help for loss ($M = 2.72$, $SD = .96$) and having no professional help for loss ($M = 2.64$, $SD = 1.11$), $t(142) = .33$, $p = .74$, in terms of PG symptoms. As a result, there are no differences in PG symptoms in terms of their gender, marital status, history of prior traumatic events, or having professional help for loss.

	Group 1		Group 2		<i>t</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	
Gender ^a	2.75	1.19	2.40	0.73	1.74
Marital Status ^b	2.60	1.09	2.72	1.10	-.65
Prior Traumatic Event(s) History ^c	2.64	1.03	2.65	1.14	-.07
Degree of Kinship ^d	2.39	0.96	3.61	1.01	-6.11***
Professional Help for Loss ^e	2.72	0.96	2.64	1.11	.33

Note. ** $p < .01$, *** $p < .001$; ^a: Group 1 = Female, Group 2 = Male; ^b: Group 1 = Single/Divorced/Widowed, Group 2 = Married/Cohabitated; ^c: Group 1 = Yes, Group 2 = No; ^d: Group 1 = Other, Group 2 = Parent, child, sibling, or spouse; ^e: Group 1 = Yes, Group 2 = No.

Table 4.4. Independent Samples T-test Results for PG symptoms

Secondly, regarding PTG, results indicated that there is a significant difference between being single/divorced/widowed ($M = 1.59$, $SD = 1.16$) and married/cohabitant ($M = 2.14$, $SD = 1.19$), $t(142) = -2.74$, $p = .007$, $95\%CI = [-.93, -.15]$. This result means that participants who are married or cohabitant experienced higher levels of PTG than single, divorced, or widowed participants. On the other side, the analysis revealed no statistically significant differences between being female ($M = 1.72$, $SD = 1.18$) and male ($M = 2.07$, $SD = 1.23$), $t(142) = -1.55$, $p = .12$; having a prior traumatic event(s) history ($M = 2.04$, $SD = 1.24$) and having no prior traumatic event(s) history ($M = 1.65$, $SD = 1.14$), $t(142) = 1.94$, $p = .05$; losing their parent, child, sibling, or spouse ($M = 2.13$, $SD = 1.14$) and losing other types of relative ($M = 1.74$, $SD = 1.21$), $t(142) = -1.58$, $p = .12$; having professional help for loss ($M = 2.03$, $SD = 1.21$) and having no professional help for loss ($M = 1.79$, $SD = 1.20$), $t(142) = .84$, $p = .41$, in terms of PTG. Thus, gender, a history of earlier traumatic events, degree of kinship, or getting professional help for loss have no differentiating effects on PTG.

	Group 1		Group 2		<i>t</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	
Gender ^a	1.72	1.18	2.07	1.23	-1.55
Marital Status ^b	1.59	1.16	2.14	1.19	-2.74**
Prior Traumatic Event(s) History ^c	2.04	1.24	1.65	1.14	1.94
Degree of Kinship ^d	1.74	1.21	2.13	1.14	-1.58
Professional Help for Loss ^e	2.03	1.21	1.79	1.20	0.84

Note. ** $p < .01$, *** $p < .001$; ^a: Group 1 = Female, Group 2 = Male; ^b: Group 1 = Single/Divorced/Widowed, Group 2 = Married/Cohabitated; ^c: Group 1 = Yes, Group 2 = No; ^d: Group 1 = Other, Group 2 = Parent, child, sibling, or spouse; ^e: Group 1 = Yes, Group 2 = No.

Table 4.5. Independent Samples T-test Results for PTG

Thirdly, regarding intrusive ruminations, results indicated that there is a significant difference between losing their parent, child, sibling or spouse ($M = 2.62$, $SD = .52$) and losing other types of relative ($M = 1.81$, $SD = 1.96$), $t(142) = -6.19$, $p < .001$, 95%CI = [-1.07, -.55]; and having professional help for loss ($M = 2.58$, $SD = .60$) and having no professional help for loss ($M = 1.88$, $SD = .96$), $t(142) = 4.31$, $p < .001$, 95%CI = [.37, 1.01]. These results show that participants who lost a parent, child, sibling, or spouse rather than other types of relatives had more intrusive rumination. Those receiving professional help for loss also had more intrusive ruminations. Analysis, on the other hand, did not find any statistically significant variations between females ($M = 2.04$, $SD = .99$) and males ($M = 1.82$, $SD = .82$), $t(142) = 1.29$, $p = .20$; being single/divorced/widowed ($M = 1.94$, $SD = .97$) and married/cohabitant ($M = 2.02$, $SD = .92$), $t(142) = -.46$, $p = .65$; having a prior traumatic event(s) history ($M = 1.96$, $SD = .94$) and having no prior traumatic event(s) history ($M = 2.00$, $SD = .96$), $t(142) = -.21$, $p = .84$, in terms of intrusive ruminations. Therefore, there are no differences in intrusive rumination in terms of gender, marital status, or history of prior traumatic events.

	Group 1		Group 2		<i>t</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	
Gender ^a	2.04	0.99	1.82	0.82	1.29
Marital Status ^b	1.94	0.97	2.02	0.92	-0.46
Prior Traumatic Event(s) History ^c	1.96	0.94	2.00	0.96	-0.21
Degree of Kinship ^d	1.81	1.96	1.62	0.52	-6.19***
Professional Help for Loss ^e	2.58	0.60	1.88	0.96	4.31***

Note. ** $p < .01$, *** $p < .001$; ^a: Group 1 = Female, Group 2 = Male; ^b: Group 1 = Single/Divorced/Widowed, Group 2 = Married/Cohabitated; ^c: Group 1 = Yes, Group 2 = No; ^d: Group 1 = Other, Group 2 = Parent, child, sibling, or spouse; ^e: Group 1 = Yes, Group 2 = No.

Table 4.6. Independent Samples T-test Results for Intrusive Ruminations

Lastly, regarding deliberate ruminations, results indicated that there is a significant difference between losing parent, child, sibling, or spouse ($M = 2.03$, $SD = .68$) and losing other types of relatives ($M = 1.46$, $SD = .86$), $t(142) = -3.87$, $p < .001$, $95\%CI = [-.87, -.28]$; and having professional help for loss ($M = 2.01$, $SD = .70$) and having no professional help for loss ($M = 1.51$, $SD = .86$), $t(142) = 2.87$, $p < .01$, $95\%CI = [.14, .86]$. These findings suggest that deliberate rumination was more for those who lost a parent, child, sibling, or spouse than other for those in other loss categories of relatives. Those receiving professional help for a loss also had more deliberate ruminations. On the other hand, statistically significant differences between females ($M = 1.64$, $SD = .89$) and males ($M = 1.42$, $SD = .75$), $t(142) = 1.38$, $p = .17$; being single/divorced/widowed ($M = 1.53$, $SD = .84$) and married/cohabitant ($M = 1.63$, $SD = .88$), $t(142) = -.69$, $p = .49$; having a prior traumatic event(s) history ($M = 1.63$, $SD = .76$) and having no prior traumatic event(s) history ($M = 1.53$, $SD = .93$), $t(142) = .71$, $p = .48$, in terms of deliberate ruminations were not found. Hence, gender, marital status, or history of prior traumatic events have no differential effect on deliberate ruminations.

	Group 1		Group 2		<i>t</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	
Gender ^a	1.64	0.89	1.42	0.75	1.38
Marital Status ^b	1.53	0.84	1.63	0.88	-0.69
Prior Traumatic Event(s) History ^c	1.63	0.76	1.53	0.93	0.71
Degree of Kinship ^d	1.46	0.86	2.03	0.68	-3.87***
Professional Help for Loss ^e	2.01	0.70	1.51	0.86	2.87**

Note. ** $p < .01$, *** $p < .001$; ^a: Group 1 = Female, Group 2 = Male; ^b: Group 1 = Single/Divorced/Widowed, Group 2 = Married/Cohabitated; ^c: Group 1 = Yes, Group 2 = No; ^d: Group 1 = Other, Group 2 = Parent, child, sibling, or spouse; ^e: Group 1 = Yes, Group 2 = No.

Table 4.7. Independent Samples T-test Results for Deliberate Ruminations

4.4. Evaluation of Patterns of Bivariate Correlation among Continuous Study

Variables

The associations between continuous variables of the present study were examined using Pearson's bivariate correlation analysis. In Table 4.7, the results of this analysis are presented. PG symptoms, one of the main outcome variables of the research, revealed a positive correlation with subjective traumatic level of loss ($r = .68, p < .01$), subjective closeness with the deceased ($r = .66, p < .01$), PGRF ($r = .77, p < .01$), intrusive rumination ($r = .68, p < .01$), and deliberate rumination ($r = .58, p < .01$) whereas it was negatively correlated with friends support ($r = -.21, p < .05$). Additionally, there was a positive correlation between PG symptoms and the other outcome variable, PTG ($r = .22, p < .01$). PTG, the other main outcome variable, displayed a positive correlation with age ($r = .22, p < .01$), the unexpectedness of death ($r = .17, p < .05$), subjective traumatic level of loss ($r = .18, p < .05$), PGRF ($r = .22, p < .01$), intrusive rumination ($r = .29, p < .01$), and deliberate rumination ($r = .50, p < .01$).

Intrusive rumination, one of the outcome variables in the moderated-mediation models, showed a positive correlation with the subjective traumatic level

of loss ($r = .72, p < .01$), subjective closeness with the deceased ($r = .63, p < .01$), and PGRF ($r = .68, p < .01$). Lastly, deliberate rumination, the other outcome variable in the moderated-mediation models, showed a positive correlation with the subjective traumatic level of loss ($r = .55, p < .01$), subjective closeness with deceased ($r = .45, p < .01$), and PGRF ($r = .58, p < .01$). Also, it was found that there is a positive correlation between intrusive rumination and deliberate rumination ($r = .76, p < .01$).



Variables	1	2	3	4	5	6	7	8	9
1. Age	-								
2. Education	.04	-							
3. SES	.09	.23**	-						
4. Age of Deceased	.01	-.09	.11	-					
5. Time Since Loss	-.09	.22**	.14	-.20*	-				
6. Unexpectedness of Death	-.04	-.06	-.01	.07	.05	-			
7. Subjective Traumatic Level of Loss	.13	-.08	-.05	-.29**	.02	.03	-		
8. Subjective Closeness with Deceased	.03	-.10	-.02	.10	-.03	-.12	.70**	-	
9. Conflict with Deceased	-.04	.07	-.04	-.04	.00	.08	-.04	-.04	-
10. PGRF	.06	-.14	-.06	-.11	.01	-.02	.62**	.62**	-.04
11. Intrusive Rumination	.02	-.04	-.07	-.12	-.05	-.02	.72**	.63**	.10
12. Deliberate Rumination	.02	.06	.02	-.14	.05	.09	.55**	.45**	.06
13. Total PSS	.17*	.08	.22**	-.07	-.06	-.06	.08	-.10	-.03
14. Family Support	.13	.13	.17*	-.02	.01	-.09	.16	.03	-.13
15. Friends Support	.15	.05	.11	-.00	-.06	.01	-.00	-.17*	.00
16. Significant Other Support	.13	.01	.24**	-.12	-.08	-.05	.04	-.09	.03
17. PG symptoms	.05	-.13	-.02	-.14	-.12	-.06	.68**	.66**	-.05
18. PTG	.22**	-.04	.11	.05	.01	.17*	.18*	.15	-.01

Variables	10	11	12	13	14	15	16	17	18
10. PGRF	-								
11. Intrusive Rumination	.68**	-							
12. Deliberate Rumination	.58**	.76**	-						
13. Total PSS	-.02	.00	.02	-					
14. Family Support	.03	.11	.04	.73**	-				
15. Friend Support	-.11	-.02	-.08	.82**	.49**	-			
16. Significant Other Support	.03	-.06	.07	.81**	.32**	.48**	-		
17. PG symptoms	.77**	.68**	.58**	-.11	.00	-.21*	-.05	-	
18. PTG	.22**	.29**	.50**	.13	.08	.11	.12	.22**	-

Note. ** p < .01 (2-tailed), * p < .05 (2-tailed); SES = Socioeconomic Status; PGRF = Pandemic Grief Risk Factors; Total PSS = Total Perceived Social Support; PG symptoms = Prolonged Grief symptoms; PTG = Posttraumatic Growth

Table 4.8. Correlation Between Variables as Determined by Pearson's Correlation Coefficient

4.5. Hierarchical Regression Analyses Results

Two hierarchical regression analyses were conducted to find the main predictive roles of event-related ruminations and perceived social support (PSS) on PG symptoms and PTG. The variables used in these analyses were added according to the results found in the preliminary analyses as independent samples t-test and Pearson correlation. In other words, variables associated with PG symptoms and PTG were used in these analyses. Also, a preliminary analysis was performed to make sure that the assumptions of normality, linearity, multicollinearity, independence of observations, and homoscedasticity were not violated.

4.5.a. Predictors of PG Symptoms

A two-stage hierarchical regression analysis was conducted on PG symptoms (see Table 4.8). In the first stage, degree of kinship, subjective traumatic level of loss, subjective closeness with the deceased, and PGRF were simultaneously included in the first model as possible risk factors related to an increase in PG symptoms. In the second stage, intrusive rumination, deliberate rumination, and friend support were added to the second model as possible variables that could predict PG symptoms.

As a result of the analysis, the first model, which included degree of kinship, subjective traumatic level of loss, subjective closeness with deceased, and PGRF, was identified as significant [$F(4,139) = 72.713, p < .001$] and the model explained 67.7% of the variance ($R^2 = .677$). In this model, the degree of kinship ($\beta = .07, t = 1.23, p = .22$) did not significantly predict PG symptoms, while the subjective traumatic level of loss ($\beta = .22, t = 3.12, p = .002, 95\%CI [.08, .35]$), subjective closeness with the deceased ($\beta = .17, t = 2.35, p = .02, 95\%CI [.03, .32]$), and PGRF ($\beta = .50, t = 7.42, p < .001, 95\%CI [.54, .94]$) significantly predicted PG symptoms.

Thus, high subjective traumatic levels of loss, subjective closeness to the deceased, and PGRF are associated with high PG symptoms.

