

#### Beatriz Maria de Brito Fernandes

# THE IMPACT OF COVID-19 PANDEMIC ON MENTAL HEALTH AND ON LOSS AND GRIEF PROCESSES: THE ROLE OF COMPASSION

Dissertação no âmbito do mestrado em Psicologia Clínica e da Saúde, subárea de especialização em Intervenções Cognitivo-Comportamentais nas Perturbações Psicológicas e da Saúde, orientada pela Professora Doutora Maria do Céu Teixeira Salvador e co-orientada pela Professora Doutora Marcela Salomé Albuquerque Andrade de Matos e apresentada à Faculdade de Psicologia e Ciências da Educação da Universidade de Coimbra

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#### Statement of integrity.

I hereby declare having conducted this academic work with integrity. I confirm that I have not used plagiarism or any form of undue use of information or falsification of results along the process leading to its elaboration.

#### Institutional framework.

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#### Content

#### Acknowledgments

Abstract
Introduction
Introduction
The impact of COVID-19 pandemic in people's lives: The new burden in mental
health
Shame and Mental Health
Compassion
The aftermath effect of COVID-19 in the processes of Loss and Grief
Objectives
Methods
Participants
Total sample
Grief Sample
Measures10
Demographic questionnaire
Self-report measures
External and Internal Shame Scale (EISS/EVEI; Ferreira, et al.,, 2020)
The Compassionate Engagement and Action Scales (CEAS; Gilbert et al., 2017).10
Fears of Compassion Scales (FCS/EMC; Gilbert et al., 2011; Portuguese version
by Matos et al., 2011)
Brief Adjustment Scale-6 (BASE-6; Cruz et al, 2020; Translation and Adaptation
for Portuguese Population by Matos et al., 2021)
Impact of Event Scale-Revised (IES-R; Weiss & Marmar, 1997; Portuguese
version by Matos et al., 2011; Adaptation COVID-19: Matos, 2020)
Pandemic Grief Scale (PGS; Lee & Neimeyer, 2020; Translation and Adaptation
for Portuguese Population by Matos et al., 2021).

Procedures	13
Data Analysis	14
Results	17
Total Sample	17
Correlation analyses	17
Grief sample	22
Correlation analyses	22
Discussion	23
References	29
Appendix	39

### The Impact of COVID-19 pandemic on Mental Health and on Loss and Grief Processes: The Role of Compassion.

#### Resumo

A Pandemia de COVID-19 transformou radicalmente a vida quotidiana, acarretando implicações relevantes para o bem-estar psicológico. Conceptualizada como um evento traumático, esta pandemia promoveu uma deterioração significativa da saúde mental, que se traduziu num aumento considerável dos níveis de desajustamento psicológico, vergonha, e medo de receber compaixão por parte dos outros. Para além das dificuldades em termos de saúde mental que advieram desta emergência sanitária global, os processos de perda e luto adquiriram um maior relevo nesta fase, devido ao seu carácter inesperado e repentino e às restrições sanitárias impostas para tentar conter o vírus, que originaram mudanças profundas no modo como o luto e a perda são experienciados. Neste sentido, o presente estudo teve como objetivo analisar o papel mediador do medo de receber compaixão por parte dos outros e da auto-compaixão na relação entre vergonha e desajustamento psicológico e entre vergonha e o impacto traumático da pandemia de COVID-19, numa amostra de 240 adultos portugueses. Este estudo ainda teve como objetivo explorar a relação entre desajustamento psicológico, o impacto traumático da pandemia de COVID-19 e luto complicado, numa subamostra de 44 participantes que iniciaram um processo de luto no decurso da pandemia e que integraram a amostra total. A amostra total respondeu a questionários de autorresposta destinadas a avaliar vergonha, desajustamento psicológico, impacto traumático da pandemia de COVID-19, medo de receber compaixão por parte dos outros e auto-compaixão, num formato online. A subamostra de luto completou ainda um conjunto de instrumentos destinados a avaliar a presença de desajustamento psicológico, impacto traumático da pandemia de COVID-19 e luto complicado. Os resultados obtidos sugerem que, no contexto da COVID-19, a autocompaixão foi um mediador da relação entre vergonha e desajustamento psicológico e que o medo de receber compaixão por parte dos outros foi um mediador da relação entre vergonha e o impacto traumático da COVID-19. Paralelamente, os resultados da subamostra de luto demonstraram que o impacto traumático da COVID-19 foi preditor significativo de luto complicado. Assim, estes resultados podem contribuir para informar e adaptar intervenções psicológicas, nomeadamente intervenções focadas na compaixão, às especificidades do novo contexto pandémico. Atendendo às limitações metodológicas deste estudo, futura investigação deve procurar replicar os resultados obtidos através de estudos longitudinais e com uma amostra de maior dimensão.

*Palavras-Chave*: Pandemia COVID-19; Desajustamento Psicológico; Vergonha; Medo de Receber Compaixão por Parte dos Outros; Auto-Compaixão; Impacto Traumático da Pandemia; Perda; Luto

### The Impact of COVID-19 pandemic on Mental Health and on Loss and Grief Processes: The Role of Compassion.

#### **Abstract**

The COVID-19 pandemic has radically transformed people's lives by having significant and pervasive implications on their psychological well-being. Considered as a traumatic event, this pandemic has indeed triggered a mental health outburst, associated with a significant increase in the levels of psychological maladjustment, shame, and fear of receiving compassion from others. Besides the emergence of increased mental health difficulties during this global health emergency, loss and grief processes have also received special attention due to their new sudden and unexpected nature. Additionally, the strict health security measures implemented to slow the spread of the virus have profoundly changed the way people grieve. In this sense, the present study aimed at examining the mediator role of fear of receiving compassion from others and self-compassion on the association between shame and psychological maladjustment, and between shame and the traumatic impact of the COVID-19 pandemic, in a sample of 240 Portuguese adult participants. This study also sought out to explore the association between psychological maladjustment, traumatic impact of the COVID-19 pandemic and complicated grief, in a sample of 44 participants (part of the total sample) who had lost a significant other during the pandemic. The overall sample completed an online survey encompassing self-report measures assessing shame, psychological maladjustment, traumatic impact of COVID-19 pandemic, fear of receiving compassion from others and self-compassion. The grief subsample also completed self-report questionnaires measuring psychological maladjustment, traumatic impact of COVID-19 pandemic and complicated grief. The results revealed that self-compassion mediated the relationship between shame, in the context of the COVID-19 pandemic, and psychological maladjustment, and that fear of receiving compassion from others was a mediator of the relationship between shame and the traumatic impact of the COVID-19 pandemic. In addition, results from the grief sample showed that the traumatic impact of COVID-19 was a significant predictor of complicated grief. These findings may contribute to inform and adapt psychological interventions in the context of this novel pandemic, especially Compassion focused interventions. Considering the methodological limitations of this study, future research should seek to replicate these findings with a larger sample and using a longitudinal design.

*Keywords*: COVID-19 pandemic; Psychological Maladjustment; Shame; Fear of Receiving Compassion from Others; Self-Compassion; Traumatic Impact of COVID-19 pandemic; Loss; Grief.

## The Impact of COVID-19 Pandemic on Mental Health and on Loss and Grief Processes: The Role of Compassion

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#### **Abstract**

The COVID-19 pandemic has radically transformed people's lives by having significant and pervasive implications on their psychological well-being. Considered as a traumatic event, this pandemic has indeed triggered a mental health outburst, associated with a significant increase in the levels of psychological maladjustment, shame, and fear of receiving compassion from others. Besides the emergence of increased mental health difficulties during this global health emergency, loss and grief processes have also received special attention due to their new sudden and unexpected nature. Additionally, the strict health security measures implemented to slow the spread of the virus have profoundly changed the way people grieve. In this sense, the present study aimed at examining the mediator role of fear of receiving compassion from others and self-compassion on the association between shame and psychological maladjustment, and between shame and the traumatic impact of the COVID-19 pandemic, in a sample of 240 Portuguese adult participants. This study also sought out to explore the association between psychological maladjustment, traumatic impact of the COVID-19 pandemic and complicated grief, in a sample of 44 participants (part of the total sample) who had lost a significant other during the pandemic. The overall sample completed an online survey encompassing self-report measures assessing shame, psychological maladjustment, traumatic impact of COVID-19 pandemic, fear of receiving compassion from others and self-compassion. The grief subsample also completed self-report questionnaires measuring psychological maladjustment, traumatic impact of COVID-19 pandemic and complicated grief. The results revealed that self-compassion mediated the relationship between shame, in the context of the COVID-19 pandemic, and psychological maladjustment, and that fear of receiving compassion from others was a mediator of the relationship between shame and the traumatic impact of the COVID-19 pandemic. In addition, results from the grief sample showed that the traumatic impact of COVID-19 was a significant predictor of complicated grief. These findings may contribute to inform and adapt psychological interventions in the context of this novel pandemic, especially Compassion focused interventions. Considering the methodological limitations of this study, future research should seek to replicate these findings with a larger sample and using a longitudinal design.

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#### Introduction

In December of 2019, the COVID-19 virus was discovered in Wuhan, China. A global pandemic has since been declared. Billions of people have been affected (Chatterjee et al., 2021; Chee et al., 2022). In this sense, different governments established an immediate response to this global health crisis, imposing strict health measures to prevent the breakdown of healthcare systems and to limit the spread of this virus (Henssler et al., 2020). These measures included social isolation and a prohibition on long-distance travel (Boyraz et al., 2020; Chee et al., 2022; Henssler et al., 2020). Additionally, during this time, there have been reports of increased mental health challenges (Chatterjee et al., 2021; Chee et al., 2022; Kunzler et al., 2021). Issues regarding death, dying, and bereavement have also been considered a particularly relevant concern on these reports (Lee & Neimeyer, 2020; Neimeyer et al., 2022).