The second model, which included intrusive rumination, deliberate rumination, and friends support was also determined to be significant [$F(7,136) = 45.596, p < .001$] and the variance explained increased by 2.4% to 70.1% ($R^2 = .701, \Delta R^2 = .024$). In this model, subjective closeness with the deceased lost its significance ($\beta = .12, t = 1.63, p = .10$), while subjective traumatic level of loss ($\beta = .20, t = 2.57, p = .01, 95\%CI [.04, .34]$) and PGRF ($\beta = .43, t = 6.03, p < .001, 95\%CI [.43, .85]$) retained their significance. Also, degree of kinship ($\beta = .07, t = 1.30, p = .20$) remained insignificant. As newly added variables, intrusive rumination ($\beta = .08, t = .86, p = .39$) and deliberate rumination ($\beta = .07, t = .99, p = .33$) did not show a significant effect. On the other hand, friends support ($\beta = -.13, t = -2.65, p = .009, 95\%CI [-.14, -.02]$) significantly predicted PG symptoms. This indicates that after controlling the subjective traumatic level of loss and PGRF, higher levels of perceived social support from friends predicted a decrease in PG symptoms.

Variable	<i>B</i>	95% CI for <i>B</i>		SE <i>B</i>	β	<i>t</i>	<i>R</i> ²	ΔR^2	<i>F</i>
		<i>LL</i>	<i>UL</i>						
Step 1							.677	.677***	72.713
Constant	.10	-.34	.54	.22		.44			
DoK	.18	-.11	.48	.15	.07	.22			
STLL	.21	.08	.35	.07	.22**	3.12			
SCwD	.17	.03	.32	.07	.17*	2.35			
PGRF	.74	.54	.94	.10	.50***	7.42			
Step 2							.701	.024*	45.596
Constant	.59	.03	1.15	.28		2.08			
DoK	.19	-.10	.47	.15	.07	1.30			
STLL	.19	.04	.34	.08	.20**	2.57			
SCwD	.12	-.03	.27	.08	.12	1.63			
PGRF	.64	.43	.85	.11	.43***	6.03			
IR	.09	-.12	.30	.11	.08	.86			
DR	.09	-.09	.28	.09	.07	.99			
FS	-.08	-.14	-.02	.03	-.13**	-2.65			

Note. * $p < .05$. **, $p < .01$. ***, $p < .001$; CI = confidence interval; LL = lower limit; UL = upper limit; DoK = degree of kinship; STLL = subjective traumatic level of loss, SCWD = subjective closeness with deceased; PGRF = pandemic grief risk factors; IR = intrusive rumination; DR = deliberate rumination; FS = friends support

Table 4.9. Results of a Hierarchical Regression for PG Symptoms

4.5.b. Predictors of PTG

A three-stage hierarchical regression analysis was conducted on PTG (see Table 4.9). In the first stage, age and marital status were included in the first model as control variables because of their significant correlation with PTG. In the second stage, the unexpectedness of death, subjective traumatic level of loss, and PGRF were added to the second model as possible facilitators of PTG. In the third stage, intrusive rumination and deliberate rumination were added to the third model as possible variables predicting PTG.

The first model, which included age and marital status, was significant as a result of the analysis [$F(2,141) = 4.896$, $p = .009$] and the model successfully predicted 6.5% of the variance ($R^2 = .065$). However, age ($\beta = .15$, $t = 1.50$, $p = .14$) and marital status ($\beta = .15$, $t = 1.49$, $p = .14$) were not significant predictors of PTG in this model. Therefore, PTG was not influenced by age and marital status.

It was revealed that the second model, which also included unexpectedness of death, subjective closeness with the deceased, and PGRF, was also significant [$F(5,138) = 4.498, p < .001$] and the variance explained increased from 6.5% to 14% ($R^2 = .140, \Delta R^2 = .075$). Age ($\beta = .14, t = 1.47, p = .14$) and marital status ($\beta = .14, t = 1.47, p = .15$) were still insignificant in this model. As additional variables, traumatic level of loss ($\beta = .04, t = .39, p = .70$) and PGRF ($\beta = .19, t = 1.90, p = .06$) did not significantly influence PTG, but the unexpectedness of death ($\beta = .17, t = 2.19, p = .03, 95\%CI [.01, .27]$) did. This suggests that individuals experienced more PTG when their loss was more unexpected.

Lastly, the third model, which also incorporated intrusive rumination and deliberate rumination, was found to be significant [$F(7,136) = 10.159, p < .001$] and the variance explained rose from 14% to 34.3 % ($R^2 = .343, \Delta R^2 = .203$). In this model, age became a significant predictor of PTG ($\beta = .18, t = 2.12, p = .04, 95\%CI [.00, .04]$) whereas unexpectedness of death lost its significance ($\beta = .11, t = 1.57, p = .12$). Also, marital status ($\beta = .10, t = 1.21, p = .23$) and subjective traumatic level of loss ($\beta = .11, t = -.11, p = .30$) maintained their insignificance. As additional variables in this model, deliberate ruminations ($\beta = .64, t = 5.78, p < .001, 95\%CI [.59, 1.20]$) significantly predicted PTG but intrusive ruminations ($\beta = -.11, t = -.82, p = .42$) did not. These results indicate that increasing age and deliberate rumination predict an increase in PTG levels.

Variable	B	95% CI for B		SE B	β	t	R^2	ΔR^2	F
		LL	UL						
Step 1							.065	.065**	4.896**
Constant	.78	.09	1.47	.35		2.24			
Age	.02	-.01	.04	.01	.15	1.50			
MS	.35	-.11	.82	.24	.15	1.49			
Step 2							.140	.075**	4.498***
Constant	-.18	-	.77	.48		-.38			
Age	.02	-.01	.04	.01	.14	1.47			
MS	.33	-.12	.79	.23	.14	1.47			
UoL	.14	.01	.27	.06	.17*	2.19			
STLL	.04	-.17	.25	.11	.04	.39			
PGRF	.31	-.01	.64	.16	.19	1.90			
Step 3							.701	.203**	10.159**
Constant	-.12	-.96	.71	.42		-.29			
Age	.02	.00	.04	.01	.18*	2.12			
MS	.24	-.16	.64	.20	.10	1.21			
UoD	.09	-.02	.20	.06	.11	1.57			
STLL	-.12	-.33	.10	.11	-.11	-			
PGRF	-.03	-.35	.30	.16	-.02	-.16			
IR	-.14	-.48	.20	.17	-.11	-.82			
DR	.89	.59	1.20	.15	.64***	5.78			

Note. * $p < .05$. **, $p < .01$. ***, $p < .001$; CI = confidence interval; LL = lower limit; UL = upper limit; MS = Marital Status; UoD = unexpectedness of death; STLL = subjective traumatic level of loss; PGRF = pandemic grief risk factors; IR = intrusive rumination; DR = deliberate rumination

Table 4.10. Results of a Hierarchical Regression for PTG

4.6. Moderated Mediation Analyses Results

Since the main predictor effect of perceived social support (PSS) on PTG was not found in the previous analysis, hypothesized moderated mediation models (See Figure 4.1, Figure 4.2, Figure 4.3, and Figure 4.4) were tested using PROCESS v4.2 in SPSS to further explore the potential buffering effect of PSS (Hayes, 2013; Model 7). In these models, bias-corrected 95% confidence intervals were generated using 5000 bootstrap samples to assess the significance of the direct and indirect effects. In the confidence intervals, the absence of zero indicates the presence of statistical significance.

Separate moderated-mediation models (see Figure 4.1, Figure 4.2, Figure 4.3, and Figure 4.4) were hypothesized for each sub-factor of PSS (i.e., family, friends, and significant other) and total PSS score. In these moderated-mediation models, the independent variable was PGRF, mediators were event-related ruminations, the moderator was total PSS and its three subfactors (i.e., family, friends, and significant other), and the dependent variable was PTG. Based on the theoretical knowledge of the Functional Descriptive Model of PTG (Tedeschi et al., 2018) that risk factors trigger event-related ruminations, and these event-related ruminations result in the development of PTG, intrusive rumination and deliberate rumination were identified as mediators in these moderated-mediation models. Also, PSS was added to the model as a moderator based on the social support buffering hypothesis (Cohen & Wills, 1985; Stroebe et al., 2005) that social support may have a potential moderator role in the wake of a significant stressor. By hypothesizing that social support would come immediately after the loss and affect rumination, PSS was put in the a-path as a moderator.

Prior to conducting the main analyses, it was checked whether each model met the regression assumptions since moderated-mediation analysis is a regression-based approach. Findings indicated that the assumptions of normality, linearity, multicollinearity, independence of observations, and homoscedasticity were not violated.

Figure 4.1. Conceptual Diagram of Moderated Mediation Model 1 (Moderator is Total PSS)

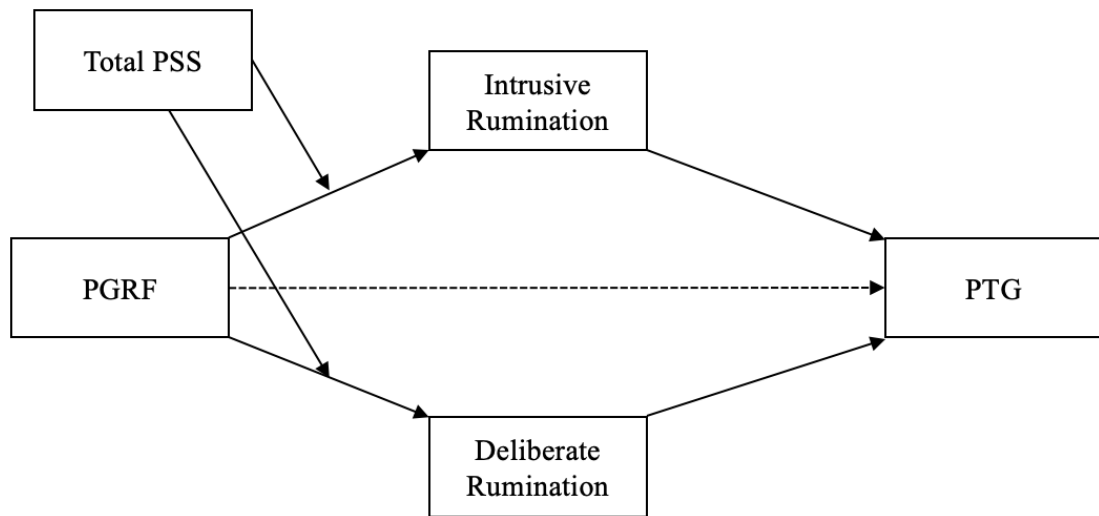


Figure 4.2. Conceptual Diagram of Moderated Mediation Model 2 (Moderator is Family Support)

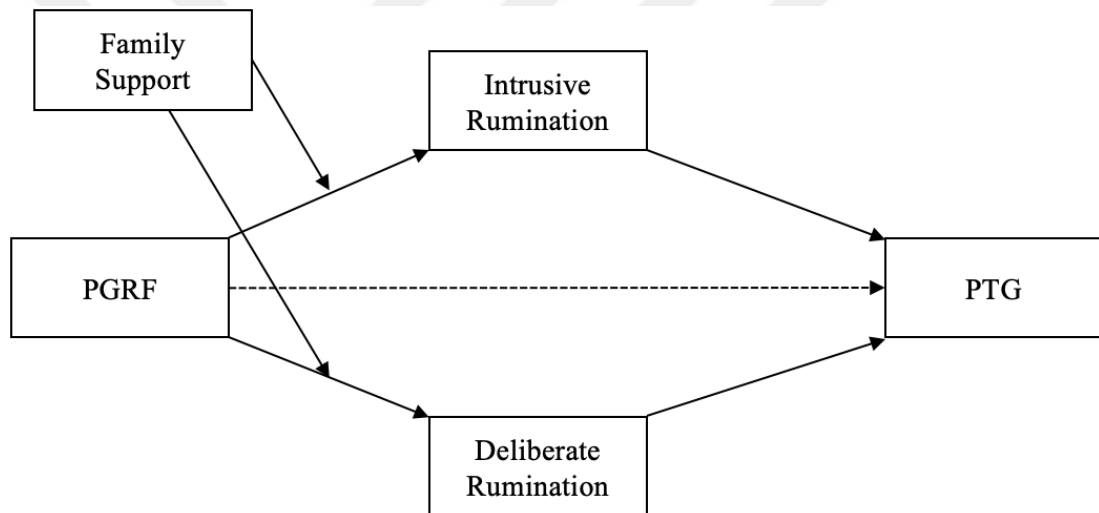


Figure 4.3. Conceptual Diagram of Moderated Mediation Model 3 (Moderator is Friends Support)