### The impact of COVID-19 pandemic in people's lives: The new burden in mental health

There has been a significant impact on mental health caused by the COVID-19 pandemic, particularly for those who had prior mental health problems and those who have been infected by COVID and had to, therefore, be quarantined, and endure emotional distress alongside physical discomfort in separation of their loved ones (Henssler et al., 2020; Kunzler et al., 2021; Neelam, et al., 2021; Onyeaka et al., 2021; Robinson et al., 2022; Zhao et al., 2021).

Since this pandemic implied death or serious physical harm and restricted access to essential services, such as counseling and psychological support, this health emergency seems to have entailed a prolonged state of alert followed by a wide range of psychological difficulties, thus resulting in psychological distress, unhelpful coping behaviors, and non-conformance with public health measures (Henssler et al., 2020; Kunzler et al., 2021; Neelam, et al., 2021; Onyeaka et al., 2021; Robinson et al., 2022). In line with this, a considerable amount of research is reporting an exponential rise in several psychological disorders, particularly during the lockdown period, such as depression (Deng et al., 2020; Henssler et al., 2020; Kunzler et al., 2021), anxiety (Deng et al., 2020; Henssler et al., 2021), and sleep-related disorders (Deng et al., 2020; Zhao et al., 2021), as well as obsessive-compulsive and panic-related disorders (Herţa et al., 2021; Henssler et al., 2020; Kunzler et al., 2021; Matos et al.,

2021b), and, most notably, suicidal ideation (Pinto et al., 2020; Lin et al., 2022; Shobhana & Raviraj, 2020). Furthermore, due to its unexpected nature and the perceived threat to public health, this relatively new pandemic was recognized as a traumatic event with profound consequences for people's daily lives. Overall, this pandemic has therefore contributed to an exponential rise in psychological maladjustment, and to an overwhelming need and demand for mental health support (Bridgland, et al., 2021; Noronha et al., 2021; Onyeaka et al., 2021).

#### **Shame and Mental Health**

Numerous authors define shame as a particularly intense and frequently incapacitating emotion that typically includes negative evaluation and/or self-evaluation characterized by feelings of inferiority, defectiveness, powerlessness, uselessness, isolation, alienation, and self-consciousness, as well as the desire to disappear, hide, or escape from shame-prone situations (Cândea & Szentai-Tăta, 2018; Ferreira et al., 2020; Gilbert, 1998, 2003, 2007; Matos & Pinto-Gouveia, 2010; Matos et al., 2012).

According to Gilbert (1998, 2000 2003, 2007), shame, as an evolutionary emotion, can be conceptualized as a damage limitation strategy to protect the self from rejection, which is intimately related to one's place and rank in the social hierarchy. Its primary function is to alert the individual to the possibility of tarnishing their reputation and, consequently, compromise their social rank and relationships. As a painful emotion, shame involves more internal, global, and stable attributions, where the entire self is scrutinized and negatively evaluated (Cândea & Szentagotai-Tăta, 2018; Ferreira et al., 2020; Gilbert 1998, 2000, 2003, 2007; Matos & Pinto-Gouveia, 2010; Matos et al., 2012).

In fact, several authors state that shame has two focal dimensions that involve distinct attentional, monitoring, and processing systems: external shame and internal shame (Cândea & Szentagotai-Tăta, 2018; Ferreira et al., 2020; Gilbert 1998, 2000, 2003, 2007; Matos & Pinto-Gouveia, 2010; Matos et al., 2012). External shame is defined by the perception of negative appraisals of the self by others (i.e., an individual's perception of themselves as viewed and judged by others) (Cândea & Szentagotai-Tăta, 2018; Ferreira et al., 2020; Gilbert 1998, 2000, 2003, 2007; Matos & Pinto-Gouveia, 2010; Matos et al., 2012). The internal dimension of shame is characterized by self-focused negative evaluations (i.e., a self-perceived and judged experience) that can be interpreted as an internalizing defensive response to the external

dimension of shame (Cândea & Szentagotai-Tăta, 2018; Ferreira et al., 2020; Gilbert 1998, 2000, 2003, 2007; Matos & Pinto-Gouveia, 2010; Matos et al., 2012). These two dimensions often reinforce each other, since the recognition by the individual that their social attractiveness has diminished can lead to more severe self-devaluations and self-blame, which in turn can increase the awareness of their self-depreciation (Cândea & Szentagotai-Tăta, 2018; Ferreira et al., 2020; Gilbert 1998, 2000, 2003, 2007; Matos & Pinto-Gouveia, 2010; Matos et al., 2012). This depreciation is associated with the impression that others hold the same negative view that the individual has of themselves, which may consequently lead to the adoption of social exclusion behaviors, like social withdraw (Cândea & Szentagotai-Tăta, 2018; Ferreira et al., 2020; Gilbert 1998, 2000, 2003, 2007; Matos & Pinto-Gouveia, 2010; Matos et al., 2012).

The scientific literature has linked shame and its two focal dimensions to psychological maladjustment, namely to a number of psychopathology symptoms and disorders, including social anxiety disorder (Cândea & Szentagotai-Tăta, 2018; Gilbert, 2000; Matos & Pinto-Gouveia, 2010), eating disorders (Skarderud, 2007; Oliveira et al., 2018) depression (Cândea & Szentagotai-Tăta, 2018; Cheung et al., 2004; Gilbert, 2000), suicidal and aggressive behaviors (Cândea & Szentagotai-Tăta, 2018; Cavalera, 2020), posttraumatic stress disorders (Cândea & Szentagotai-Tăta, 2018; Lee et al., 2001; Matos et al., 2012; Matos & Pinto-Gouveia, 2010) and fear of receiving compassion from others (Coelho et al., 2021).

#### Compassion

According to Gilbert (2020), compassion can be defined in a variety of ways, but most notably as a prosocial motivation that evolved from mammalian caregiving systems, which include a variety of physiological and emotion-regulating systems oriented to recognizing and addressing the needs of dependent children. Furthermore, it is also characterized as sensitivity to suffering in oneself and others, coupled with a strong desire to alleviate it (Gilbert, 2020).

Compassion, as a social mentality that operates in a dynamic intra and interpersonal process, that unfolds in a social interaction context, endeavors three dimensions that act as "flows": the capacity to feel or experience compassion for others; the capacity to feel or experience compassion from others; and the capacity to give or experience compassion towards ourselves (Gilbert, 2020). Each of these three dimensions are considered, by the scientific literature, as protective factors against

psychological distress, and are specifically targeted in compassion-focused therapy (Gilbert, 2009). Moreover, people can also develop fear of compassion for oneself, for others and from receiving compassion from others (Gilbert et al., 2011; Matos et al., 2011; Matos et al., 2021a; Kirby et al., 2019). According to Gilbert et al. (2011) and Kirby et al. (2019), these fears of compassion (towards oneself, others, and of receiving compassion from others) are associated with higher levels of self-criticism (Gilbert et al., 2011; Matos et al., 2011; Kirby et al., 2019), anxiety (Gilbert et al., 2011; Matos et al., 2011; Kirby et al., 2019), depression (Gilbert et al., 2011; Matos et al., 2011; Kirby et al., 2019), shame (Coelho et al., 2021; Kirby et al., 2019), stress (Gilbert et al., 2011; Matos et al., 2021a; Kirby et al., 2019).

In this sense, research has often highlighted the importance and clinical significance of self-compassion as a protective factor (Neff, 2003a, 2003b) in mental health disorders with empirical evidence suggesting a positive association between this compassion flow and higher levels of psychological and neurophysiologic well-being (Craig et al., 2020; Gilbert, 2020; Matos et al., 2021b; Neff, 2003a, 2003b; Kirby, 2017), resilience and prosocial behavior (Matos et al., 2021a, 2021b; Matos et al., 2022). Research also suggests a negative association between self-compassion and depression (Craig et al., 2020; Matos et al., 2022; Kirby, 2017; Neff, 2003a, 2003b), anxiety (Craig et al., 2020; Kirby, 2017; Neff, 2003a, 2003b), shame (Craig et al., 2020; Gilbert, 2020) and posttraumatic stress disorder (Craig et al., 2020; Matos et al., 2021b; Matos et al., 2022; Kirby, 2017: Kirby et al., 2019).

Specifically, regarding the COVID-19 pandemic, compassion was found to be a protective factor regarding the negative effects of this new pandemic on mental health, while fear of receiving compassion from others amplified these effects (Matos et al., 2021a, Matos et al., 2022). Additionally, individuals with fear of receiving compassion from others may have difficulty self-regulating threat-based emotions or restoring feelings of safety and connectedness to others, making them more susceptible to psychological distress and social disconnection, particularly when faced with adverse events, like a global pandemic (Matos et al., 2021a).

#### The aftermath effect of COVID-19 in the processes of Loss and Grief

Grief is a natural and highly personal response to any real, perceived, or anticipated loss situation, and not just the death of a loved one. It typically follows a pattern characterized by ups and downs, where grief responses can be more or less intense (Doka, 2022; Kessler, 2019). Holidays, anniversaries, and other significant days are some examples of these more intense periods of grief. Nonetheless, other periods from which discernible triggers are absent, may also be associated with more intense grief responses (Doka, 2022; Kessler, 2019). In this sense, losing a loved one can be a very powerful physical and/or emotional experience that is normally accompanied by a wide range of emotional, behavioral, cognitive, and physiologic symptoms, such as anguish, sorrow, social withdrawal, and disturbed sleep and personal sense of security (Doka, 2022; Kessler, 2019).

In fact, with COVID-19 pandemic the world has faced many challenges, namely in the perception of death, the process of dying, and the rituals used to mark the death of our loved ones (Corona et al., 2021; Doka, 2022; Hameed et al., 2022; Neimeyer et al., 2022). Besides, the pandemic has also resulted in actual increases in sudden deaths around the world, as well as secondary losses of financial, social, and personal security (Corona et al., 2021; Doka, 2022; Hameed et al., 2022; Lee & Neimeyer, 2020; Neimeyer et al., 2022; Vara & Thimm, 2020). Pandemic deaths take center stage and overshadow other types of losses due to their sudden and unpredictable nature, increasing persistent and pervasive grief (Chee et al., 2022; Doka, 2022; Eisma & Tamminga, 2020; Hameed et al., 2022; Lee & Neimeyer, 2020; Neimeyer et al., 2022).

The literature identifies prolonged/pervasive grief as a severe reaction to the death of a loved one, accompanied by significant separation distress and preoccupation with the loss to such a degree that one experiences, for at least one year after the death, significant impairment in social, familial, or occupational functioning, that exist on a continuum ranging from mild, limited and transitory to severe, pervasive, and disabling (Doka, 2022; Eisma & Tamminga, 2020; Lee & Neimeyer, 2020; Neimeyer & Lee, 2021; Neimeyer, 2022). Several factors can aggravate grief. According to previous research, the main risk factors for complicated grief as a result of the COVID-19 pandemic are social isolation, economic disruption, government-implemented strict public health measures (that profoundly restricted funeral rituals), the traumatic and multifactorial nature of the loss; and an absence of organizational and informational

support in the care center where the death occurred (Neimeyer & Lee, 2021). These factors are also accompanied by marked difficulties in making sense of the loss, separation distress, functional impairment and a sense of purposelessness (Bertuccio & Runion, 2020; Corona et al., 2021; Neimeyer et al., 2021; Neimeyer, et al., 2022; Vara & Thimm, 2020). Thus, according to Bertuccio and Runion (2020), it is important to highlight that these grief and loss experiences in this particular context were frequently linked with anxiety and depression symptomology, higher levels of stress, disturbed sleep and posttraumatic stress disorder, particularly during the lockdown period, due to the uncertainty, threat perceptions, and feelings of ineffectiveness. Suicidal ideation has also been identified as a primary result of the emergence of these responses in the context of the pandemic, particularly in complicated grief survivors (Bertuccio & Runion, 2020; Lin et al., 2022; Pinto et al., 2020; Vara & Thimm, 2020).

#### **Objectives**

The COVID-19 pandemic has had a global negative impact with unprecedented consequences on mental health and grief processes, due to the implementation of strict health measures around the world, especially social isolation (Matos et al., 2021b). In this pandemic context, a further understanding of the relationship between variables that might affect the pandemic traumatic impact on mental health and bereavement is relevant to the adaptation of psychological interventions (Craig et al., 2020; Kirby, 2017). Thus, taken together the buffering effect of self-compassion in the relationship between perceived risk of the pandemic and psychological maladjustment (Matos et al., 2021a, 2021b), the conceptualization of fears of compassion as a specific form of social disconnection that arises during adverse experiences, such as the COVID-19 pandemic (Matos et al., 2021a, 2021b), and the greater grief severity when COVID-19 is involved in the death, an indicator of psychological maladjustment (Lee & Neimeyer, 2020), the present study had three main aims. First, we intended to better understand the potential mediating effect of fear of receiving compassion from others and self-compassion on the relationship between shame and psychological maladjustment in a sample of Portuguese adult participants. It was hypothesized that fear of receiving compassion from others and self-compassion would be mediators of the relationship between shame and psychological maladjustment (H1). Second, we sought out to investigate the mediating effect of fear of receiving compassion from others and self-compassion on the relationship between shame and the traumatic impact of the COVID-19 pandemic,

in the same sample. It was hypothesized that fear of receiving compassion from others and self-compassion would mediate the relationship between shame and traumatic impact of COVID-19 pandemic (H2). Finally, we aimed to examine the relationship between psychological maladjustment, traumatic impact of the COVID-19 pandemic and complicated grief, in a subsample of participants who had lost a loved one over the pandemic period. It was expected that psychological maladjustment and traumatic impact of COVID-19 pandemic would predict complicated grief (H3).

#### **Methods**

#### **Participants**

To accomplish the objectives set forth in this cross-sectional study, a Portuguese sample was recruited, yielding a total sample of 240 participants. It should be noted that the study considered two samples: one total sample that included all 240 participants, and another sample composed of only the 44 participants who had lost a loved one in the previous twelve to eighteen months (regardless of whether the death is related to COVID-19).

#### **Total sample**

The overall sample included 240 individuals, from which 82.9 % (N = 199) were women. The mean age of the sample was 34.19 years old (SD = 13.22). In terms of gender differences, there were statistically significant differences in age (t (238) =-4.25, p > .05) but not in years of education (t (238) =.45, p > .05) or socioeconomic status ( $\chi 2$  (2.240) = 1.09, p > .05). Descriptive analysis regarding gender, academic education, socioeconomic level, place of residence and the presence of psychological support, are presented in Table 1 (cf. Appendix).

#### **Grief Sample**

The participants who had lost a relative or a loved one in the past 12 to 18 months, (N = 44) represented 18.3 % of the total sample, with 38 (86,4%) female individuals. The mean age of the sample was 32.41 years old (SD = 12.03). Other descriptive analysis regarding socio-demographic characteristics and information regarding the deceased person is presented in Table 1. (cf. Appendix).

#### Measures

#### Demographic questionnaire

A demographic questionnaire was designed to examine the research participants' social demographic characteristics (e.g., age, gender, place of residence, years of education completed), as well as if they were receiving therapy, counseling, or other types of psychological support. Moreover, this questionnaire also included specific questions about COVID-19 and whether the participants had lost a relative in the past 12 to 18 months, whose death was related or unrelated to the COVID-19 pandemic.

#### Self-report measures

#### External and Internal Shame Scale (EISS/EVEI; Ferreira, et al., 2020).

The External and Internal Shame Scale (EISS) is an eight-item self-report scale designed to assess the disposition to experience shame, subdivided into two factors, internal shame, and external shame (each one assessed by 4 items, based on four core domains: Inferiority/Inadequacy, Exclusion, Emptiness and Criticism. Higher scores represent higher levels of shame feelings (Ferreira et al., 2020). Participants answered each item on a 5-point Likert scale (0 = "Never", and 4 = "Always"), according to what best represents their experience (Ferreira et al., 2020). In terms of psychometric properties, EISS demonstrated good internal consistency with Cronbach's alpha values of .80 for the external shame subscale, .82 for the internal shame subscale and a .89 for its overall score (Ferreira et al., 2020). Furthermore, this scale has demonstrated good convergent, divergent, and concurrent validity (Ferreira et al., 2020).

In this study, only the total score of this scale was used, having resented a Cronbach's alpha value of .90.

### The Compassionate Engagement and Action Scales (CEAS; Gilbert et al., 2017).

The Compassionate Engagement and Action Scales (CEAS) is a 39-item self-report instrument that assesses aptitudes that enhance moving towards and engaging in suffering (compassion engagement) and aptitudes that facilitate actions to minimize and prevent suffering (compassionate actions) by using three different compassion orientations: compassion for others, compassion from others, and compassion for oneself (Gilbert et al., 2017). Each scale is composed of 8 items that intend to reflect

specific compassion engagement competencies, as well as 5 items that intend to reflect specific compassionate actions (Gilbert et al., 2017). This scale uses a 10-point Likert response scale (1 = "Never" to 10 = "Always") (Gilbert et al., 2017). The higher the score, the greater one's compassion for oneself and others and one's ability to receive compassion from others (Gilbert et al., 2017). In terms of psychometric properties, the original version of CEAS, which included validation for American, British, and Portuguese populations, showed good internal consistency (ranging from .67 to .94) and good temporal stability (ranging from .59 to .75) (Gilbert et al., 2017).

In this study, only the self-compassion scale was used, with a Cronbach's alpha value of 71.

### Fears of Compassion Scales (FCS/EMC; Gilbert et al., 2011; Portuguese version by Matos et al., 2011).

The Fears of Compassion Scales (FCS) is a three-scale self-report questionnaire that assesses fears associated with: 1) expressing compassion for others; 2) receiving compassion from others; and 3) compassion for oneself (Gilbert et al., 2011; Matos et al., 2011). The scale of fear of expressing compassion for others, in the original study, is composed of 10 items, but only 9 compose the Portuguese version (Gilbert et al., 2011; Matos et al., 2011). The scale of fear of receiving compassion for others includes 13 items and the scale of fear of compassion towards oneself includes 15 items, both in the original and Portuguese versions (Gilbert et al., 2011; Matos et al., 2011). Participants are asked to rate, on a 5-point Likert scale (0 = "Don't agree at all" and 4 = "Completely agree"), the extent to which they agreed with each item's statement (Gilbert et al., 2011; Matos et al., 2011). In terms of the psychometric properties, the Cronbach's alpha values for each subscale in the original version varied between .78 and .87 (Gilbert et al., 2011). In the Portuguese version, these values varied between .88 and .94 (Matos et al., 2011). Furthermore, the FCS has also shown good convergent and divergent validity.

In this study, only the fear of receiving compassion from others subscale was used; the Cronbach's alpha value obtained was .91.

### Brief Adjustment Scale-6 (BASE-6; Cruz et al, 2020; Translation and Adaptation for Portuguese Population by Matos et al., 2021).

The Brief Adjustment Scale-6 (BASE-6) is a 6-item self-report scale designed to be a brief and valid measure of general psychological adjustment. The six items that compose the scale are derived from the three aspects of psychological adjustment (symptom distress, interpersonal problems, and social role functioning) assessed by the Outcome Questionnaire 45.2 (OQ-45.2), which was the basis for the development of BASE-6 (Cruz et al., 2020). Participants are asked to rate how they have been feeling during the current week on a 7-point Likert scale (1 = "Not at all", to 7 = "Extremely") (Cruz et al., 2020). The scale's total score is calculated by summing the responses to all six items. The higher the total score, the poorer the general psychological adjustment (Cruz et al., 2020).

In terms of the original version's psychometric properties, BASE-6 has shown strong internal consistency, with Cronbach's alpha values ranging from .87 to .93 in three different samples, as well as good test-retest reliability (with an intraclass correlation of .77 across 1 week) (Cruz et al., 2020).