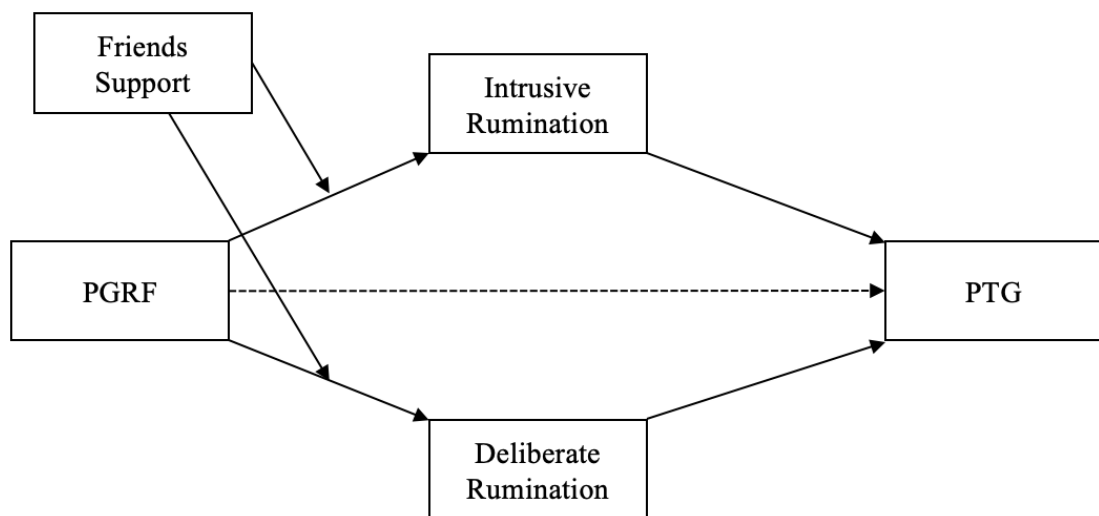
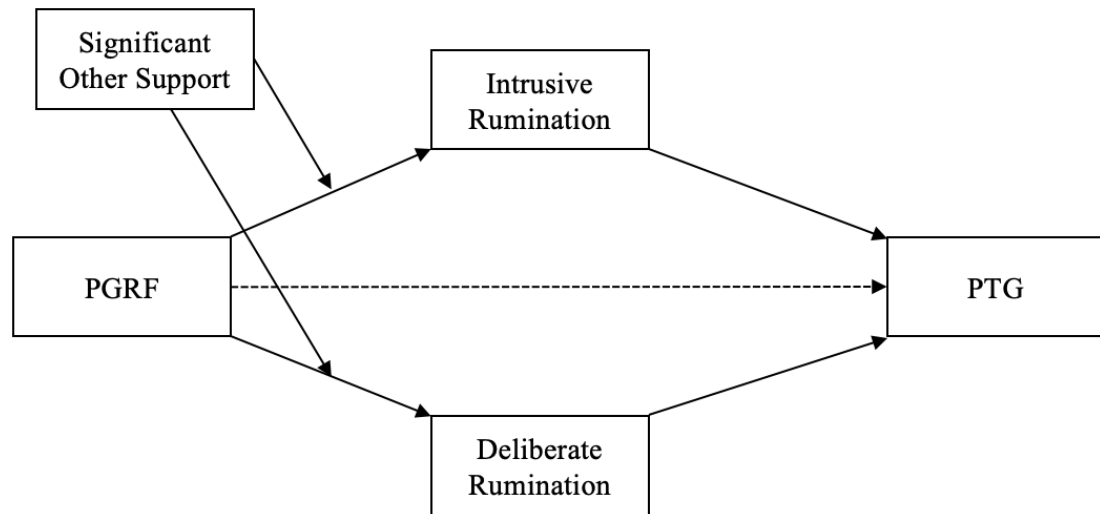


Figure 4.4. Conceptual Diagram of Moderated Mediation Model 4 (Moderator is Significant Other Support)



4.6.a. Moderated Mediation Analysis Result While the Moderator was Total PSS

The first hypothesized moderated mediation model (see Figure 4.1) was analyzed to determine the direct and indirect effects of PGRF on PTG via event-related ruminations (i.e., intrusive rumination and deliberate rumination) that were moderated by Total PSS.

Firstly, in the case that intrusive rumination was the mediator, it was found that the moderated mediation model did not demonstrate any significant results ($b = -0.00$) since there was zero within the 95% CI $[-0.03, 0.01]$. Similarly, the moderated mediation model was not significant when deliberate rumination was the mediator, too ($b = 0.04$, 95%CI $[-0.05, 0.14]$). As a result, there was no difference in the conditional indirect effect of PGRF on PTG through intrusive rumination and deliberate rumination according to the level of a bereaved person's Total PSS.

When the interactions in the a_1 -path and a_2 -path (see Figure 4.5) were analyzed, it was found that PGRF and Total PSS did not interact significantly when the outcome is intrusive rumination ($b = 0.02$, $p = .59$, $\Delta R^2 = 0.00$) or deliberate

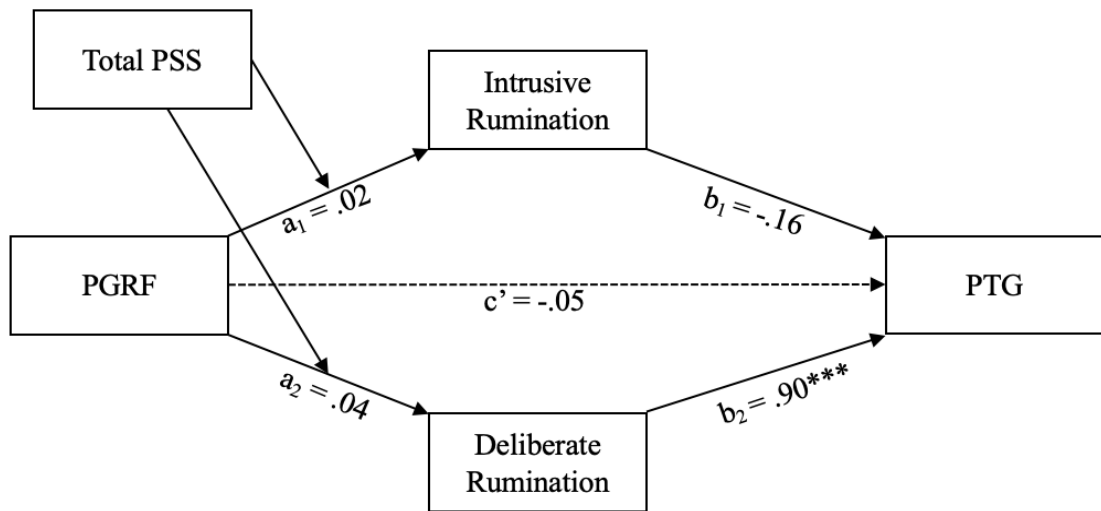
rumination ($b = 0.04$, $p = .41$, $\Delta R^2 = 0.00$). Also, it was not significant that intrusive rumination leads to PTG on a b_1 -path ($b = -0.16$, $p = .37$), on the other hand; it was significant that deliberate rumination leads to PTG on a b_2 -path ($b = 0.90$, $p < .001$). Lastly, there was not a significant interaction between PGRF and PTG on the c' -path ($b = -0.05$, $p = .79$). See Table 4.10 for the complete regression findings.

Variables	On IR			On DR			On PTG		
	β	SE	p	β	SE	p	β	SE	p
PGRF	.32	.24	.18	.26	.27	.35	-.05	.18	.79
Total PSS	-.04	.07	.60	-.06	.09	.46			
PGRF x Total PSS	.02	.05	.59	.04	.05	.41			
IR							-.16	.18	.37
DR							.90	.16	<.001
Age	-.01	.01	.19	-.00	.01	.42	.02	.01	.03
MS	.14	.13	.28	.14	.14	.31	.26	.21	.21
UoD	.01	.03	.81	.06	.04	.12	.10	.06	.10
STLL	.36	.07	<.001	.24	.08	.001	-.15	.12	.23
SCwD	.12	.07	.09	.02	.08	.83	.09	.12	.45
PHfL	-.36	.15	.01	-.26	.17	.12	.01	.25	.98
DoK	-.14	.14	.34	-.17	.16	.30	-.07	.25	.78

Note. $N = 144$. Model for the a_1 -path $R^2 = .64$, $F(10, 133) = 23.8716$, $p < .001$; for a_2 -path $R^2 = .43$, $F(10, 133) = 10.1346$, $p < .001$; and for b_1 -path, b_2 -path, and c' -path $R^2 = .35$, $F(10, 133) = 7.0506$, $p < .001$. PGRF = pandemic grief risk factors; Total PSS = total perceived social support; IR = intrusive rumination; DR = deliberate rumination; MS = marital status; UoD = unexpectedness of death; STLL = subjective traumatic level of loss; SCwD = subjective closeness with deceased; PHfL = professional help for loss; DoK = degree of kinship.

Table 4.11. Regression Results of Moderated Mediation Analysis While the Moderator was Total PSS

Figure 4.5. Statistical Diagram of Moderated Mediation Model 1 Results (Moderator is Total PSS)



4.6.b. Moderated Mediation Analysis Result While the Moderator was Family Support

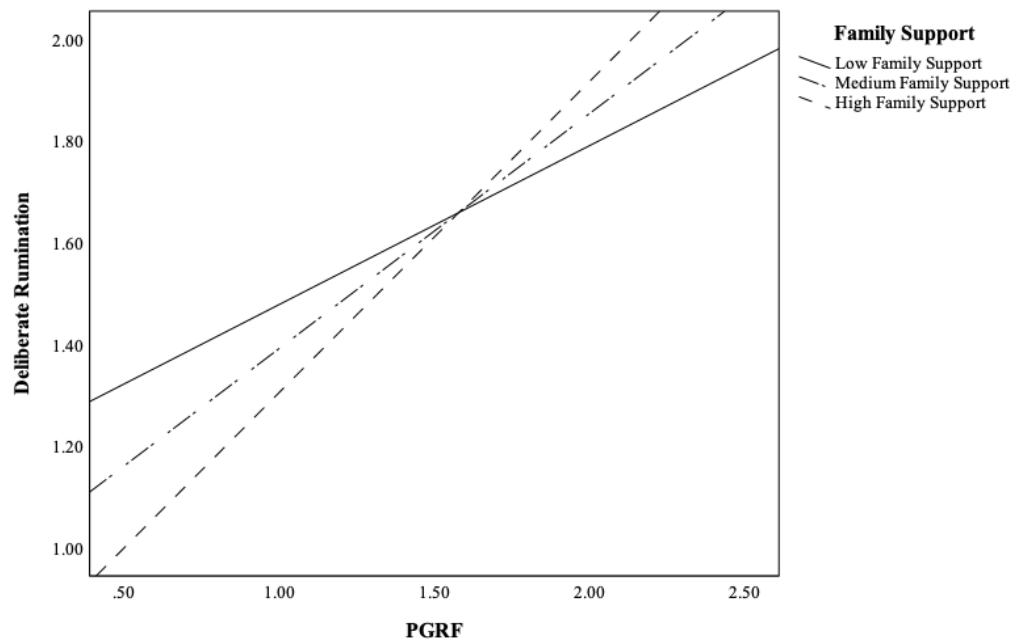
The second hypothesized moderated mediation model (see Figure 4.2) was analyzed to determine the direct and indirect effects of PGRF on PTG via event-related ruminations (i.e., intrusive rumination and deliberate rumination) that were moderated by family support. Because the results for the b-paths and c'-path (see Figure 4.5) are identical to those in model 1, only the moderated mediation index and a-paths were presented in this and the following result subsections.

First, it was found that the moderated mediation model did not show any significant effect when intrusive rumination functioned as the mediator ($b = -0.00$) since 95% CI involved zero $[-0.03, 0.01]$. Thus, there was no difference in the conditional indirect effect of PGRF on PTG through intrusive rumination according to the level of the bereft's family support. On the other hand, the moderated mediation model was significant when deliberate rumination was the mediator in the model ($b = 0.08$, 95%CI $[0.01, 0.16]$), indicating support for moderated mediation. Accordingly, high values (6.81) of family support have the strongest positive

conditional indirect effect ($b = 0.55$, 95%CI [0.30, 0.85]), followed by medium values (5.10) of family support ($b = 0.42$, CI [.20, 0.67]), and small values (3.38) of family support ($b = 0.28$, CI [0.05, 0.55]).

When the interactions in the a_1 -path and a_2 -path were analyzed (see Figure 4.7), it was found that PGRF and family support did not interact significantly when the outcome is intrusive rumination ($b = 0.02$, $p = .58$, $\Delta R^2 = 0.00$), but interacted significantly when the outcome is deliberate rumination ($b = 0.09$, $p = .04$, $\Delta R^2 = 0.02$). Thus, in the case that outcome is deliberate rumination, for a high level (6.81) of family support, the positive conditional effect from PGRF to deliberate rumination was the largest ($b = .61$, $p < .001$); followed by medium level (5.10) of family support ($b = .46$, $p < .001$) and low level (3.38) of family support ($b = .31$, $p = .02$) (see Figure 4.6.). For a complete list of the regression results, see Table 4.11.

Figure 4.6. Moderating Effect of Family Support on the Relationship Between PGRF and Deliberate Rumination

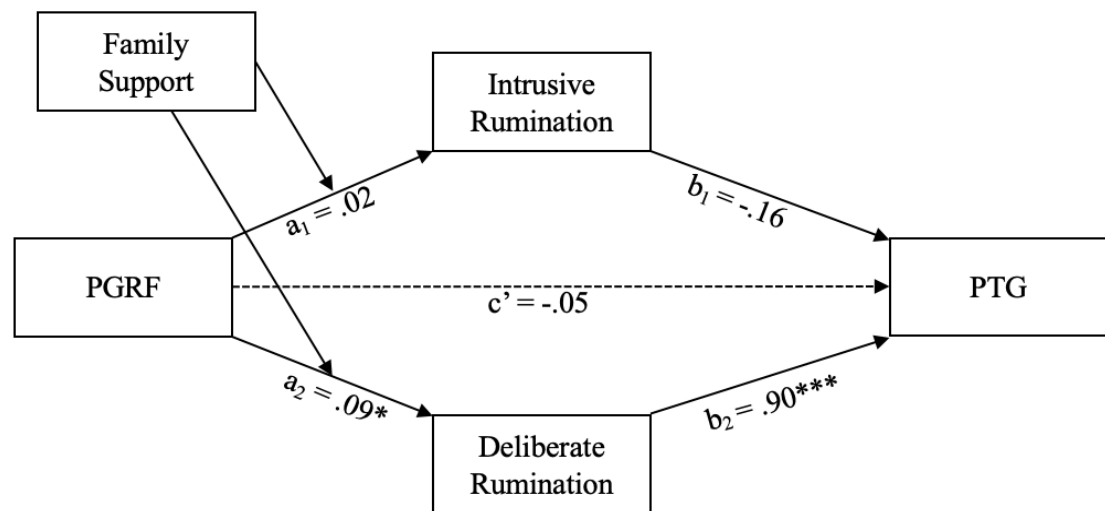


Variables	On IR			On DR			On PTG		
	β	SE	<i>p</i>	β	SE	<i>p</i>	β	SE	<i>p</i>
PGRF	.34	.21	.11	.02	.24	.94	-0.05	.18	.79
Family Support	-.01	.06	.87	-.14	.07	.04			
PGRF x Family Support	.02	.04	.58	.09	.04	.04			
IR							-.16	.18	.37
DR							.90	.16	<.001
Age	-.01	.01	.19	-.01	.01	.42	.02	.01	.03
MS	.12	.12	.34	.18	.14	.19	.26	.21	.21
UoD	.01	.03	.77	.06	.04	.13	.10	.06	.10
STLL	.35	.07	<.001	.26	.07	<.001	-.15	.12	.23
SCwD	.13	.07	.08	.02	.08	.84	.09	.12	.45
PHfL	-.37	.14	.01	-.25	.16	.12	.01	.25	.98
DoK	-.12	.15	.41	-.20	.16	.23	-.07	.25	.78

Note. $N=144$. Model for the a_1 -path $R^2 = .64$, $F(10, 133) = 23.9689$, $p < .001$; for a_2 -path $R^2 = .45$, $F(10, 133) = 10.8277$, $p < .001$; and for b_1 -path, b_2 -path and c' -path $R^2 = .35$, $F(10, 133) = 7.0506$, $p < .001$. PGRF = pandemic grief risk factors; IR = intrusive rumination; DR = deliberate rumination; MS = marital status; UoD = unexpectedness of death; STLL = subjective traumatic level of loss; SCwD = subjective closeness with deceased; PHfL = professional help for loss; DoK = degree of kinship.

Table 4.12. Regression Results of Moderated Mediation Analysis While the Moderator was Family Support

Figure 4.7. Statistical Diagram of Moderated Mediation Model 2 Results (Moderator is Family Support)



4.6.c. Moderated Mediation Analysis Result While the Moderator was Friends

Support

The third hypothesized moderated mediation model (see Figure 4.3) was analyzed to determine the direct and indirect effects of PGRF on PTG via event-related ruminations (i.e., intrusive rumination and deliberate rumination) that were moderated by friend support.

Firstly, it was found that the moderated mediation model did not exhibit any significant results ($b=-0.00$) when intrusive rumination was the mediator, as there was zero within the 95% confidence interval $[-0.02, 0.02]$. Furthermore, moderated mediation did not show significance when deliberate rumination was also a mediator ($b=0.01$, 95%CI $[-0.08, 0.08]$). This resulted in no differences in the conditional indirect effect of PGRF on PTG through intrusive rumination and deliberate rumination according to the level of support provided by friends for a bereaved person.

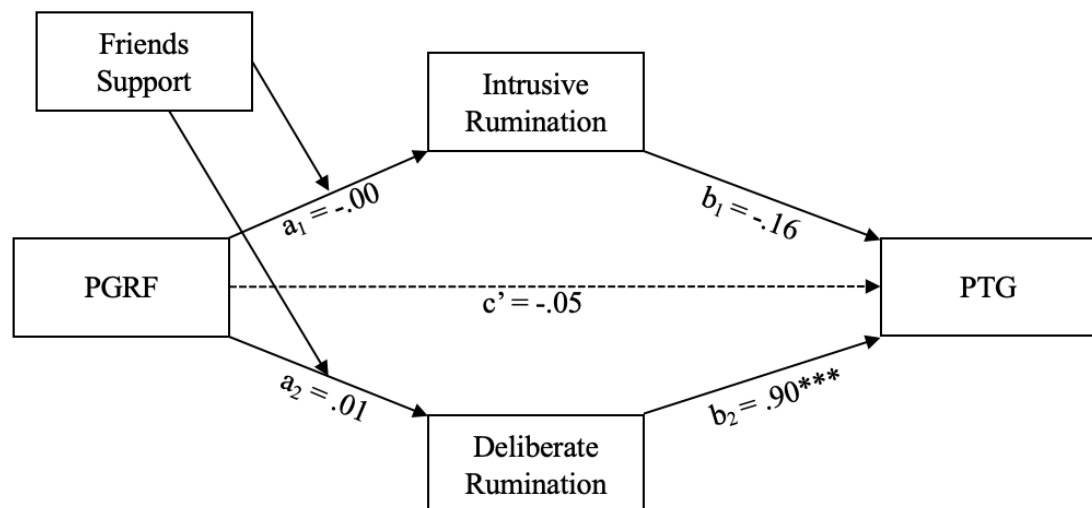
Regarding the a_1 -path and a_2 -path (see Figure 4.8), respectively, PGRF and friends support did not interact significantly when the outcome is intrusive rumination ($b = -0.00$, $p = .94$, $\Delta R^2 = 0.00$) or deliberate rumination ($b = 0.01$, $p = .85$, $\Delta R^2 = 0.00$). See Table 4.12 for the complete regression findings.

Variables	On IR			On DR			On PTG		
	β	SE	<i>p</i>	β	SE	<i>p</i>	β	SE	<i>p</i>
PGRF	.46	.20	.03	.42	.23	.07	-.05	.18	.79
Friends Support	.02	.06	.72	-.04	.07	.56			
PGRF x Friends Support	-.00	.04	.94	.01	.04	.85			
IR							-.16	.18	.37
DR							.90	.16	<.001
Age	-.01	.01	.17	-.01	.01	.38	.02	.01	.03
MS	.12	.12	.32	.17	.14	.22	.26	.21	.21
UoD	.01	.03	.79	.06	.04	.13	.10	.06	.10
STLL	.35	.07	<.001	.25	.07	.00	-.15	.12	.23
SCwD	.13	.07	.07	.00	.08	.99	.09	.12	.45
PHfL	-.13	.14	.39	-.17	.16	.29	.01	.25	.98
DoK	-.36	.15	.01	-.27	.16	.11	-.07	.25	.78

Note. $N = 144$. Model for the a_1 -path $R^2 = .64$, $F(10, 133) = 23.8912$, $p < .001$; for a_2 -path $R^2 = .43$, $F(10, 133) = 10.1593$, $p < .001$; and for b_1 -path, b_2 -path and c' -path $R^2 = .35$, $F(10, 133) = 7.0506$, $p < .001$. PGRF = pandemic grief risk factors; IR = intrusive rumination; DR = deliberate rumination; MS = marital status; UoD = unexpectedness of death; STLL = subjective traumatic level of loss; SCwD = subjective closeness with deceased; PHfL = professional help for loss; DoK = degree of kinship.

Table 4.13. Regression Results of Moderated Mediation Analysis While the Moderator Was Friends Support

Figure 4.8. Statistical Diagram of Moderated Mediation Model 3 Results (Moderator is Friend Support)



4.6.d. Moderated Mediation Analysis Result While the Moderator was Significant

Other Support

The fourth and last hypothesized moderated mediation model (see Figure 4.4) was analyzed to determine the direct and indirect effects of PGRF on PTG via event-related ruminations (i.e., intrusive rumination and deliberate rumination) that were moderated by significant other support.

The moderated mediation model failed to demonstrate any significant results ($b=-0.00$) when intrusive rumination was identified as a mediator since there was no zero within the 95% confidence interval $[-0.02, 0.01]$. As well, the moderated mediation model was not significant when deliberate rumination acted as the mediator ($b=0.04$, 95%CI $[-0.08, 0.06]$). In other words, there was no difference in the conditional indirect effect of PGRF on PTG through intrusive rumination and deliberate rumination according to the degree of support provided to a bereaved person by a significant other.

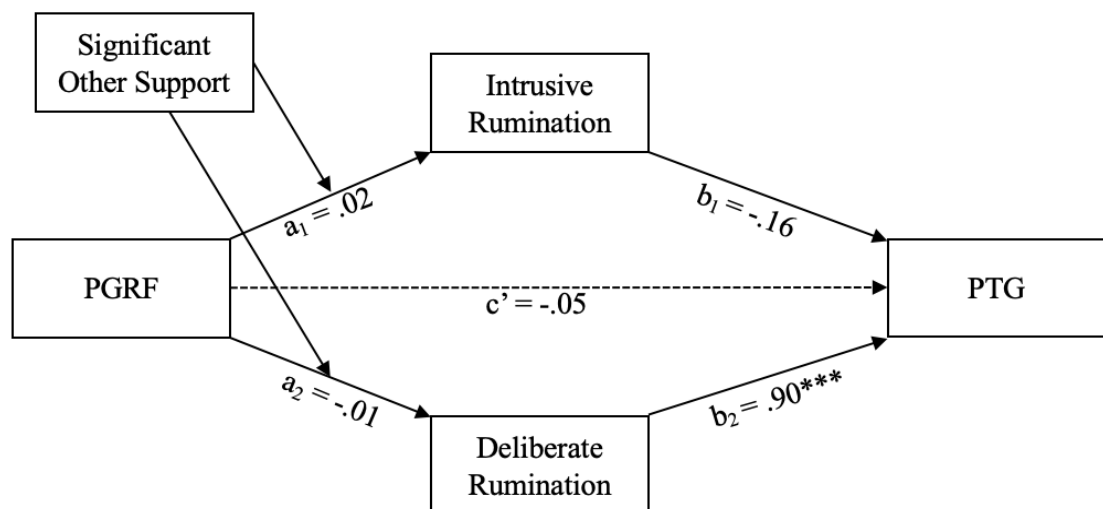
There was no significant interaction between PGRF and significant other support when the outcome was intrusive rumination ($b = 0.02$, $p = .56$, $\Delta R^2 = 0.00$) or deliberate rumination ($b = -0.01$, $p = .89$, $\Delta R^2 = 0.00$), respectively, for the a_1 - and a_2 -paths (see Figure 4.9). See Table 4.13 for the complete regression findings.

Variables	On IR			On DR			On PTG		
	β	SE	<i>p</i>	β	SE	<i>p</i>	β	SE	<i>p</i>
PGRF	.36	.17	.04	.48	.20	.02	-.05	.18	.79
Significant Other Support	-.06	.05	.27	.03	.06	.56			
PGRF x Significant Other Support	.02	.03	.56	-.01	.04	.89			
IR							-.16	.18	.37
DR							.90	.16	<.001
Age	-.01	.01	.19	-.01	.01	.39	.02	.01	.03
MS	.16	.12	.20	.12	.14	.41	.26	.21	.21
UoD	.01	.03	.86	.06	.04	.10	.10	.06	.10
STLL	.36	.06	<.001	.23	.07	.002	-.15	.12	.23
SCwD	.11	.07	.13	.03	.08	.73	.09	.12	.45
PHfL	-.13	.14	.38	-.17	.16	.30	.01	.25	.98
DoK	-.33	.15	.03	-.29	.17	.09	-.07	.25	.78

Note. $N=144$. Model for the a_1 -path $R^2 = .65$, $F(10, 133) = 24.2986$, $p < .001$; for a_2 -path $R^2 = .43$, $F(10, 133) = 10.1822$, $p < .001$; and for b_1 -path, b_2 -path and c' -path $R^2 = .35$, $F(10, 133) = 7.0506$, $p < .001$. PGRF = pandemic grief risk factors; IR = intrusive rumination; DR = deliberate rumination; MS = marital status; UoD = unexpectedness of death; STLL = subjective traumatic level of loss; SCwD = subjective closeness with deceased; PHfL = professional help for loss; DoK = degree of kinship.

Table 4.14. Regression Results of Moderated Mediation Analysis While the Moderator was Significant Other Support

Figure 4.9. Statistical Diagram of Moderated Mediation Model 4 Results (Moderator is Significant Other Support)



4.7. Summary of Moderated Mediation Analyses

According to the results of all moderated mediation analyses, among the sub-factors of PSS (i.e., family, friends, and significant other support), only family support was found to have a moderator role. Family support moderated the relationship between PGRF and deliberate rumination, but not the relationship between PGRF and intrusive rumination. Accordingly, for a high level of family support, the positive conditional effect from PGRF to deliberate rumination was the largest; followed by medium level of family support and low level of family support. Overall, high values of family support have the strongest positive conditional indirect effect on PTG, followed by medium values of family support, and small values of family support.



CHAPTER V

DISCUSSION

The present study explored the bereavement outcomes of the current sample who experienced loss due to the COVID-19 pandemic that began in March 2020 in the world and Türkiye. One of the aims of the study was to achieve a comprehensive understanding by investigating various factors that may be predictive of prolonged grief (PG) symptoms in the context of COVID-19-caused deaths. Further, considering that the person's struggle with loss and shattered assumptions after the death of a loved one could be a part of the growth process, posttraumatic growth (PTG) of these bereaved individuals was also evaluated. The variables of interest in the prediction of individuals' PG symptoms and PTG, after consideration of the threats posed by the COVID-19 pandemic, were pandemic grief risk factors (PGRF), event-related ruminations (i.e., intrusive rumination and deliberate rumination), and perceived social support (PSS).

Accordingly, two hierarchical regression analyses for PG symptoms and PTG and four moderated mediation analyses for PTG were conducted. This chapter presents the discussion of the current study findings in the light of previous research findings, the main effects and the stress-buffering model of social support (Cohen & Wills, 1985), the Dual Process Model of coping with bereavement (DPM; Stroebe & Schut, 1999, 2010, 2016, 2021), and the posttraumatic growth theory (PTG theory; Tedeschi et al., 2018). After the discussion of the study findings, the study's limitations and suggestions for future research are provided. Afterwards, strengths and clinical implications are given, and finally, the conclusions will be stated.

5.1. Grieving in COVID-19 Pandemic: Demographic Characteristics, Loss-Related Experiences, and Bereavement Outcomes of the Sample

Considering that the COVID-19-caused loss experiences for the present sample, the first thing to notice is that the level of exposure to pandemic grief risk factors among bereaved individuals is below the mean score according to the scoring of the PGRF inventory. It is also lower than previous reports in the literature (Breen et al., 2022; Neimeyer & Lee, 2022). As a possible explanation, this observation may have been influenced by the broad period of retrospective data collection used in the present study. During some parts of that period, the pandemic displayed a high level of intensity, and various measures and quarantine protocols were implemented in Türkiye. However, as time passed, the number of cases began to decline, leading to a gradual easing of restrictions and their eventual removal. For this reason, some participants may have experienced loss during the peak of the COVID-19 outbreak and pandemic restrictions, while others may have experienced loss during a period when the pandemic was waning, and these restrictions were not in place. In other words, while some participants were unable to organize funerals, were distant from their loved ones due to restrictions, and worried about losing other loved ones, other participants may have been less exposed to these risk factors. As a result, exposure to pandemic grief risk factors may not have been high across the sample.