In this study, the Cronbach's alpha value for the total scale was .92.

### Impact of Event Scale-Revised (IES-R; Weiss & Marmar, 1997; Portuguese version by Matos et al., 2011; Adaptation COVID-19: Matos, 2020).

The Impact of Event Scale-Revised (IES-R) is a review by Weiss and Marmar (1997) of Horowitz's original 15-item scale. It consists of 22 items that are further subdivided into three subscales: intrusion symptoms (composed of eight items), avoidance symptoms (composed of eight items), and hyperactivation symptoms (composed of six items), which measure the three main characteristics of the traumatic experience considered (Matos et al., 2011; Weiss & Marmar, 1997). The IES-R evaluates psychological distress, specifically post-traumatic stress symptoms, as a result of a specific life event (Matos et al., 2011; Weiss & Marmar, 1997). Participants were asked to rate how distressed they felt by the difficulties concerning their specific stressful life event in the previous seven days on a 5-point Likert scale (ranging from 0 = "Not at all" to 4 = "Extremely") (Matos et al., 2011; Weiss & Marmar, 1997). In terms of the psychometric properties, Cronbach's alpha values of the original version of IES-R ranged between .79 and .92. Additionally, the scale demonstrated a strong

convergent and divergent validity (Weiss & Marmar, 1997). For the Portuguese version of IES-R, revealed a single-factor structure with a Cronbach's alpha value of .96 (Matos et al., 2011).

In this study, an adaption was made to the Portuguese version of the original questionnaire to specifically assess psychological distress, particularly as a result of the COVID-19 pandemic. Only the total score of the scale was used, which obtained a Cronbach's alpha value of .97.

### Pandemic Grief Scale (PGS; Lee & Neimeyer, 2020; Translation and Adaptation for Portuguese Population by Matos et al., 2021).

The Pandemic Grief Scale (PGS) is a brief mental health screening tool, composed of 5 items, with the main goal of assessing the presence of probable cases of dysfunctional grief in people who have lost a relative during the pandemic. On a 4-point Likert scale, participants were asked to assess the frequency in which they experienced each grief symptom (0 = not at all; 3 = almost every day). A PGS total score of  $\geq 7$  indicates the presence of a dysfunctional grief process related to COVID-19. In terms of the psychometric properties of PGS, for original version, the authors reported a Cronbach's alpha vale of .86 and a high factorial and construct validity, demonstrated by significant correlations with suicidal ideation and substance use coping (Lee & Neimeyer, 2020). In this study, the Cronbach's alpha value obtained was .78.

#### **Procedures**

The current study is part of a larger research project investigating the impact of COVID-19 on people's lives and the protective role of compassion in the process of grief and loss in the pandemic context. All ethical requirements were followed, and the research protocol was approved by the Faculty of Psychology and Educational Sciences Ethical Committee, with the approval number CEDI 22/02/2021. This study's data was collected between October 2021 and March of 2022, entirely online, through social media platforms, university mailing lists, and personal contacts of the research team members, using the snowball sampling method. Before agreeing to, participants were informed about the study's aims, confidentiality and anonymity, and, upon agreement, provided their informed consent. Participants were then asked to complete a sociodemographic questionnaire as well as the self-report questionnaires mentioned above. The average filling time of the research protocol was approximately 25 minutes.

#### **Data Analysis**

SPSS (Statistical Package for the Social Sciences, version 25; Armonk, NY: IBM Corp.) was used to conduct statistical analyses. To conduct the mediational study, PROCESS macro for SPSS (version 4.1; Hayes, 2022) was used.

To ensure that the distribution of each variable was normal, skewness and kurtosis were examined, considering values ranging from -2 to 2 as representative of normal distributions (George & Mallery, 2010). Furthermore, an outlier inspection was conducted, by steam-and-leaf diagrams.

Cronbach's coefficients were used to assess internal consistency for each scale. According to Pestana and Gageiro (2008), Cronbach's alpha values are considered inadmissible when they fall below .69, acceptable, between .70 and .79, high, between .80 and .89 and excellent, between .90 and 1. These criteria were used to evaluate the internal consistency of all instruments. Descriptive statistics were performed to examine frequencies, means and standard deviations of the sociodemographic and study variables.

With the purpose of assessing gender differences in age, years of education, and socioeconomical status, chi-square and independent sample *t*-test analyses were performed. Additionally, general linear model ANOVA was used to explore gender differences across relevant study variables (i.e., shame, fear of receiving compassion from others, self-compassion, psychological maladjustment, and traumatic impact of COVID-19 pandemic). According to Cohen's criteria (1988), a partial eta squared value of .01 or less was considered small, a value of .07 or more was considered medium, and a value of .14 or more was considered high.

Based on the proposed hypotheses, Pearson correlation coefficients were calculated for the total and grief samples to examine the relationships between study variables. A correlation coefficient value of less than .20 indicated a very low association, between .21 and .29 a low association, between .30 and .69 a moderate association, between .70 and .89 a high association, and between .90 and 1 an excellent association (Pestana & Gageiro, 2008).

To test the mediator effect of fear of receiving compassion from others and self-compassion on the association between shame and psychological maladjustment in the context of the COVID-19 pandemic, a first parallel mediation model was estimated using PROCESS (model 4 in Hayes, 2018; Fig. 1). In this model, shame was used as an

independent variable, psychological maladjustment as a dependent variable, and fear of receiving compassion from others and self-compassion as mediators. Additionally, a second model of parallel mediation tested the mediator effect of fear of receiving compassion from others and self-compassion on the association between shame and the traumatic impact of the COVID-19 pandemic (model 4 in Hayes, 2018; Fig. 2). Similarly, to the first model, shame was used as an independent variable, traumatic impact of the COVID-19 pandemic as a dependent variable, and fear of receiving compassion from others and self-compassion as mediators. The indirect effects of both models were assessed using a bootstrapping procedure with 10,000 resamples, yielding 95 percent bias-corrected and enhanced confidence intervals. These effects were considered significant if zero was not included within the lower and upper bounds of the confidence intervals ( $p \le .05$ ).

Finally, to investigate the predictive effect of psychological maladjustment and traumatic impact of the COVID-19 pandemic on complicated grief, a simple multiple regression was also performed, based solely on the grief sample.

#### Figure 1

The first proposed parallel mediation conceptual diagram, testing the mediator effect of fear of receiving compassion from others and self-compassion on the relationship between shame and psychological maladjustment in the context of COVID-19 pandemic.



Figure 2

The second proposed parallel mediation conceptual diagram, testing the mediatior effect of fear of receiving compassion from others and self-compassion on the relationship between shame and traumatic impact of COVID-19 pandemic.



#### **Results**

The variables in the current study were subjected to preliminary analyses. Gender differences were found for some of the study variables; however, since the effect size was small, gender was not controlled in subsequent mediation analyses. Additionally, the distribution of both samples was normal, and no significant outliers were detected in the examined variables.

#### **Total Sample**

#### Correlation analyses

Table 2 presents bivariate correlations between shame, fear of receiving compassion from others, self-compassion, psychological maladjustment, and the traumatic impact of the COVID-19 pandemic for the entire sample. All variables were significantly and moderately associated. Self-compassion revealed a negative association with all other variables, while these other variables were positively associated with each other.

 Table 2

 Descriptive statistics and Bivariate correlations for study variables (N = 240)

Variable	M	SD	1	2	3	4	5
1. Shame	67.08	13.05					
2. Fear of Receiving							
Compassion from	14.77	10.23	.58***				
Others							
3. Self-Compassion	22.88	9.88	49***	32***			
4. Psychological	11.05	c 20	4 <del></del> ***	20***	27***		
Maladjustment	11.95	6.32	.45***	.32***	37***		
5. Traumatic Impact of							
COVID-19	1.00	.960	.42***	.41***	28***	.59***	
pandemic							

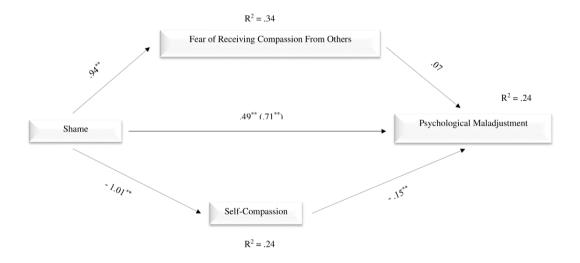
 $<sup>^{***}</sup>p < .001.$ 

The mediator effect of fear of receiving compassion from others and self-compassion on the relationship between shame and psychological maladjustment.

Process Model 4 (Hayes, 2018) was estimated to examine whether shame would predict psychological maladjustment through fear of receiving compassion from others and self-compassion (H1). As presented in Fig. 3, shame positively and significantly predicted fear of receiving compassion from others (b= .94, p < .001), explaining 34% of its variance. Moreover, shame was negatively and significantly associated with self-compassion (b = -.1.01, p < .001), explaining 24% of its variance. The significance of the indirect effect of shame on psychological maladjustment mediated by fear of receiving compassion from others was not confirmed. In this sense, only self-compassion was found to be a significant mediator in the relationship between shame and psychological maladjustment. The overall model explained 24% of psychological maladjustment, with shame demonstrating a direct effect and an indirect effect (through self-compassion) on psychological maladjustment.

Figure 3

First Parallel Mediation model diagram (Model 4).



*Note:* Ustandardized regression coeficients are represented by path values. The values enclosed by parenthesis represent the total effect of X on Y. \*  $p \le .05$ , \*\*  $p \le .001$ .