Examining how the current sample processed and coped with their losses, firstly, their ERRI scores showed that intrusive rumination levels were above the mean score while deliberate rumination levels were around the mean score. That is, although this sample seemed to more often dwell on the unpleasant facets of loss, they were also able to ruminate voluntarily and reflectively to construct meaning about their experience of loss. Secondly, the social support perceived by the

bereaved participants during their process of loss is slightly above the mean score according to the scoring of MSPSS. The score is not as high as might be expected, since the measures taken to contain the spread of the virus during this period limited the opportunities for social support (Aguilar et al., 2022; Gabay & Tarabeih, 2022).

As one of the bereavement outcomes of the present study, the prolonged grief symptom levels of the bereaved participants were slightly above the mean score according to PG-13. Compared to other studies conducted on a general bereaved population of Türkiye, the prolonged grief scores of this study were approximately at the same level as one of the previous reports (Işıklı et al., 2022), but higher than another study report (Keser et al., 2022). In addition, the posttraumatic growth level of the bereaved participants in the present study was below the mean score according to the PTGI and is also markedly lower than the PTG scores of participants in various studies conducted in different populations in Türkiye (Dirik & Karanci, 2008; Öksüzler & Dirik, 2019). In general terms, these findings of the present study may indicate that although the sample exhibited an average intensity of prolonged grief reactions following their loss, they also experienced posttraumatic growth, albeit to a lesser extent. The reason for low levels of PTG may be the unique conditions of the COVID-19 pandemic. Under normal circumstances, as time passes after the loss, one would expect the bereaved to make sense of their experiences and subsequently for PTG to increase (Carson et al., 2021). However, according to the results of the current study, no relationship was found between time since loss and PTG. The reason for this may be that the recalling factors (i.e., mask use, number of cases published in everyday news) that expose the person to stress did not diminish with the passage of time during the pandemic (Chen & Tang, 2021). Thus, the

occurrence of PTG may have been interrupted due to distressing reminders during the pandemic period.

According to the demographic information of the sample, the majority of them were women, with a university education level and above and with medium-high socioeconomic status. Although this sample is insufficient to represent the above-mentioned characteristics in the population, the ages of the participants ranged from 20 to 67, which is a wide age range. Most participants reported a single loss during this period, the majority of the deceased were women, and the average time passed since the loss was around 17 months. Other loss-related information from the sample indicates that although most of the deceased were not first-degree relatives, the quality of the reported relationship between the participants and the deceased was high. In other words, bereaved individuals perceived the lost one as subjectively close to themselves and the conflict they experienced was low. Further, despite the deceased's older age and their perception that the loss was not particularly unexpected, they also perceived their losses as traumatic. This indicates that COVID 19-deaths are often recognized as traumatic, and despite this, it appears that most bereaved individuals did not seek professional help for their loss.

5.2. Predictors of PG Symptoms

A two-step hierarchical multiple regression analysis was conducted on PG symptoms. In the first model, degree of kinship, subjective traumatic level of loss, subjective closeness with the deceased, and PGRF were simultaneously included as potential risk factors that intensify PG symptoms. In the second model, intrusive rumination, deliberate rumination, and friend support were also added as variables that may have potential predictor effects on PG symptoms. Accordingly, findings

from the final step of the hierarchical regression analysis, the second model, revealed that PGRF, subjective traumatic level of loss, and friend support were significant predictors of PG symptoms.

First of all, PGRF (e.g., prohibition of rituals and dying of the deceased alone or suffering) was found to be a significant predictor of an increase in prolonged grief symptoms regardless of other risk factors of grief. This finding is consistent with the initial evidence-based evaluation of the predictive role of pandemic grief risk factors on bereavement outcomes (Neimeyer & Lee, 2022). Accordingly, circumstantial factors specific to COVID-19 such as prohibition of rituals and social restrictions to prevent the spread of the coronavirus represent a significant risk factor for prolonged grief. As proposed in the Dual Process Model (Stroebe & Schut, 2016, 2021), there might be an “overload” of multiple stressors in loss orientation (i.e., being unable to say goodbye, isolation of the patient, etc.) and restoration orientation (i.e., financial burden, isolation policies-related struggles, etc.) in the grieving process experienced during the COVID-19 pandemic. Thus, these pandemic circumstances may complicate the grief process of the bereaved individuals as shown by many studies in the literature (Amy & Doka, 2021; Gabay & Tarabeih, 2022; LeRoy et al., 2020).

Secondly, as one of the grief risk factors, the subjective traumatic level of loss was found to have a predictive role in increasing PG symptoms. Similar to this finding, the literature demonstrates that the extent to which the loss is perceived as traumatic appears to be a significant factor associated with an increase in individuals’ complicated grief symptoms, whereas the objective nature of death was not found to be related (Tang & Chow, 2017). This distinction between objective and subjective traumatic loss reflects the concept of “cognitive appraisal” under the framework of bereavement (Stroebe et al., 2016). In other words, individual variations in the

psychological impacts of bereavement are influenced by differences in how the stressor is perceived (Boelen et al., 2006). These circumstantial risk factors created by the COVID-19 pandemic (Neimeyer & Lee, 2022) may have caused bereaved individuals to perceive the losses they experienced as more traumatic. On the other hand, the preliminary correlation analysis did not find an association between PG symptoms and the unexpectedness of death, which is one of the indicators of traumatic loss. This result also conforms with research conducted during the COVID-19 pandemic which indicates that the subjective perception of trauma of the loss had a greater influence on the intensity of prolonged grief than the unexpected nature of death itself (Tang, & Xiang, 2021). This pandemic has brought a lot of unknowns, regardless of whether people anticipated death could occur when their loved ones were infected with the coronavirus. Accordingly, the nature of the death, whether expected or unexpected, may not have made a significant difference on the symptoms of prolonged grief (Chen & Tang, 2021). Therefore, the degree to which the person perceives their COVID-19-caused loss as traumatic predicted an increase in PG symptoms rather than whether the loss was unexpected or not.

Lastly, the findings showed that the perception of support from friends was a significant predictor of alleviation of PG symptoms. This finding is in parallel with the main effect model of social support (Cohen & Wills, 1985). Regarding bereavement within the model, since social support gives a person a sense of being valued, a realization of not being alone, and consequently an appreciation of self-worth, the individual's positive affect may increase. Additionally, a person's life might become more predictable and stable, and being embedded in social roles may prevent one from undesirable circumstances such as financial difficulties. Thus, perceiving social support, the bereft may be less inclined to experience complicated

grief (Stroebe et al., 2005). In accordance, bereavement literature also demonstrated that receiving social support alleviates the symptoms of pathological grief (Al-Gamal et al., 2019; Boulware & Bui, 2016; Comtesse et al., 2022; Song et al., 2023; Tsai et al., 2016) whereas adaptation to bereavement can be hampered by a lack of social support (Burke & Neimeyer, 2013).

An interesting finding from this study, which addressed grief during the COVID-19 pandemic, was that only perceived social support from a friend, rather than a family member or a significant other, was correlated with the prolonged grief symptoms. Firstly, the reason for the lack of a relationship between "significant other" and PG symptoms may be the way in which the "significant other" was measured in the Turkish adaptation of the MSPSS (Eker & Arkar, 1995), since this factor simultaneously includes a flirt, fiancé, relative, neighbor, and doctor. It's possible that the measurement tool did not accurately capture and measure what a "significant other" is. Secondly, in the case of "family support", the function of social support received from the family may be prevented by the stress-increasing effects of exposure to the pain of a shared family bereavement, as mentioned by Grace and VanHeuvelen (2022) in their study. In the context where entire family members are concurrently mourning the same deceased, "stress contagion" mentioned by Frost et al. (2017) may have occurred. In other words, the stress family members experience can spread through the family, adversely affect the grieving process, and may also hinder their ability to support each other. Hence, it may not have made a difference whether bereft perceived social support from family or not during the COVID-19 pandemic.

From another perspective, based on the regression findings, it might be inferred that friend support has a mediator role in the relationship between closeness

with the deceased and prolonged grief symptoms. When considering the rationale for this, the new variable added to the model, friend support, arguably has a greater predictive role for prolonged grief symptoms. As an expected result in a mediation model (Baron & Kenny, 1986), when friends support was added to the second model, the predictive role of closeness was lost and the role of social support in predicting prolonged grief symptoms was observed. Thus, the closer the bereaved person is to the deceased, the more distress one may show, which may lead people around the bereaved person to offer more support and, consequently, a reduction in prolonged grief symptoms may be observed.

Considering the priori analyses regarding kinship degree and subjective closeness with the deceased, it was found that individuals who lost immediate family members (parent, child, sibling, or spouse) showed more prolonged grief symptoms than individuals who lost other types of relatives. Further, the subjective level of closeness with the deceased was positively associated with PG symptoms. Likewise, prior research has consistently shown that both being a close relative of the deceased (Bolaséll et al., 2022; Chen & Tang, 2021; Gang et al., 2022; Glickman, 2021) and having an intimate and loving relationship with the deceased (Glickman, 2021; Schaal et al., 2014), regardless of the age or cultural background, is indicative of a greater level of grief severity. However, when considered together with other potential grief risk factors in the hierarchical regression analysis, the results of the first model indicated that subjective closeness to the deceased predicted prolonged grief symptoms, whereas the degree of kinship did not. In other words, closeness with the deceased had the power to predict prolonged grief symptoms independently of other variables in the model; contrarily, kinship degree solely did not predict prolonged grief symptoms because of the shared variance between these variables.

Interestingly, this finding confirms Archer's (1999) assertion that a key element determining the severity of grief is perceived closeness instead of kinship. He argued that there is a possibility that closeness is misconstrued as kinship since the members of a family are usually responsible for supporting and maintaining daily life. Thus, one of the findings of this study indicated that it is not the degree of kinship with the deceased, but the level of closeness to the deceased that is predictive of PG symptoms.

Unexpectedly, although a positive relationship was observed between event-related ruminations and PG symptoms in preliminary correlation analysis, results of the hierarchical regression analysis demonstrated that event-related ruminations, namely intrusive rumination and deliberate rumination, did not have a predictive role on prolonged grief symptoms. According to the theoretical inferences from the functional descriptive model of PTG (Calhoun et al., 2000, 2010; Tedeschi et al., 2018), both types of rumination can be triggered by a distressing experience in one's life, intrusive rumination can make grief symptoms complex by focusing on the negative aspects of grief, and grief can be perceived as a process of remaking the meaning via deliberate rumination. Therefore, an association between event-related ruminations and prolonged grief symptoms was an expected finding. Considering relevant findings from the literature, one study indicated the predictive role of both types of rumination on increasing symptoms of prolonged grief but ruminating intrusively was found to be a stronger predictor than ruminating deliberately (Chukwuorji et al., 2018). Similarly, another study also found the predictive role of intrusive rumination in increasing symptoms of pathological grief but did not find evidence of a correlation between deliberate rumination and pathological grief (Huh et al., 2020). Given the current study findings, one of the reasons for the lack of

predictive role of event-related rumination may be that the variables in the first model (i.e., degree of kinship, subjective traumatic level of loss, subjective closeness with deceased, and PGRF) explained too much variance on prolonged grief symptoms. Therefore, in this specific context, event-related ruminations may appear to be insignificant. Secondly, The PGRF measurement includes items such as: “I kept thinking about what I could have done to prevent the deceased’s illness” and “I kept having images of the deceased struggling for life on some machine”. The similarity of these items to the rumination factor is noteworthy. Thus, there may be shared variance between some items of the PGRF measurement and ruminations. Lastly, although the VIF value of the analysis is within the expected range, multicollinearity may have occurred due to high correlation between some variables such as intrusive rumination and deliberate rumination. Therefore, suppression may have occurred, and we may not have been able to observe the predictive role of event-related rumination on PG symptoms.

Overall, the first model including grief risk factors (i.e., degree of kinship, subjective traumatic level of loss, subjective closeness with deceased, and PGRF) explained the majority of the variance in prolonged grief symptoms. Among these factors, PGRF was found to be a robust predictor of PG symptoms. This finding suggests that the PGRF is very successful in addressing pandemic-related circumstances that complicate the grieving process (e.g., dying of the deceased alone or suffering, prohibition of funerals and rituals, etc.) and ruminations about these conditions (e.g., having thoughts about preventing the disease, worrying about that other loved ones may also die from the infection, etc.). Hence, it is a valid tool for predicting the severity of prolonged grief following a COVID-19-caused loss of a loved one. On the other hand, the findings of the second model indicated that despite

this explained variance, more support from friends was associated with a decline in prolonged grief symptoms. Consequently, although the strength of the effect was small, this signifies the importance of friend support in the grief processes during the pandemic period.

5.3. Predictors of PTG

In order to evaluate the predictors of PTG, a three-step hierarchical multiple regression analysis was conducted on PTG levels. In the first model, age and marital status were included as demographic variables to control. In the second model, risk factors related to the loss (i.e., the unexpectedness of death, subjective traumatic level of loss, and PGRF) were added to find their facilitator power for PTG. In the third model, intrusive rumination and deliberate rumination were added as variables that may have potential predictor effects on PTG. Perceived social support or its subfactors were not included in this analysis because they were not found to be associated with PTG in the preliminary correlation analysis. Overall, findings from the final step of the hierarchical regression analysis, the third model, revealed that age and deliberate rumination were significant predictors of PTG when all other variables were controlled.

First and foremost, engaging in deliberate rumination -reflective, constructive, and voluntary with the purpose of gaining a profound understanding of the event- predicted an increase in PTG in the present study. In parallel, numerous empirical findings showed that among individuals who experienced a distressing life event, thinking deliberately consistently predicted higher levels of posttraumatic growth (Cann et al., 2011; Gul & Karanci, 2017; İkizer et al., 2021; Kelly et al., 2018; Morris et al., 2011; Záhorcová & Prielomková, 2020). Accordingly, PTG

theory (Tedeschi et al., 2018) essentially encompasses the individual's cognitive struggle initiated by shattered assumptions after the seismic traumatic event, that is, intrusive and deliberate rumination. Ruminating deliberately serves meaning-seeking efforts which eventually enables one to reconstruct core beliefs and thus to have a more profound understanding of life. On the other hand, the predictor role of intrusive rumination was not found, but it was found in the preliminary correlation analysis that there is a positive but weaker relationship between intrusive rumination and posttraumatic growth. Similar findings were also observed in the literature (Ryninks et al., 2022; Záhorcová & Prielomková, 2020), and the explanation for these findings may be that intrusive rumination is not the driving force behind posttraumatic growth (Joseph et al., 2012). That is, as PTG theory suggests, ruminations of either form may co-occur and intrusive rumination may be a catalyst for efforts at ruminating more deliberately so that one may have an enhanced understanding of their traumatic incident and be able to develop new core beliefs (Cann et al., 2011; Tedeschi et al., 2018). Correspondingly, given its weaker relationship with posttraumatic growth and the absence of its predictive role, it may be that the driving force behind posttraumatic growth is not intrusive rumination, but deliberate rumination. Thus, the current study revealed the importance of deliberate rumination in the development of posttraumatic growth in line with the PTG theory and literature findings.

As a second and interesting finding, although age did not predict posttraumatic growth in the first model, it began to significantly predict posttraumatic growth in the third model. That is, the addition of event-related ruminations in the third step may increased the explanatory power of the third model and increased the ability of age to better explain the variability of posttraumatic

growth. This may suggest that age becomes significant under the influence of event-related rumination, so it is positively associated with PTG. Hence, the present finding may be explained by the literature suggesting that an individual's ability to learn from experiences, develop coping mechanisms (Diehl et al., 2014), cognitive-emotional complexity (Labouvie-Vief et al., 2007) and engage more actively in the process of posttraumatic growth (López et al., 2015; Goldberg et al., 2019) may increase with age. On the other hand, the multicollinearity may have been happen due to the high correlation between the variables and age may have become significant in step 3 due to suppression.

Thirdly, risk factors related to the loss (i.e., the unexpectedness of death, subjective traumatic level of loss, and PGRF) which were added to the second model of the analysis are inherently distressful and have the potential to complicate the experience of loss (Doering et al., 2022; Neimeyer & Lee, 2022; Tang & Chow, 2017; Tang, & Xiang, 2021, Yılmaz & Zara, 2016). According to PTG theory (Tedeschi et al., 2018), in order to facilitate the occurrence of posttraumatic growth, an individual must experience an event with a possible seismic effect quality and several studies have supported this relationship (Beaglehole et al., 2022; Dekel et. al, 2012). Also, theoreticians asserted that a traumatic event that is severe results in a greater disturbance in the life of the person as well as providing more opportunities for growth (Tedeschi et al., 2018). Alongside the theory (Tedeschi et al., 2018) and the findings of the literature (García et al., 2018; Yılmaz & Zara, 2016), preliminary analyses demonstrated a positive association between these risk factors of loss and posttraumatic growth. Considering the circumstances framing COVID-19 deaths (e.g., the painful and lonely death of a loved one, prevention of funerals, policies of social isolation, etc.) (Neimeyer & Lee, 2022), it was expected that these risk factors

would lead to the occurrence of PTG. However, in the second model of the regression analysis, that is, when controlling for age and marital status, it was detected that only the unexpectedness of the death had the power to predict posttraumatic growth independently of other risk factors. In other words, the unexpectedness of the death in this particular context is the factor associated with an increase in the possibility of posttraumatic growth with the distress it possesses. In fact, one of the elements that affect the traumatic perception of loss is its unexpected nature (Rubin et al., 2009). Given the unexpected nature of COVID-19 deaths (Eisma et al., 2021; Gang et al., 2022), it was preferred to measure the unexpectedness of death separately from the traumatic perception of loss in this study. In the framework of PTG theory, unexpectedness was addressed with an earthquake analogy (Calhoun & Tedeschi, 2013). The destruction caused by an earthquake at an unexpected time and in an unexpected place was analogized to the way a distressful event can demolish one's assumptive core beliefs. Similar to rebuilding a city after a disaster, a person's beliefs are restructured through cognitive work, resulting in posttraumatic growth (Calhoun & Tedeschi, 2013). Hence, the present results may indicate that the unexpectedness in the traumatic nature of COVID-19 deaths has the greatest role in facilitating posttraumatic growth. Further, consistent with the PTG theory (Tedeschi et al., 2018), the non-significance of the unexpectedness of death in the third model may suggest that deliberate rumination plays a mediating role between the unexpectedness of death and PTG. Therefore, the unexpected nature of COVID-19 deaths may have shattered the deceased's core beliefs, leading to deliberately ruminate and thus the development of posttraumatic growth.

Lastly, the predictor role of marital status as a demographic variable was not found in the present study. On the other hand, the preliminary correlational finding

regarding marital status is similar to the results of numerous studies in the literature consistently showing that being married is positively associated with PTG among several samples such as survivors of an earthquake (Seo & Lee, 2020), polytraumatized patients (Kalbas et al., 2023), soldiers (Mitchell et al., 2013), bereaved parents (Polatinsky & Esprey, 2000), and bereaved adults (Li et al., 2021). These results may be supported by the perspective that marriage has traditionally been regarded as a means of social interaction and a source of support, which can lead to psychological growth (Polatinsky & Esprey, 2000; Seo & Lee, 2020).

Regarding perceived social support, neither the total score nor its sub-factors (support from family, friends, and significant others) were associated with posttraumatic growth, according to a priori correlational analysis. This finding contradicts numerous studies in the literature (Dirik & Karanci, 2008; Dominick et al., 2021; Ning et al., 2023; Ryan & Ripley, 2021; Yilmaz & Zara, 2016). Perceived social support is a key factor in the functional descriptive model (Tedeschi et al., 2018) and since the direct effect of it could not be observed, moderated mediation analyses were conducted to find its potential buffering effect on posttraumatic growth. The following section presents a discussion of these analyses.

5.4. The Buffering Role of Family Support on PTG

First of all, the findings of the moderated mediation analyses demonstrated that the mediating effect of deliberate ruminations between PGRF and posttraumatic growth was moderated by family support. PTG theory (Tedeschi et al., 2018) posits that traumatic events, as discussed earlier, cause an individual's core beliefs to be shattered, indicating the necessity of cognitive endeavors in order to experience posttraumatic growth. At this point, deliberate rumination serves as a pursuit for

meaning and consequently enables an individual to acquire a deeper appreciation of one's own life. The results of this study were in line with the theory (Tedeschi et al., 2018) and literature findings showing the mediator role of deliberate rumination (Kramer et al., 2020; Wang et al., 2020), deliberate rumination mediated the relationship between PGRF and posttraumatic growth among bereaved individuals.

Further, as the perceived social support from the family increased, pandemic grief risk factors predicted deliberate rumination more strongly, and thus the posttraumatic growth experienced by bereaved individuals increased. Social support, as proposed in the PTG theory, is crucial in the development of these deliberate ruminations (Calhoun & Tedeschi, 2013). During the COVID-19 pandemic, resources for receiving social support, such as the prevention of funerals, lockdowns, etc., were quite restricted (Aguiar et al., 2022; Gabay & Tarabeih, 2022). Thus, support from family members may have created a secure atmosphere for the expression of thoughts and emotions and encouraged a person to view their traumatic experience differently, optimistically, or adaptively as noted by many researchers (Karanci & Erkam, 2007; Testoni et al., 2021). Moreover, as was mentioned in the social support buffering hypothesis, an effective social support network constructed by family members may have helped the bereft feel better after a loss since it can reduce the stress reactions and affects the way one appraises the loss (Cohen & Wills, 1985; Stroebe et al., 2005). Consequently, it may have presented a new understanding of trauma or a new belief system to facilitate psychological growth (Tedeschi et al., 2018).

Interesting to note is that only family support -not friends or significant others- strengthened the positive relationship between PGRF and deliberate rumination and thus increased PTG levels. Further, prior analysis had found no

association between family support and PG symptoms. In other words, while family support is related to an increase in the PTG experienced by individuals, it has no relationship with prolonged grief symptoms. The DPM (Stroebe & Schut, 2010, 2016) mentions that loss is also experienced at the family level in addition to the individual level. In the context of the COVID-19 pandemic, family members coped with family-related stressors such as multiple losses in a short period, prolonged stay in the same household, or painful detachment from family and friends (Stroebe & Schut, 2021). It is also possible that, as noted above, the “stress contagion” described by Frost et al. (2017) may have occurred - that is, the stress experienced by family members may have spread throughout the family, detrimentally impacting the grieving process, and also interfering with their ability to support each other. Thus, these family-related stressors possess the risk of creating an “overload” at the beginning of the grieving process and not helping to alleviate complicated grief (Stroebe & Schut, 2016, 2021). On the other hand, later in the grieving process, bereaved individuals may have had the opportunity to have more conversations with their families in the household, as opposed to friends or other people, because of the pandemic conditions. Hence, family members may have been role models for each other in the meaning-making process of grief as mentioned in PTG theory (Calhoun & Tedeschi, 2006; Tedeschi et al., 2018), having experienced the same circumstances of COVID-19-deaths. Moreover, the Turkish culture has a collective nature (Göregenli, 1997) and collectivist cultures are characterized by a greater level of interaction between individuals and their families than individualistic cultures (Germani et al., 2020). Family support may not affect PG symptoms, but experiencing and sharing the same pain together may lead to PTG by increasing deliberate rumination. This can be examined in future qualitative studies.

Lastly, it was expected that perceived social support may be a possible moderator factor on the pathway of intrusive rumination to posttraumatic growth since there are several contrasting findings in the literature regarding the relationship between intrusive rumination and PTG (Dunn et al., 2011; Taku et al., 2012). However, the present study showed that when intrusive rumination was the mediator between PGRF and PTG, the moderated mediation model did not work. In other words, the mediator role of intrusive rumination between PGRF and PTG did not differ according to levels of perceived social support or its subfactors. It would be worthwhile to examine probable reasons why social support did not have a differential effect on intrusive rumination in the context of the COVID-19 outbreak. During the pandemic, instead of bringing calm, the time has brought an escalating amount of loss-related information (Chen & Tang, 2021). People were constantly exposed to various news about the coronavirus during this time, and even wearing masks could have been a reminder of the circumstances of their loss. Because of these constant reminders, intrusive ruminations regarding coronavirus-related information may not have decreased even if the person received social support, resulting in no change in PTG.

5.5. Overview of Predictors of PG Symptoms and PTG

Overall, the outcomes of all the conducted analyses revealed that distinct variables exhibit predictive capabilities for PG symptoms and PTG separately. Firstly, subjective traumatic level of loss and PGRF predicted an increase in symptoms of PG. On the other side, the variables predicting the increase in PTG were older age and deliberate rumination. Further, as a noteworthy finding of this investigation, specific sub-factors of perceived social support were observed to

exhibit disparate associations with outcomes related to bereavement. That is, friend support had a main effect in diminishing PG symptoms, while family support moderated the relationship between PGRF and deliberate rumination, thus increasing PTG.

The distinct results pertaining to the sub-factors of perceived social support may be interpreted by the impact of the pandemic circumstances on the mechanism underlying the perception of social support during the period of bereavement. Several family-related stressors in the context of the COVID-19 pandemic may have contributed to an initial "overload" during the grieving process and the phenomenon of "stress contagion" may have impaired the family members' capacity to provide support in navigating their bereavement journey. Due to this rationale, it is plausible that family support did not exhibit a predictive role in mitigating PG symptoms, whereas friend support which is support from outside the household may have demonstrated predictive potential. As the bereavement process unfolds, bereaved individuals may find themselves with increased opportunities for communication with their family members, as compared to friends. Additionally, the shared experience of COVID-19-related loss within the family unit may have led family members to serve as role models for each other. Consequently, social support, particularly from the family, could have played a significant role in promoting PTG.

5.6. Limitations and Suggestions for Future Research

Regarding the limitations of the current research, firstly, since data was collected online via SurveyMonkey®, only individuals with internet access were able to participate in the study. Similar to most online studies in the literature (Eysenbach & Wyatt, 2002), this study also suffered from selection bias as the majority of the

sample in the present study consisted of women and people from high socioeconomic and educational backgrounds. Moreover, the average level of prolonged grief symptoms among the participants suggested that individuals experiencing severe grief symptoms may have preferred not to take part in the study or they may be too distressed to pay attention to social media calls for participation in a scientific study. Therefore, future studies should attempt to reach a representative sample in order to improve the generalizability of the study results.

As a second limitation, some of the scales and questions used in this study may have failed to provide a complete and valid measurement of the variables examined. Firstly, The Scale of Social Support in Bereavement (Li et al., 2022) which is a more specific measurement tool for the social support perceived by bereaved individuals in their grief process, could not be used in this study due to the absence of Turkish adaptation of the scale. In future studies, this scale can be adapted into Turkish to provide a more valid measure of social support during the grief process. Also, in this study, only one Likert-type question was used to measure the unexpectedness of the death, subjective traumatic level of loss, subjective closeness with the deceased, and conflict with the deceased. Using a single question as a measure may not be reliable and valid, so future studies should consider using different instruments to measure these variables.

Thirdly, the current study was cross-sectional in design. It is not possible to draw causal conclusions from the findings. Further research using longitudinal methods is needed to examine the relationship between ruminative thoughts, social support, prolonged grief symptoms, and posttraumatic growth. Moreover, mixed methods studies, including both quantitative and qualitative methods, are

recommended to better comprehend the family's support mechanisms during the grief process.

Finally, the dependent variables of the current study may have posed some limitations to the study due to their inherent nature. The death of a loved one can be a very delicate subject, especially if it has traumatic aspects. Bereft may find it challenging to reflect on and speak openly about their experience of bereavement when answering the research questions or they may have preferred to respond to some questions with socially desirable information. Further, posttraumatic growth, which is the other dependent variable addressed in the study, was questioned by some researchers as being potentially illusory (Taylor & Armor, 1996). In other words, rather than a coping outcome, posttraumatic growth may be a possible coping style to enable individuals to manage their vulnerability. This possible aspect of posttraumatic growth may appear to be in conflict with the conclusions to be drawn from the results of the present research; however, it is a worthwhile endeavor to address psychological growth beyond a mere symptom-reduction approach and to embed it in clinical practice.