 Table 3

 Summary of the direct, indirect and total effects of the first parallel mediation model (Model 4)

Direct Effects	b	SE	t	p	95% CI
Shame — Psychological  Maladjustment.	.49	.12	4.17	< 0.01	.26/.73
Shame Fear of Receiving Compassion From Others	.98	.09	10.97	< 0.01	.77/1.11
Shame → Self-Compassion	1.00	.12	-8.60	< 0.01	-1.24/78
Fear of Receiving Compassion From Others  → Psychological Maladjustment	.07	.07	1.01	.29	06/.20
Self-Compassion → Psychological Maladjustment	15	.05	-2.97	< 0.05	24/05
Indirect Effects	b	SE	t	p	95% CI
Shame — Fear of Receiving Compassion From Others Psychological Maladjustment	.07	.07	-	-	07/.20
Shame — Self-Compassion  Psychological Maladjustment	.15	.06	-	-	.04/.26
Total Effect	b	SE	t	p	95% CI
Shame — Psychological Maladjustment	.71	.09	7.84	< 0.01	.53/.89

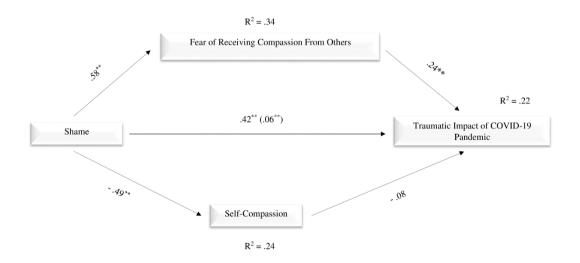
Note: b = ustandardized regression coefficient; SE = standard error; p = statistical significance; CI = confidence interval.

The mediator effect of fear of receiving compassion from others and self-compassion on the relationship between shame and the traumatic impact of COVID-19 pandemic

A second parallel mediation model was estimated to examine the mediating role of fear of receiving compassion from others and self-compassion on the relationship between shame and the traumatic impact of the COVID-19 pandemic (H2).

As previously seen, shame was positively and significantly associated with fear of receiving compassion from others (b = .58, p < .001), explaining 34% of its variance, and negatively and significantly associated with self-compassion (b = -.49, p < .001), explaining 24% of its variance. The significance of the indirect effect of shame on the traumatic impact of COVID-19 pandemic mediated by self-compassion was not confirmed. Only the indirect effect of shame on the traumatic impact of COVID-19 pandemic through fear of receiving compassion from others was found to be significant. Overall, shame showed a direct effect and an indirect effect (through fear of receiving compassion) on the traumatic impact of the COVID-19 pandemic, with the total model explaining 22% of its variance.

Figure 4
Second Parallel Mediation model diagram (Model 4).



*Note:* Ustandardized regression coefficients are represented by path values. The values enclosed by parenthesis represent the total effect of X on Y. \*  $p \le .05$ , \*\*  $p \le .001$ .

 Table 4

 Summary of the direct, indirect and total effects of the second parallel mediation model (Model 4)

Direct Effects	b	SE	t	p	95% CI
Shame — Traumatic Impact of COVID-19 pandemic.	.04	.01	3.21	< 0.05	.01/.06
Shame → Fear of Receiving Compassion From Others	.98	.09	10.97	< 0.01	.77/1.11
Shame → Self-Compassion.	1.01	.12	-8.60	< 0.01	-1.24/78
Self-Compassion → Traumatic Impact of COVID-19 pandemic	01	.01	-1.21	23	02/.00
Indirect Effects	b	SE	t	p	95% CI
Shame Fear of Receiving Compassion  From Others Traumatic Impact of  COVID-19 pandemic	.01	.01	-	-	00/.02
Shame → Self-Compassion → Traumatic Impact of COVID-19 pandemic	.01	.01	-	-	.01/.04
Total Effect	b	SE	t	p	95% CI
Shame Traumatic Impact of COVID-19 pandemic.	.06	.01	7.22	< 0.01	.05/.08

Note: b = ustandardized regression coefficient; SE = standard error; p = statistical significance; CI = confidence interval.

#### **Grief sample**

#### Correlation analyses

Table 5 presents bivariate correlations for the grief sample between psychological maladjustment, traumatic impact of COVID-19 pandemic and complicated grief. All variables were positively, moderately and significantly associated.

 Table 5

 Descriptive statistics and Bivariate correlations for study variables (N = 44) 

Variable	M	SD	1	2	3
Psychological     Maladjustment.	24.80	9.73			
2. Traumatic Impact of COVID-19 pandemic.	1.09	1.08	.54***		
3. Complicated Grief	1.84	2.60	.41***	.69***	

<sup>\*\*\*</sup>*p* < .001.

### The predictive effect of psychological maladjustment and the impact of COVID-19 pandemic on complicated grief

Table 6 presents a multiple regression analysis with psychological maladjustment and traumatic impact of the COVID-19 pandemic as predictors of complicated grief (H3). The results indicated that the regression model significantly predicted complicated grief (F (2,43) = 19.14, p < .001) and explained 48.3 % of its variance. Psychological maladjustment was not a significant predictor of complicated grief. Only the traumatic impact of the pandemic emerged as a significant predictor (cf., Table 6).

**Table 6**Summary of Multiple Regression Analysis for variables predicting Complicated Grief  $(N = 44)^a$ 

Variables	В	$R^2$
		.48
Psychological Maladjustment.	.05	
Traumatic Impact of COVID-19 pandemic.	.66*	

a \*p < .001.

#### **Discussion**

The present study had three main aims. Firstly, this study sought to investigate the effects of shame, fear of receiving compassion from others and self-compassion on psychological maladjustment, and secondly the effects of shame, fear of receiving compassion from others and self-compassion on traumatic impact of the COVID-19 pandemic, in a sample of 240 adult participants. Lastly, it aimed to explore the relationship between shame, psychological maladjustment, the traumatic impact of the COVID-19 pandemic and complicated grief in a subsample of 44 participants who had lost a significant other during the pandemic.

Regarding the first aim of this study, bivariate correlations between study variables have shown that shame was positively associated with fear of receiving compassion from others, psychological maladjustment, and the traumatic impact of the COVID-19 pandemic, but negatively associated with self-compassion. This suggests that individuals who experience higher levels of external and internal shame in the context of the pandemic tend to reveal greater resistances and fear of receiving compassion from others and to be less able to be compassionate towards themselves in difficult times. Indeed, shame, functioning as a defensive emotional response that allows the individual to monitor their social acceptance, has been typically related with a marked difficulty of receiving compassion from others (i.e., compassion is seen as unhelpful and receiving compassion from others as sign of weakness, vulnerability, and inferiority) (Coelho et al., 2021; Gilbert et al., 2020; Kirby et al., 2019; Matos et al., 2022; Steindl, et al. 2018). Furthermore, our results also suggests that individuals with higher levels of shame tend to present increased levels of psychological maladjustment and traumatic symptoms associated to the COVID-19 pandemic. Indeed, in line with

this result, shame, as a key emotion to one's identity, has been associated with traumatic stress reactions (Dorahy et al., 2017; Lee et al., 2001; Matos & Pinto-Gouveia, 2010; Matos et al., 2011), and higher levels of psychological maladjustment (Hamana & Levin-Dagan, 2021; Matos et al., 2017; Steindl et al., 2018).

Additionally, the results have also shown that fear of receiving compassion from others and lower levels of self-compassion were related to higher levels of psychological maladjustment and traumatic impact of COVID-19. This means that individuals who are more fearful of receiving compassion from others and less compassionate with themselves seem to experience greater psychological maladjustment and be more affected by the traumatic impact of the pandemic. These findings are in line with previous research that demonstrated a significant association between higher levels of fear of receiving compassion from others and between lower levels of self-compassion with psychological maladjustment in the context of traumatic events, such COVID-19 pandemic (Kirby et al., 2019; Matos et al., 2021a; Matos et al., 2022).

Considering the first parallel mediation model, self-compassion mediated the relationship between shame and psychological maladjustment, but fear of receiving compassion from others did not. This finding partially supports the first hypothesis (H1) and suggests that self-compassion was a negative, partial and significant mediator of the relationship between shame and psychological maladjustment. Indeed, self-compassion, by downregulating the threat system and activating the care-giving system, can be an important protective factor against negative mental health outcomes and promote greater levels of psychological and physical well-being (Craig et al., 2020; Hall et al., 2013, Kirby, 2017; Lau et al., 2020). Compassion can foster our ability to strive through the harshest moments of your lives with resilience and courage, namely in the context of the COVID-19 pandemic (Fino et al., 2022; Gillies, 2020; Lau et al., 2020; Matos et al., 2022). Consequently, some authors argue that there is an urgent need to develop resilience through second and third wave cognitive-behavioural interventions to overcome the challenges that the pandemic has brought, especially regarding mental health (Naeem et al., 2020).

Moreover, and contrary to our hypothesis (H1), fear of receiving compassion from others was not a mediatior of the relationship between shame and psychological maladjustment. This finding suggest that, when both mediators are considered, the effect of shame on psychological maladajustment is partially explained by the

incapacity of caring for one's suffering in a gentle and encouraging manner, and less by the unavailability of receiving compassion from others.

In relation to the second aim, the results also offer partial support to H2 and indicate that fear of receiving compassion from others was a mediator of the relationship between shame and traumatic impact of COVID-19 pandemic, while self-compassion was not. Based on this finding, it is possible to conclude that fear of receiving compassion from others partially mediates the effect of shame on the potentially traumatic impact of the COVID-19 pandemic, which is consistent with previous research that has reported an association between this particular flow of fears of compassion and traumatic symptoms (Craig et al., 2020; Matos et al., 2022; Kirby et al., 2019), higher levels of shame and other psychological dimensions (Best et al., 2021; Craig et al., 2020; Coelho et al., 2021; Kirby et al., 2019).