5.7. Strengths and Clinical Implications

The present study provides some worthwhile perspectives on the bereavement outcomes and processes of people who have lost a loved one due to COVID-19 and has clinical implications for practitioners working with these bereaved people. Rather than focusing only on negative outcomes, this study considered both prolonged grief symptoms and posttraumatic growth as possible bereavement outcomes. Hence, the results of this study may contribute to future investigations and clinical applications

regarding the self-enhancing aspects of grief experiences in burdensome and bereavement-complicating circumstances such as the pandemic.

First of all, the study finding that the circumstances caused by the COVID-19 pandemic and its traumatic nature have the potential to immensely exacerbate the prolonged grief symptoms of bereaved individuals implies the importance of providing support and psychoeducation programs. It is recommended that psychoeducation programs on various stress factors that may arise under pandemic conditions and ways of coping with them be extensively implemented. It is vital to provide bereaved individuals with information on how to deal with their emotions so that they are not left on their own. Further, in pandemic conditions despite the restrictions on physical contact with friends, support from them appears to be important in alleviating prolonged grief symptoms. Awareness-raising programs focusing on the value of providing support to bereft friends can also be conducted in this regard. As part of the psychotherapy process, clinicians can also focus on the role of social support from friends in helping bereaved people to cope. As a consequence, the clinician may serve as a catalyst for the client to communicate and express their emotional distress and their grieving process with their friends.

Second, the power of deliberate rumination in predicting PTG suggests that to promote posttraumatic growth, clinicians should not focus solely on reducing unfavorable emotions and thoughts resulting from loss as part of a psychotherapy or counseling process. Deliberate and constructive rumination by the client should be recognized and encouraged by the clinician. This enables clients to reflect on their experience of loss and its consequences, to actively attempt to find or reconstruct meaning, and thus experience posttraumatic growth. Further, based on the finding that age significantly predicts posttraumatic growth under the influence of

ruminations, age-appropriate intervention programs are recommended. For instance, clinicians can apply different strategies to support deliberate rumination in the psychotherapy process for young adults and older adults. In other words, individualized treatment plans can be developed by recognizing age-specific needs and coping skills. Moreover, the finding that age interacts with rumination to predict PTG highlights the complexity of posttraumatic growth. Therefore, it is recommended that future studies investigate more than one factor together to better comprehend posttraumatic growth. Lastly, considering the moderating role of family support between pandemic grief risk factors and deliberate rumination, family-focused interventions can be developed. For instance, family members can be educated about supporting each other, strengthening communication, providing emotional support, and encouraging healthy coping strategies during bereavement to facilitate posttraumatic growth. Also, clinicians can encourage their clients to self-disclose their emotions and thoughts with their families about their grieving process.



CHAPTER VI

CONCLUSION

This study investigated the bereavement outcomes of individuals who have suffered the loss of their loved ones as a consequence of COVID-19. Prolonged grief symptoms and posttraumatic growth were examined as outcomes of bereavement. As a variable of interest, firstly, the predictor role of pandemic grief risk factors (PGRF) on people's bereavement outcomes was investigated. In addition, it was suggested that bereavement adjustment will be significantly predicted by event-related rumination and perceived social support, especially when the opportunities to receive social support were so limited in pandemic circumstances. Respectively, the findings of the study indicated that the perception of traumatic loss and especially PGRF were factors that exacerbated prolonged grief symptoms, while support from friends was a factor that alleviated the symptoms. Factors predicting the other bereavement outcome, posttraumatic growth, were the older age of bereaved individuals and the most strongly deliberate rumination. Further, support from family was the factor that strengthens the relationship between pandemic grief risk factors and deliberate rumination and thus related to an increase in posttraumatic growth. In conclusion, these findings highlight the role of pandemic conditions in both complicating individuals' grief experiences and offering opportunities for growth. At this point, social support plays an important role in both reducing prolonged grief symptoms and facilitating posttraumatic growth. In light of these findings, clinicians may have a better understanding of PG symptoms and PTG in the context of bereavement following a pandemic, thereby providing efficient therapeutic possibilities.



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APPENDIX

INSTUTIONAL REVIEW BOARD APPROVAL

Evrak Tarih ve Sayısı: 26.08.2022-E.28692



T.C.
TOBB EKONOMİ VE TEKNOLOJİ ÜNİVERSİTESİ
İnsan Araştırmaları Değerlendirme Kurulu

Sayı : E-27393295-100-28692
Konu : 2022-47 numaralı başvuru

26.08.2022

Sayın Prof. Dr. Ayşe Nuray KARANCI

İnsan Araştırmaları Değerlendirme Kurulu'na etik yönden değerlendirilmek üzere sunmuş olduğunuz 2022-47 kayıt numaralı "COVID-19'dan Yakınlarını Kaybeden Bireylerde Uzamış Yas Semptomları ve Travma Sonrası Gelişimde Algılanan Sosyal Desteğin Rolü" başlığını taşıyan projeniz etik yönden uygun görülerek onaylanmasına karar verilmiştir.
Bilgilerinizi rica ederiz

Prof. Dr. Tayyibe Nur ÇAĞLAR
Kurul Başkanı

Bu belge, güvenli elektronik imza ile imzalanmıştır.

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DATA COLLECTION POSTER



TOBB ETÜ
Ekonomi ve Teknoloji Üniversitesi

Sosyal Bilimler
Enstitüsü

COVID-19 Dönemi Yaş Deneyimleri Konulu Yüksek Lisans Tezine için;

Eğer **COVID-19'dan bir yakınınızı**
kaybettiyseniz, bu araştırmaya
katılarak tezime destek olabilirsiniz.

Araştırmaya katılmak için yaklaşık 15 dakika
sürecek olan ankete karekod aracılığıyla
ulaşabilir veya linke tıklayabilirsiniz.



Ayrıca, COVID-19'dan yakınını kaybetmiş
tanıdıklarınız varsa, bu anketi o kişilerle
paylaşarak tezime destek olabilirsiniz.

Teşekkür ederim.

Psk. Meyra Çakar

Tez Danışmanı: Prof. Dr. A. Nuray Karancı

INFORMED CONSENT FORM

“COVID-19’dan Yakınlarını Kaybeden Bireylerde Uzamış Yas Semptomları ve Travma Sonrası Gelişimde Algılanan Sosyal Desteğin Rolü” başlıklı bir araştırma yapmaktayız. Eğer COVID-19’dan bir yakınınızı kaybettiyseniz, siz de bu araştırmaya katılarak bize destek olabilirsiniz. Bu araştırmaya katılıp katılmamakta serbestsiniz. Kararınızdan önce araştırma hakkında sizi bilgilendirmek istiyoruz. Bu bilgileri okuyup anladıktan sonra araştırmaya katılmak isterseniz ilgili seçeneği işaretleyiniz.

Bu araştırma TOBB ETÜ Fen-Edebiyat Fakültesi Psikoloji Bölümü öğretim üyesi Prof. Dr. A. Nuray Karancı danışmanlığında, TOBB ETÜ Klinik Psikoloji Yüksek Lisans öğrencisi Meyra Çakar tarafından yürütülen bir tez çalışmasıdır. Bu araştırmayı yapmak istememizin amacı, COVID-19’dan yakını kaybetmiş bireylerin deneyimlerini anlamaktır. Bu çalışmaya katılımınız araştırmanın başarısı için önemlidir.

Eğer araştırmaya katılmayı kabul ederseniz, sizlerden yaklaşık 15 dakikalık çevrim içi ankette yer alan COVID-19’dan kaybettiğiniz yakınınız ve yaşadıklarınız ile ilgili soruları yanıtlamanız istenmektedir. Soruları cevaplarken, kendinizi sorulardan dolayı veya herhangi bir başka nedenden dolayı rahatsız hissederseniz, soruları cevaplamayı sonlandırabilirsiniz. Çalışmaya katıldığınız için size ek bir ödeme yapılmayacaktır. Bu araştırmaya katılmak tamamen isteğe bağlıdır.

Sizden herhangi bir kişisel bilgi (adınız, iletişim adresiniz vb.) istenmeyecektir. Anket cevaplarınız kimliğinizle eşleştirilmeyecek şekilde muhafaza edilecektir.

Araştırma ile ilgili bir sorunuz olduğunda, Psk. Meyra Çakar’a ... e-posta adresi üzerinden ulaşabilirsiniz.

DEMOGRAFIC INFORMATION FORM

1. KISIM

1. Yaşınız: _____

2. Cinsiyetiniz: Kadın () Erkek () Diğer () (Lütfen belirtin) _____

3. Eğitim durumunuz: Okuryazar () İlkokul () Ortaokul () Lise () Üniversite ()
Yüksek Lisans () Doktora ()

4.

Aşağıdaki merdivenin Türkiye'deki insanların durduğu yeri temsil ettiğini düşünün.

Merdivenin tepesindekiler her şeyin en iyisine (en çok paraya, en iyi eğitime ve en saygın mesleklere) sahip olanlar. Merdivenin en altındakiler ise, en kötü koşullara sahip olanlar (en az paraya, en az eğitime ve en az sayılan mesleklere sahip olanlar ya da hiçbir işi olmayanlar).

Bu merdivende daha yüksek bir konuma sahip olmanız en tepedeki insanlara daha yakın olduğunuz; daha aşağıda olmanız ise en alttaki insanlara daha yakın olduğunuzu gösterir.



Bu merdivende kendinizi nereye yerleştirirdiniz?

1 () 2 () 3 () 4 () 5 () 6 () 7 () 8 () 9 () 10 ()

5. Medeni durumunuz: Bekar () Evli () Eşini kaybetmiş () Boşanmış () Birlikte yaşıyor () Ayrı yaşıyor ()

6. Yaşantımızın olağan akışında aniden meydana gelen, yaşamımızı alt üst eden, bizde dehşet, korku, endişe ve çaresizlik yaşatan olayları travmatik olaylar olarak adlandırırız. Bu olaylara örnek olarak, depremler, trafik kazaları, fiziksel şiddete maruz kalma/tehdit altında kalma/tanık olma gibi durumlar örnek verilebilir.

Bu tanıma göre COVID-19 Pandemisi döneminde yakın kaybı dışında başınıza gelen yaşadığınız travmatik bir olay/olaylar oldu mu?

Evet () Hayır ()

7. Bir önceki soruda cevabınız evet ise, başınızdan ne tür bir olay/olaylar geçtiğini lütfen belirtiniz. _____

2. KISIM

Hepimiz yaşantımız boyunca farklı zamanlarda sevdiğimiz bir yakınımızı ölüm sebebi ile kaybedebiliriz. Bu kısımda sorulacak sorular sizlerin COVID-19 Pandemisi döneminde koronavirüs hastalığı (COVID-19) sebebi ile kaybettiğiniz yakınlarınız hakkında olacaktır.

8. Aşağıdaki yakınlarınızdan COVID-19 Pandemisi döneminde koronavirüs hastalığı (COVID-19) kaynaklı kaybettiğiniz kişi/kişileri işaretleyiniz.

Anne () Baba () Kardeş () Eş () Sevgili () Çocuk () Dede () Anneanne ve/veya babaanne () Arkadaş () Akraba () Komşu () Diğer () (Lütfen belirtin) _____

9. Yukarıda birden fazla kişiyi işaretlediyseniz, COVID-19 Pandemisi döneminde koronavirüs hastalığı (COVID-19) kaynaklı kaybettiğiniz kişi veya kişilerden, kaybı sizi EN ÇOK ETKİLEYEN kişiyi lütfen işaretleyiniz. Sadece bir kişiyi işaretleyiniz.

Anne () Baba () Kardeş () Eş () Sevgili () Çocuk () Dede () Anneanne ve/veya babaanne () Arkadaş () Akraba () Komşu () Diğer () (Lütfen belirtin) _____

3. KISIM

Bu kısımdaki sorular yaşadığınız kayıp ile ilgilidir. Lütfen bu kısımdaki soruları yukarıda işaretlediğiniz, **kaybı sizi EN ÇOK ETKİLEDİĞİNİ düşündüğünüz kişiyi** düşünerek cevaplayınız.

10. Kaybettiğiniz kişinin ölüm yaşı: _____
11. Kaybettiğiniz kişinin ölüm tarihi: (Gün) _____ (Ay) _____ (Yıl) _____
12. Kaybettiğiniz kişinin cinsiyeti: Kadın () Erkek ()
13. Yakınınızın kaybı sonrası herhangi bir profesyonelden psikolojik/psikiyatrik yardım aldınız mı?
Evet () Hayır ()
14. Evet ise, yardım türünü belirtiniz.
Psikoterapi/ Psikolojik danışma ()
Psikiyatrik yardım/ İlaç kullanımı ()
Psikoterapi ve ilaç yardımı bir arada ()
15. Bu kayıp sizin için ne kadar beklenmedik?
() Hiç () Hafif düzeyde () Orta düzeyde () Fazla () Çok fazla
16. Bu kayıp sizin için ne kadar travmatik?
() Hiç () Hafif düzeyde () Orta düzeyde () Fazla () Çok fazla
17. Ölen kişiyle ne kadar yakındınız?
() Hiç () Hafif düzeyde () Orta düzeyde () Fazla () Çok fazla
18. Ölen kişiyle aranızda bir çatışma var mıydı?
() Hiç () Hafif düzeyde () Orta düzeyde () Fazla () Çok fazla

PANDEMIC GRIEF RISK FACTORS (PGRF) INVENTORY

Yaşadığınız kayıptan sonraki 2 hafta içinde, aşağıdaki verilen, kaybınızla ilişkili düşünce, his veya davranışları ne sıklıkla deneyimlediniz?

	Hiç	Birkaç Gün	Çoğu Günler	Neredeyse Her Gün
1. Ölen yakınım hayatını kaybetmeden önce yanında olamadığım için kendimi suçlu hissettim.	0	1	2	3
2. Ölen yakınımın nasıl öldüğü hakkında (örneğin, yalnız veya acı çekerek) kötü hissettim.	0	1	2	3
3. Ölen yakınıma uygun bir cenaze veya taziye düzenlenmediği için kötü hissettim.	0	1	2	3
4. Ölen yakınımın hastalığını önlemek için neler yapabilirdim diye düşünüp durdum.	0	1	2	3
5. Ölüm ortam ve koşullarının onunla aramızda duygusal bir mesafe yarattığını hissettim.	0	1	2	3
6. Önemsediğim diğer insanları da aynı hastalıktan kaybetmekten endişelendim.	0	1	2	3
7. Makineye bağlı olarak yaşam mücadelesi verdiği görüntüler sürekli gözümün önüne geldi.	0	1	2	3
8. Doktorların, ölen yakınımın durumu hakkında beni bilgilendirmemelerine sinirlendim.	0	1	2	3
9. Pandemiye kontrol altına almak için belirlenen sosyal mesafe kuralları sebebiyle yas sürecimde kendimi çok yalnız hissettim.	0	1	2	3
10. Ölen yakınımı düşündüğümde Allah'ın ya da evrenin neden bizi bu şekilde cezalandırdığını sorguladım.	0	1	2	3

EVENT-RELATED RUMINATION INVENTORY (ERRI)

Bilgi Formunda belirttiðinize benzer bir yařantıdan sonra, her zaman olmasa da bazen insanlar, bu deneyim hakkında düşünmeye çalışmamalarına rağmen kendilerini onunla ilgili düşünceler içinde bulurlar. Ařağıda yer alan maddeleri **yařadığınız kaybın hemen ardındaki haftalarda, kaybınızı düşünerek** ne sıklıkla yařadığınızı belirtin.

	Hiç olmadı / Hiç /Asla	Nadiren	Bazen	Sık sık/Sıklıkla
1. İstemediğim hâlde olayı düşündüm.	0	1	2	3
2. Olayla ilgili düşünceler aklıma geldi ve onlar hakkında düşünmeden duramadım.	0	1	2	3
3. Olayla ilgili düşünceler dikkatimi dağıttı ya da beni odaklanmaktan alıkoydu.	0	1	2	3
4. Olayla ilgili görüntü ya da düşüncelerin zihnime girmesine engel olamadım.	0	1	2	3
5. Olaya ait düşünceler, anılar ya da görüntüler istemesem de aklıma geldi.	0	1	2	3
6. Olayla ilgili düşünceler deneyimimi yeniden yaşamama neden oldu.	0	1	2	3
7. Olayı hatırlatan şeyler, yařadığım deneyimimle ilgili düşünceleri geri getirdi.	0	1	2	3
8. Kendimi otomatik olarak ne olmuş olduğı ile ilgili düşünürken buldum.	0	1	2	3
9. Diğere şeyler beni, yařadığım deneyimle ilgili düşünmeye yönlendirip durdu.	0	1	2	3

10. Olayla ilgili düşünmemeye çalıştım ama düşünceleri aklımdan çıkaramadım.	0	1	2	3
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Belirttiğinize benzer bir yaşantıdan sonra, her zaman olmasa da bazen insanlar, özellikle ve kasıtlı olarak bu deneyim hakkında düşünerek vakit geçirirler. Aşağıda yer alan maddeler için, **yaşadığınız kaybın hemen ardındaki haftalarda, kaybınızı düşünerek** eğer olduysa ne sıklıkla, belirtilen konular ile ilgili olarak düşünmek için özellikle vakit geçirdiğinizi belirtin.

	Hiç olmadı / Hiç /Asla	Nadiren	Bazen	Sık sık/Sıklıkla
1. Yaşadığım deneyimden anlam bulup bulamayacağım ile ilgili düşündüm.	0	1	2	3
2. Yaşamımdaki değişikliklerin deneyimimle uğraşmaktan kaynaklanıp kaynaklanmadığını düşündüm.	0	1	2	3
3. Kendimi, yaşadığım deneyimle ilgili duygularım hakkında düşünmeye zorladım.	0	1	2	3
4. Yaşadığım deneyimin sonucunda bir şey öğrenip öğrenmediğim ile ilgili düşündüm.	0	1	2	3
5. Bu deneyimin dünya ile ilgili inançlarımı değiştirip değiştirmediği hakkında düşündüm.	0	1	2	3
6. Bu deneyimin geleceğim için ne anlama gelebileceği hakkında düşündüm.	0	1	2	3
7. Diğerleri ile olan ilişkilerimin, yaşadığım deneyimin ardından	0	1	2	3

değişip değişmediği hakkında düşündüm.				
8. Kendimi olayla ilgili duygularımla baş etmeye zorladım.	0	1	2	3
9. Olayın beni nasıl etkilemiş olduğu hakkında özellikle düşündüm.	0	1	2	3
10. Olay hakkında düşündüm ve ne olduğunu anlamaya çalıştım.	0	1	2	3



MULTIDIMENSIONAL SCALE OF PERCEIVED SOCIAL SUPPORT (MSPSS)

Aşağıda 12 cümle ve her bir cümle altında da cevaplarınızı işaretlemeniz için 1’den 7’ye kadar rakamlar verilmiştir. **Bu soruları yaşadığınız kayıptan sonraki zamanı düşünerek cevaplayınız.** Her cümlede söylenenin sizin için ne kadar çok doğru olduğunu veya olmadığını belirtmek için o cümle altındaki rakamlardan yalnız bir tanesini işaretleyiniz. Bu şekilde 12 cümlelerin her birine bir işaret koyarak cevaplarınızı veriniz.

Lütfen hiçbir cümleyi cevapsız bırakmayınız. Sizce doğruya en yakın olan rakamı işaretleyiniz.

	Kesinlikle Hayır						Kesinlikle Evet
1. Ailem ve arkadaşlarım dışında olan ve ihtiyacım olduğunda yanımda olan bir insan (örneğin, flört, nişanlı, sözlü, akraba, komşu, doktor) var.	1	2	3	4	5	6	7
2. Ailem ve arkadaşlarım dışında olan ve sevinç ve kederlerimi paylaşabileceğim bir insan (örneğin, flört, nişanlı, sözlü, akraba, komşu, doktor) var.	1	2	3	4	5	6	7
3. Ailem (örneğin, annem, babam, eşim, çocuklarım, kardeşlerim) bana gerçekten yardımcı olmaya çalışır.	1	2	3	4	5	6	7
4. İhtiyacım olan duygusal yardımı ve desteği ailemden (örneğin, annemden, babamdan, eşimden, çocuklarımdan, kardeşlerimden) alırım.	1	2	3	4	5	6	7
5. Ailem ve arkadaşlarım dışında olan ve beni gerçekten rahatlatan bir insan (örneğin, flört, nişanlı, sözlü, akraba, komşu, doktor) var.	1	2	3	4	5	6	7

6. Arkadaşlarım bana gerçekten yardımcı olmaya çalışırlar.	1	2	3	4	5	6	7
7. İşler kötü gittiğinde arkadaşlarıma güvenebilirim.	1	2	3	4	5	6	7
8. Sorunlarımı ailemle (örneğin, annemle, babamla, eşimle, çocuklarımla, kardeşlerimle) konuşabilirim.	1	2	3	4	5	6	7
9. Sevinç ve kederlerimi paylaşabileceğim arkadaşlarım var.	1	2	3	4	5	6	7
10. Ailem ve arkadaşlarım dışında olan ve duygularıma önem veren bir insan (örneğin, flört, nişanlı, sözlü, akraba, komşu, doktor) var.	1	2	3	4	5	6	7
11. Kararlarımı vermede ailem (örneğin, annem, babam, eşim, çocuklarım, kardeşlerim) bana yardımcı olmaya isteklidir.	1	2	3	4	5	6	7
12. Sorunlarımı arkadaşlarımla konuşabilirim.	1	2	3	4	5	6	7

PROLONGED GRIEF DISORDER (PG-13)

Aşağıdaki anket, sizin için önemli olan bir kişiyi kaybettikten sonraki yaşamınızla ilgili soruları içermektedir.

Lütfen soruları **daha önce belirttiğiniz, sizi en çok etkilediğini düşündüğünüz yakınınızın kaybına göre** okuyunuz ve aşağıdaki her bir madde için size en uygun olan seçeneği işaretleyiniz.

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

Aşağıdaki soruları şu anda kendinizi nasıl hissettiğinizi göz önünde bulundurarak yanıtlayınız.

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

Aşağıdaki maddeyi size uygun seçeneğe işaret koyarak cevaplayınız.

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

☐ Evet ☐ Hayır



POSTTRAUMATIC GROWTH INVENTORY (PTGI)

Aşağıda yer alan her cümleyi dikkatle okuyunuz. **Yaşadığınız kaybın sonrasında**, yaşamınızın bu olaya bağlı olarak **ne derece değiştiğini** aşağıdaki ölçekte uygun rakamı daire içine alarak belirtiniz.

0 = Travmadan dolayı böyle bir değişiklik yaşamadım

1 = Travmadan dolayı bu değişikliği çok az yaşadım

2 = Travmadan dolayı bu değişikliği az derecede yaşadım

3 = Travmadan dolayı bu değişikliği orta derecede yaşadım

4 = Travmadan dolayı bu değişikliği oldukça fazla derecede yaşadım

5 = Travmadan dolayı bu değişikliği aşırı derecede yaşadım

(1)	Hayatıma verdiğim değer arttı.	0	1	2	3	4	5
(2)	Hayatımın kıymetini anladım.	0	1	2	3	4	5
(3)	Yeni ilgi alanları geliştirdim.	0	1	2	3	4	5
(4)	Kendime güvenim arttı.	0	1	2	3	4	5
(5)	Manevi konuları daha iyi anladım.	0	1	2	3	4	5
(6)	Zor zamanlarda başkalarına güvenilebileceğimi anladım.	0	1	2	3	4	5
(7)	Hayatıma yeni bir yön verdim.	0	1	2	3	4	5
(8)	Kendimi diğer insanlara daha yakın hissetmeye başladım.	0	1	2	3	4	5
(9)	Duygularımı ifade etme isteğim arttı.	0	1	2	3	4	5
(10)	Zorluklarla başa çıkabileceğimi anladım.	0	1	2	3	4	5
(11)	Hayatımı daha iyi şeyler yaparak geçirebileceğimi anladım.	0	1	2	3	4	5
(12)	Olayları olduğu gibi kabullenmeyi öğrendim.	0	1	2	3	4	5
(13)	Yaşadığım her günün değerini anladım.	0	1	2	3	4	5
(14)	Yaşadığım olaydan (travma) sonra benim için yeni fırsatlar doğdu.	0	1	2	3	4	5
(15)	Başkalarına karşı şefkat hislerim arttı.	0	1	2	3	4	5
(16)	İnsanlarla ilişkilerimde daha fazla gayret göstermeye başladım.	0	1	2	3	4	5
(17)	Değişmesi gereken şeyleri değiştirmek için daha fazla gayret göstermeye başladım.	0	1	2	3	4	5
(18)	Dini inancım daha da güçlendi.	0	1	2	3	4	5
(19)	Düşündüğümde daha güçlü olduğumu anladım.	0	1	2	3	4	5
(20)	İnsanların ne kadar iyi olduğu konusunda çok şey öğrendim.	0	1	2	3	4	5
(21)	Başkalarına ihtiyacım olabileceğini kabul etmeyi öğrendim.	0	1	2	3	4	5

DEBRIEFING FORM

Çalışmama zaman ayırıp benimle samimi bilgiler paylaştığınız için çok teşekkür ederim. Öncelikle baş sağlığı dileklerimizi iletmek isteriz.

Bu çalışmanın amacını merak ediyorsanız:

- COVID-19 Pandemisi döneminde birçok kişi bu hastalıktan hayatını kaybetmiştir ve bu kişilerin yakınları bir yas sürecinden geçmiştir. COVID-19 Pandemisinin yarattığı sosyal mesafe ve izolasyon gibi ortam ve koşullar bu yas sürecini daha da zorlaştırmış olabilir. Ayrıca, olumsuz etkilerin yanı sıra, bazı yas yaşayan bireyler, yaşadıkları acı olayla başa çıkma çabaları sonunda kişiyi geliştirici ve olumlu etkiler deneyimlemiş de olabilirler. Bu çalışmanın amacı pandeminin yarattığı olumsuz ortam ve koşulların, kişilerin yaşadığı yas ve travma sonrası gelişim deneyimleri üzerindeki etkisini incelerken, bu süreçte sosyal destek alabilmiş olan bireylerin sosyal destek alamamış bireylerden nasıl farklılaştığını araştırmaktır. Bu çalışmanın verileri, araştırmacılar olarak bizlerin ve kayıp yaşayan kişiler ile çalışan sağlık çalışanlarının, kayıp sonrasında oluşabilecek olumsuz ve olumlu gelişimi ve etki eden faktörleri anlamasına yardımcı olacaktır.

Bu çalışmanın sonunda kaybınızla ilgili bazı anılarınızı yeniden hatırlamış olabilirsiniz. Eğer sizde bununla ilgili olarak baş etmekte zorlanacağınız duygu ve düşünceler uyandıysa, bu süreçte şunları yapmak sizlere iyi gelecektir:

- Yaşadığınız duygu ve tepkiler doğaldır. Bunları engellemek yerine kabul etmeye çalışabilirsiniz. Aynı şekilde, kaybettiğiniz yakınınızın ardından ağlamak da oldukça normal bir tepkidir ve bu sizin rahatlamanıza yardımcı olabilir.
- Duygu ve düşüncelerinize yalnız başınıza katlanmak yerine, güvendiğiniz, sizi iyi dinlediğini ve anladığını düşündüğünüz birisiyle konuşabilirsiniz. Bunları paylaştığınız kişilerin üzülmelerinden veya güçsüz görünmekten çekinmeyin, bunların konuşulması ve paylaşılması onlara da iyi gelecektir.
- Duygularınızı ifade etmekte zorlandığınızı düşünüyorsanız; yazma, resim çizme veya şarkı söyleme yöntemlerini kullanabilirsiniz.

- Acınızı ifade etmek için mezarlık ziyaretleri veya dua etmek gibi rit eller gerekleřtirebilirsiniz.
- G nl k yapılan y r y řler veya basit egzersizler gibi fiziksel aktivitelerde bulunmak sizi rahatlatabilir.
- Sevdikleriniz ile vakit geirecek sosyal aktivitelerde bulunabilirsiniz.
- Kayıp ile bař etme konusundaki kitaplardan veya internet  zerindeki kaynaklardan faydalanabilirsiniz.

Eęer bir profesyonel yardım almak isterseniz, size en yakın saęlık kuruluřunda g revli olan bir psikiyatrist veya psikolog ile g r řebilirsiniz.