Contrarily to our hypothesis (H2), in this mediation model, self-compassion did not emerge as a significant mediator of the relationship between shame and the traumatic impact of the COVID-19 pandemic. This result is not consistent with previous literature that focused on the buffering effect of compassion in the traumatic impact of this health emergency (Hong et al., 2021; Lau et al., 2020; Matos et al., 2022). Despite this empirical evidence, previous research also suggests that COVID-19 is a multidetermined phenomenon (Chatterjee et al., 2021), and that the external experiences associated with COVID-19 seem to be more relevant in determining its potentially traumatic impact (Bridgeland et al., 2021; Herta et al., 2021). More specifically, considering that self-compassion seems to entail being in tune with one's internal experiences by adopting a more understanding and kind stance towards oneself in times of suffering (Neff, 2003a, 2003b), we hypothesize that, in the COVID-19 context, other variables regarding the external factors associated with the pandemic (namely, the absence of compassion from others due to fear of receiving it ) might be more important in explaining its traumatic impact, and that adopting compassionate attitudes towards oneself when addressing life stressful situations in this context, despite being an important self-regulation mechanism, might not be sufficient to explain the potentially negative effect of managing the daily vicissitudes of the pandemic. Nonetheless, given the importance of compassion for psychological well-being (Craig et al., 2020; Matos et al., 2022) and social connection (Craig et al., 2020; Kirby et al., 2019; Matos et al., 2021a, 2021b, Matos et al., 2022), and the importance of social support to positively face adversity (Kirby et al., 2019; Matos et al., 2021a, 2021b, Matos et al., 2022),

particularly in the context of COVID-19 pandemic (Matos et al., 2021a, 2021b, Matos et al., 2022), we suggest that the relationship between the other two compassion flows (i.e., self-compassion and compassion directed at others) and the traumatic impact of the COVID-19 should be futher examined.

With respect to the third hypothesis (H3), in the grief sample, the results revealed strong associations between psychological maladjustment, traumatic impact of the COVID-19 pandemic and complicated grief. Taking these associations into account, we tested a simple multiple regression model that showed that only traumatic impact of the COVID-19 pandemic predicted complicated grief. This finding is in line with previous literature that concluded that the COVID-19 pandemic has been associated with an increase in cases of complicated grief around the world due to the sudden and unexpected nature of the deaths and the profound changes in bereavement rituals (Corona et al., 2021; Doka, 2022; Eisma & Tamminga, 2020; Neimeyer et al., 2022). Notwithstanding, the scientific literature has demonstrated that psychological maladjustment has a positive association with complicated grief (Bertuccio & Runion, 2020; Lee & Neimeyer, 2020; Neimeyer et al., 2022). However, in this regression model, and contrarily to our hypothesis (H3), psychological maladjustment was not a significant predictor of complicated grief. These results seem to point to the fact that only traumatic impact of this pandemic has a relevant role in the development of complicated grief. Indeed, the COVID-19 pandemic has been associated with both unpredictable and traumatic losses and significant changes in the way people grieve with loss experiences (e.g., unemployment), particularly when facing the death of a loved one (Doka, 2022; Lee & Neimeyer, 2020; Neimeyer et al., 2022). As demonstrated by previous research (Bertuccio & Runion, 2020; Doka, 2022; Hameed et al., 2022; Neimeyer et al., 2022), the unfeasibility of performing death rituals and obtaining social support due to the strict health measures implemented to contain the propagation of the virus, seem to have heightened the experience of grief (i.e., more severe grief reactions, such as heighted intrusive thoughts about the deceased individual (Eisma & Tamminga, 2020; Wallace et al., 2020), negatively influencing the psychological well-being of people going through a grief process in this context and promoting an inability to make sense of the loss (Bertuccio & Runion, 2020; Hameed et al., 2022; Neimeyer et al., 2022). Future studies should explore in greater detail the relationship between complicated grief, in the context of COVID-19 pandemic, and psychological maladjustment.

The current findings need to be interpreted considering the potential limitations of the current study. First, the small sample size can influence the statistical power of the analyses performed and bias the results in both samples, particularly in the grief sample. Second, this study used a convenience sample with a high percentage of female participants. Third, a cross-sectional design was used to investigate the links between shame, psychological maladjustment, the traumatic impact of the COVID-19 pandemic, fear of receiving compassion from others, and self-compassion. Despite the relationships between these variables being supported by previous research, these findings can only provide empirical evidence of associations rather than causality.

In terms of future directions, and considering the previously presented limitations, future research should replicate these findings using a longitudinal design, in larger community samples and in clinical populations, and in more gender balanced samples. Future studies should also explore the potential relevance of additional variables, that have also been examined in the context of the pandemic literature, such as suicidal ideation (Pinto et al., 2020; Shobhana & Raviraj, 2020), self-harm (Cleare et al., 2019; Lin et al., 2022; Pinto et al., 2020; Shobhana & Raviraj, 2021; Young et al., 2012), self-criticism (Pinto et al., 2020; Sahoo et al., 2020; Shobhana & Raviraj, 2021; Young et al., 2012), and guilt (Lin et al., 2022; Pinto et al., 2020; Sahoo et al., 2020; Shobhana & Raviraj, 2021; Young et al., 2012), to better understand the role of shame (either external and internal on psychological maladajustment and on the traumatic impact of the COVID-19 pandemic. Focusing specifically on complicated grief, future studies should further explore the potential buffering effect of self-compassion and the other compassion flows on the relationship between complicated grief in the context of the COVID-19 pandemic and suicidal ideation. This is because previous research has shown that suicidal ideation is considered as one of the major risk factors for developing complicated grief in the context of the pandemic, especially in grieve survivors (Lin et al., 2022; Pinto et al., 2020; Shobhana & Raviraj, 2021; Vara & Thimm, 2020) and that experiencing compassion activates the soothing system and helps to regulate difficult emotions intimately related to grief and loss processes (Cleare et al., 2021; Harris, 2021; Vara & Thimm, 2020).

Lastly, and regarding the possible implications of the current findings, our results might inform the adaptation of psychological interventions that promote higher levels of psychological adjustment and well-being to better respond to the grief and loss challenges associated with this novel pandemic, especially compassion focused

interventions such as Compassion Focused Therapy (CFT), which aims to diminish resistances to compassion, cultivate the compassion flows work to reduce shame and self-criticism (Craig et al., 2020; Gilbert, 2020). Therefore, these findings seem to support the need for compassion focused interventions to be implemented in a more available and affordable way to the general public. This could potentially decrease shame, increase self-compassion, and decrease fear of receiving compassion from others, therefore having a positive impact on the reduction of psychological maladjustment and on the traumatic impact of the COVID-19 pandemic.

To sum up, the results of this study showed that self-compassion seems to mediate the relationship between shame and psychological maladjustment, and that fear of receiving compassion from others seems to mediate the relationship between shame and the traumatic impact of COVID-19 pandemic. Regarding the grief sample, this study suggests that the traumatic impact of the COVID-19 pandemic may predict complicated grief, over and above psychological maladjustment. Overall, these results support the need for interventions that promote self-compassion and reduce fear of receiving compassion from others. These interventions, however, need to be adapted to the context of the COVID-19 pandemic and its specific challenges in terms of mental health and grief, based on a detailed comprehension of the relationship between variables that might contribute to decrease psychological maladjustment and the traumatic impact of this pandemic.

## References

- Bertuccio, R. F., & Runion, M. C. (2020). Considering grief in mental health outcomes of COVID-19. *Psychological Trauma: Theory, Research, Practice, and Policy*, 12(S1), S87-S89. https://doi.org/10.1037/tra0000723.
- Best, T., Herring, L., Clarke, C., Kirby, J., & Gilbert, P. (2021). The experience of loneliness:

  The role of fears of compassion and social safeness. *Personality and Individual Differences*, 183, 111-161. https://doi.org/10.1016/j.paid.2021.111161.
- Boyraz, G., Legros, D. N., & Tigershtrom, A. (2020). COVID-19 and traumatic stress: The role of perceived vulnerability, COVID-19-related worries, and social isolation. *Journal of Anxiety Disorders*, 76, 102307. https://doi.org/10.1016/j.janxdis.2020.102307.
- Bridgland, V. M., Moeck, E. K., Green, D. M., Swain, T. L., Nayda, D., Matson, L. A., Hutchison, N. P., & Takarangi, M. K. (2021). Why the COVID-19 pandemic is a traumatic stressor. *PLoS ONE*, *16*(1). https://doi.org/10.1101/2020.09.22.307637.
- Cândea, D.-M., & Szentagotai-Tăta, A. (2018). Shame-proneness, guilt-proneness and anxiety symptoms: A meta-analysis. *Journal of Anxiety Disorders*, 58, 78–106. https://doi.org/10.1016/j.janxdis.2018.07.005.
- Cavalera, C. (2020). COVID-19 Psychological Implications: The Role of Shame and Guilt. *Frontiers in Psychology*, 11. https://doi.org/10.3389/fpsyg.2020.571828.
- Chatterjee, K., Dangi, A, Prakash, J., Srivastava, K., Chauhan, V., & Yadav, P. (2021). Coping with the aftermath of COVID: Industrial resurgence, mental health, and resilience. *Industrial Psychiatry Journal*, 30(1), 175. https://doi.org/10.4103/ipj.ipj 20 21.
- Chee, W. Y., Y. Wang, S. S., Y. Teo, W. Z., Fong, M., Lee, A., & Yong, W. C. (2022). Non-COVID-19 related dying and death during the pandemic. Panagiotis P (Eds.), In *Death*,

- Grief and Loss in the Context of COVID-19 (pp. 134-145). Routledge, Taylor & Francis Group.
- Cheung, M. S., Gilbert, P., & Irons, C. (2004). An exploration of shame, social rank and rumination in relation to depression. *Personality and Individual Diferences*, *36*(5), 1143-1153. https://doi.org/10.1016/S0191-8869(03)00206-X.
- Cleare, S., Gumley, A., & O'Connor, R. C. (2019). Self-compassion, self-forgiveness, suicidal ideation, and self-harm: A systematic review. *Clinical Psychology & Psychotherapy*, 26(5), 511-530. https://doi.org/10.1002/cpp.2372.
- Coelho, H.L., Trindade, I.A., Mendes, A.L. *et al.* (2021). The mediating role of shame and fear of compassion on the relationship between major life events and depressive symptoms. *Curr Psychol* 40, 4553–4562 (2021). https://doi.org/10.1007/s12144-019-00396-6.
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Hillsdale, NJ: Lawrence Earlbaum Associates.
- Corona, A. G., Chin, J., No, P., & Tom, J. (2021). The Virulence of Grief in the Pandemic:

  Bereavement Overload During COVID. *American Journal of Hospice and Palliative Medicine*®, 104990912110570. https://doi.org/10.1177/10499091211057094.
- Craig, C., Hiskey, S., & Spector, A. (2020). Compassion focused therapy: A systematic review of its effectiveness and acceptability in clinical populations. *Expert Review of Neurotherapeutics*, 20(4), 385-400. https://doi.org/10.1080/14737175.2020.1746184.
- Cruz, R. A., Peterson, A. P., Fagan, C., Black, W., & Cooper, L. (2020). Evaluation of the Brief Adjustment Scale–6 (BASE-6): A measure of general psychological adjustment for measurement-based care. *Psychological Services*, 17(3), 332-342. https://doi.org/10.1037/ser0000366.

- Deng, J., Zhou, F., Hou, W., Silver, Z., Wong, C. Y., Chang, O., Huang, E., & Zuo, Q. K. (2020).

  The prevalence of depression, anxiety, and sleep disturbunces in COVID-19 patients: a meta-analysis. *Ann, N.Y. Acad.* https://doi.org/10.1111/nyas,14506.
- Doka, K. J. (2022). Grief in the COVID-19 pandemic. In Panagiotis P (1° Ed), *Death, Grief and Loss in the Context of COVID-19*. (pp. 29-39). Routledge, Taylor & Francis Group.
- Dorahy M. J., Corry M., Black R., Matheson L., Coles H., Curran D., et al.. (2017). Shame, Dissociation, and Complex PTSD Symptoms in Traumatized Psychiatric and Control Groups: Direct and Indirect Associations With Relationship Distress. *J. Clin. Psych.* 73, 439–448. https://doi.org/10.1002/jclp.22339.
- Eisma, M. C., & Tamminga, A. (2020). Grief Before and During the COVID-19 Pandemic: Multiple Group Comparisons. *Journal of Pain and Symptom Management*, 60(6), E1-E4. https://doi.org/10.1016/j.jpainsymman.2020.10.004.
- Ferreira, C., Moura-Ramos, M., Matos, M., Galhardo, A. (2020). A new measure to assess external and internal shame: development, factor structure and psychometric properties of the External and Internal Shame Scale. *Current Psychology* 41, 1892–1901. https://doi.org/10.1007/s12144-020-00709-0.
- Fino, E., Mema, D., & Treska, V. (2022). COVID-19 fear, post-traumatic stress, growth, and the role of resilience. *Open Medicine*, *17*(1), 614-618. https://doi.org/10.1515/med-2022-0458.
- George, D., & Mallery, M. (2010). SPSS for Windows Step by Step: A Simple Guide and Reference, 17.0 update (10th ed.) Pearson.
- Gilbert, P. (1998). What is shame? Some core issues and controversies. In P. Gilbert & B. Andrews (Eds.), *Shame: Interpersonal behavior, psychopathology, and culture* (pp. 3–38). Oxford University Press.

- Gilbert, P. (2000). The relationship of shame, social anxiety and depression: The role of the evaluation of social rank. *Clinical Psychology & Psychotherapy*, 7(3), 174-189. https://doi.org/10.1002/1099-0879(200007)7:3<174::aid-cpp236>3.0.co;2-u.
- Gilbert, P. (2003). Evolution, Social Roles, and the Differences in Shame and Guilt. Social Research: An International Quarterly, 70(4), 1205-1230. https://doi.org/10.1353/sor.2003.0013.
- Gilbert, P. (2007). The evolution of shame as a marker for relationship security: A biopsychosocial approach. In J. L. Tracy, R. W. Robins, & J. P. Tangney (Eds.), *The self-conscious emotions: Theory and research* (pp. 283–309). Guilford Press.
- Gilbert, P. (2009). *The Compassionate mind. Coping with the challenge oof living*. London: Constable Robinson.
- Gilbert, P. (2020). Compassion: From its evolution to a psychotherapy. *Frontiers in Psychology*, 11. https://doi.org/10.3389/fpsyg.2020.586161.
- Gilbert, P., Catarino, F., Duarte, C., Matos, M., Kolts, R., Stubbs, J., Ceresatto, L., Duarte, J., Pinto-Gouveia, J., & Basran, J. (2017). The development of compassionate engagement and action scales for self and others. *Journal of Compassionate Health Care*, 4(1). https://doi.org/10.1186/s40639-017-0033-3.
- Gilbert, P., McEwan, K., Matos, M., & Rivis, A. (2011). Fears of compassion: Development of three self-report measures. *Psychology and Psychotherapy: Theory, Research and Practice*, 84, 239–255. https://doi.org/10.1348/147608310X526511.
- Gillies, A. (2020). Compassion, Resilience and Covid-19. *JR Coll Physicians Edinb*, 50(2), 105-106. https://doi.org/10.4997/JRCPE.2020.203.
- Hall, C. W., Row, K. A., Wuensch, K. L., & Godley, K. R. (2013). The Role of Self-Compassion in Physical and Psychological Well-Being. *The Journal of Psychology: Interdisciplinary* and Applied, 147(4), 311-323. https://doi.org/10.1080/00223980.2012.693138.

- Hamana, L., & Levin-Dagan, N. (2021). People who contracted COVID-19: the mediating role of shame and guilt in the link between threatening illness perception and mental health measures. *Anxiety, Stress, & Coping*. https://doi.org/10.1080/10615806.2021.1964073.
- Hameed, M. S., Foster, J., Finnerty, G., & Pentaris, P. (2022). Impact of COVID-19 on mental health and associated losses. Panagiotis P. (1° Ed.), In *Death, Grief and Loss in the Context of COVID-19* (pp. 160-177). Routledge, Taylor & Francis Group.
- Harris, D. (2021). Compassion-focused grief therapy. *British Journal of Guidance & Counselling*, 49(6), 780-790. https://doi.org/1080/030698.85.2021.1960948.
- Hayes, A. F. (2018). Introduction to mediation, moderation, and conditional process analysis: A regression-based approach (2° Ed.). Guilford Publications.
- Henssler, J., Stock, F., Van Bohemen, J., Walter, H., Heinz, A., & Brandt, L. (2020). Mental health effects of infection containment strategies: quarantine and isolation a systematic review and meta-analysis. *European Archives of Psychiatry and Clinical Neuroscience*, 271(2), 223-234. https://doi.org/10.1007/s00406-020-01196-x.
- Herţa, D., Miclea, B., Trifu, R., & Cozman, D. (2021). The psychological trauma of COVID-19 exposure. *Psihiatru.ro*, 2(65), 6. https://doi.org/10.26416/psih.65.2.2021.4971.
- Hong, S., Kim, H., & Park, M. K. (2021). Impact of COVID-19 on post-traumatic stress symptoms in the general population: An integrative review. *International Journal of Mental Health Nursing*, 30(4), 834-846. https://doi.org/10.1111/inm.12875.
- Kessler, D. (2019). Finding meaning: The Sixth Stage of Grief. Scribner.
- Kirby, J. N. (2017). Compassion interventions: The programmes, the evidence, and implications for research and practice. *Psychology and Psychotherapy: Theory, Research and Practice*, 90(3), 432-455. https://doi.org/10.1111/papt.12104.

- Kirby, J. N., Day, J., & Sagar, V. (2019). The 'Flow' of compassion: A meta-analysis of the fears of compassion scales and psychological functioning. *Clinical Psychology Review*, 70, 26-39. https://doi.org/10.1016/j.cpr.2019.03.001.
- Kunzler, A. M., Röthke, N., Günthner, L., Stoffers-Winterling, J., Tüscher, O., Coenen, M., Rehfuess, E., Schwarzer, G., Binder, H., Schmucker, C., Meerpohl, J. J., & Lieb, K. (2021). Mental burden and its risk and protective factors during the early phase of the SARS-Cov-2 pandemic: systematic review and meta-analyses. *Globalization and Health*, 17(1). https://doi.org/10.1186/s12992-021-00670-y.
- Lau, B. H., Chan, C. L., & Ng, S. (2020). Self-Compassion Buffers the Adverse Mental Health Impacts of COVID-19-Related Threats: Results From a Cross-Sectional Survey at the First Peak of Hong Kong's Outbreak. Frontiers in Psychiatry, 11. https://doi.org/10.3389/fpsyt.2020.585270.
- Lee, D. A., Scragg, P., & Turner, S. (2001). The role of shame and guilt in traumatic events: A clinical model of shame-based and guilt-based PTSD. *British Journal of Medical Psychology*, 74(4), 451-466. https://doi.org/10.1348/000711201161109.
- Lee, S. A., & Neimeyer, R. A. (2020). Pandemic Grief Scale: A screening tool for dysfunctional grief due to a COVID-19 loss. *Death Studies*, 46(1), 14-24. https://doi.org/10.1080/07481187.2020.1853885.
- Lin, C., Alimoradi, Z., Ehsani, N., Ohayon, M. M., Chen, S., Griffiths, M. D., & Pakpour, A. H. (2022). Suicidal ideation during the COVID-19 Pandemic among A Large-Scale Iranian sample: The Roles of Generalized Trust, Insomnia, and Fear of COVID-19. *Healthcare*, 10(1), 93. https://doi.org/10.3390/healthcare10010093.
- Matos, M., McEwan, K., Kanovský, M., Halamová, J. *et al.* (2021a). Fears of compassion magnify the harmful effects of threat of COVID-19 on mental health and social safeness

- across 21 countries. Clinical Psychology & Psychotherapy, 28(6), 1317-1333. https://doi.org/10.1002/cpp.2601.
- Matos, M., McEwan, K., Kanovsky, M., Halamová, J., & Steindl, S. R. et al. (2021b). The role of social connection on the experience of COVID-19 related post-traumatic growth and stress. *PLoS ONE*, *16*(12). https://doi.org/10.1371/journal.pone.0261384.
- Matos, M., McEwan, K., Kanovský, M. et al. (2022) Compassion Protects Mental Health and Social Safeness During the COVID-19 Pandemic Across 21 Countries. Mindfulness 13, 863–880 (2022). https://doi.org/10.1007/s12671-021-01822-2.
- Matos, M., Duarte, J., & Pinto-Gouveia, J. (2017). The Origins of Fears of Compassion: Shame and Lack of Safeness Memories, Fears of Compassion and Psychopathology. *The Journal of Psychology*, 151(8), 804-819. https://doi.org/10.1080/00223980.2017.1393380.
- Matos, M., & Pinto-Gouveia, J. (2010). Shame as a traumatic memory. *Clinical Psychology and Psychotherapy*, 17, 299-312. https://doi.org/10.1002/cpp.659.
- Matos, M., Pinto-Gouveia, J., & Duarte, C. (2012). Above and beyond emotional valence: The unique contribution of central and traumatic shame memories to psychopathology vulnerability. *Memory*, 20(5),

  461-477. https://doi.org/10.1080/09658211.2012.680962.
- Matos, M., Pinto-Gouveia, J. A., & Martins, S. (2011). The traumatic impact of shame experiences: study of the psychometric properties of the Portuguese version of the Impact of Event Scale-Revised (IES-R). *Psychologica*. https://doi.org/10.14195/1647-8606\_54\_16.
- Naeem, F., Irfan, M., & Javed, A. (2020). Coping with COVID-19: Urgent Need for Building Resilience Through Cognitive Behaviour Therapy. *Khyber Medical University Journal*. https://doi.org/10.35845/kmuj.2020.20194.

- Neelam, K., Duddu, V., Anyim, N., Neelam, J., & Lewis, S. (2021). Pandemics and pre-existing mental illness: A systematic review and meta-analysis. *Brain, Behavior, & Immunity Health*, *10*, 100177. https://doi.org/10.1016/j.bbih.2020.100177.
- Neff, K. D. (2003a). Self-Compassion: An Alternative Conceptualization of a Healthy Attitude

  Toward Oneself. *Self and Identity*, 2, 85–101. https://doi.org/
  10.1080/15298860390129863.
- Neff, K. D. (2003b). The Development and Validation of a Scale to Measure Self-Compassion. Self and Identity, 2, 223–250. https://doi.org/10.1080/15298860390209035.
- Neimeyer, R. A., & Lee, S. A. (2021). Circumstances of the death and associated risk factors for severity and impairment of COVID-19 grief. *Death Studies*, 46(1), 34-42. https://doi.org/10.1080/07481187.2021.1896459.
- Neimeyer, R. A., Milman, E., & Lee, S. A. (2022). Apocalypse now: COVID-19 and the crisis of meaning. Panagiotis P. (1° Ed.), In *Death, Grief and Loss in the Context of COVID-19* (pp. 40-59). Routledge, Taylor & Francis Group.
- Noronha, F. S., Pant, S., Yesodharan, R., Nayak, A. K., & Dsa, R. J. (2021). The Impact of COVID-19 Pandemic on the Developing Nations: Emerging Mental Health Challenges and Interventions. *Indian Journal of Community Health*, 23(3). https://doi.org/10.47203/UCH.2021.v33i03.002.
- Oliveira S., Pires C., Ferreira C. (2018). Does the recall of caregiver eating messages exacerbate the pathogenic impact of shame on eating and weight-related difficulties? *Eat Weight Disord*. 25, 471–480. https://doi.org/10.1007/s40519-018-0625-8.
- Onyeaka, H., Anumudu, C. K., Al-Sharify, Z. T., Egele-Godswill, E., & Mbaegbu, P. (2021).

  COVID-19 pandemic: A review of the global lockdown and its far-reaching effects. *Science Progress*, 104(2). https://doi.org/10.1177/00368504211019854.

- Pestana, M. H., & Gageiro, J. N. (2008). Análise de dados para Ciências Sociais: A complementaridade do SPSS. (5ª ed.). Edições Sílabo.
- Pinto, S., Soares, J., Silva, A., Curral, R., & Coelho, R. (2020). COVID-19 Suicide Survivors —

  A Hidden Grieving Population. Frontiers in

  Psychiatry, 11. https://doi.org/10.3389/fpsyt.2020.626807.
- Robinson, E., Sutin, A. R., Daly, M., & Jones, A. (2021). A systematic review and meta-analysis of longitudinal cohort studies comparing mental health before versus during the COVID-19 pandemic in 2020. *Journal of Affective Disorders* 296, 567-576. https://doi.org/10.1101/2021.03.04.21252921.
- Sahoo S., Mehra A., Suri V., Malhotra P., Yaddanapudi N., Puri G. D., et al. (2020). Lived experiences of the Corona Survivors (patients admitted in COVID wards): A narrative real-life documented summaries of internalized guilt, shame, stigma, anger. *Asian J. Psychiatr.* 53. https://doi.org/102187. 10.1016/j.ajp.2020.102187.
- Shobhana, S.S., Raviraj, K.G. (2020). Global trends of suicidal thought, suicidal ideation, and self-harm during COVID-19 pandemic: a systematic review. *Egypt J Forensic Sci* 12, 28 (2022). *12*. https://doi.org/10.1186/s41935-022-00286-2.
- Simões, M. R. (1994). Investigações no âmbito da aferição nacional do teste das Matrizes Progressivas de Raven. Dissertação de doutoramento não publicada. Universidade de Coimbra.
- Skarderud, F. (2007). Shame and pride in anorexia nervosa: A qualitative descriptive study. *European Eating Disorders Review*, 15(2), 81-97. https://doi.org/10.1002/erv.774.
- Steindl, S. R., Matos, M., & Creed, A. K. (2018). Early shame and safeness memories, and later depressive symptoms and safe affect: The mediating role of self-compassion. *Current Psychology*, 40(2), 761-771. https://doi.org/10.1007/s12144-018-9990-8

- Vara, H., & Thimm, J. C. (2020). Associations between self-compassion and complicated grief symptoms in bereaved individuals: An exploratory study. *Nordic Psychology*, 72(3), 235-247. https://doi.org/10.1080/19012276.2019.1684347.
- Wallace, C. L., Wladkowski, S. P., Gibson, A., White, P. (2020). Grief during the COVID-19 pandemic: Considerations for palliative care providers. *Journal of Pain and Symptom Management*, 60 (1), e70-e76. https://doi.org/10.1016/j.jpainsymman.2020.04.012.
- Weiss, D. S., & Marmar, C. R. (1997). The Impact of Event Scale—Revised. In J. P. Wilson &
  T. M. Keane (Eds.), Assessing psychological trauma and PTSD (pp. 399–411). The
  Guilford Press.
- Young, H. T., Iglewicz, A., Glorioso, D., Lanouette, N., Lanouette, S., Ilapakurti, M., & Zisook, S. (2012). Suicide bereavement and complicated grief. *Dialogues Clin Neurosci*, 14(2), 177-186. https://doi.org/10.31887/DCNS.2012.14.2/iyoung.
- Zhao X., Lan M., Li H., Yang J. (2021). Perceived stress and sleep quality among the non-diseased general public in China during the 2019 coronavirus disease: a moderated mediation model. *Sleep Med.* 77, 339-345. https://doi.org/10.1016/j.sleep.2020.05.021.

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## Appendix Sociodemographic Characteristics of Participants

 Table 1

 Sociodemographic Characteristics of Participants for Grief (N = 44) and Total Sample (N = 240).

Sample	Grief Sample		Total Sample	
	Grief Sam	pic	Total Sample	
	n	%	n	%
Gender				
Female	38	86,4	199	82,9
Male	6	13.6	41	17.1
Academic education				
Technical or Professional Course	1	2.3	5	2.1
High School Degree	14	31.8	61	25.4
Bachelor or Licentiate Degree	14	31.8	93	38.8
Master's Degree	12	27.3	57	23.8
Doctoral Degree	-	-	7	2.9
Other	2	4,5	11	4.6
Rather not to answer	1	2,3	6	2.5
Social economic level				
Low social economic level	-	-	22	9.2
Medium social economic level	35	79.5	165	68.8
High social economic level	9	20.5	53	22.1
Place of residence				

(NUT II)

North	10	22.7	61	25.4
Center	21	47.7	96	40.0
Lisbon	9	20,5	50	20.8
metropolitan area	,	20,3	30	20.0
Alentejo	-	-	7	2.9
Algarve Autonomous regions of Madeira and Azores	-	-	8 1	3.3 0.4
Rather not to answer	4	9.1	17	7.1
Psychological support				
Yes	9	20.5	49	20.4
No	34	77.3	190	79.2
Rather not to answer	1	2.3	1	0.4
Cause of death related with COVID-19				
Yes	10	22.7	-	-
No	28	63.6	-	-
Don't know	5	11.4	-	-
Rather not to answer	1	2.3	-	-
Relationship with the deceased person				
Closer familiar	30	68.2	-	-
Distant familiar	4	9.1	-	-
Friend	6	13.6	-	-
Acquaintance	1	2.3	-	-
Rather not to answer	3	6.6	-	-
Period of time associated with the death				
Until 6 months	13	29.5	-	-
Between 6 months and 1 year	17	38.6	-	-

Between 1 and 2 years	11	25.0	-	-
N/A	3	6.8	-	-
Rather not to answer	-	-	-	-
Psychological support due to grief and loss processes				
Yes	7	15.9	-	-
No	56	81.8	-	-
Rather not to answer	1	2.3	-	-

*Note*. Socioeconomic status was defined following the criteria defined by Simões (1994). Only the grief sample was asked questions about the death of a loved one.