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GRIEF, DEPRESSION, AND WELL-BEING: THE ROLE OF SOCIAL SUPPORT AND PSYCHOLOGICAL INFLEXIBILITY

A Thesis

Presented to the

Faculty of

California State University,

San Bernardino

In Partial Fulfillment

of the Requirements for the Degree

Master of Arts

in

Psychological Science

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by

Ashley Nicole Wicochea

August 2023

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ABSTRACT

Grief/bereavement is a normal emotional process that individuals experience upon the death of a loved one. Complicated grief or prolonged grief disorder results when grief becomes prolonged and associated with impairment in functioning (Howarth, 2011; Al-Gamal et al., 2018). Previous research has found a positive relationship between prolonged grief and depression. Moreover, research has found that the relationship between grief and depression was strongest under conditions of low peer support (Al-Gamal et al., 2018). Previous research on psychological inflexibility has found a positive relationship with grief and psychological distress, and a negative relationship with psychological well-being (Howell & Demuynck, 2021). Based upon the literature, we hypothesized that complicated grief would be directly related to psychological well-being and depression and that the strength of these relationships would be influenced by two moderators: psychological inflexibility and social support. Specifically, we presented a moderation model with the interaction of psychological inflexibility and social support moderating the complicated grief and psychological well-being/depression relationships. There is currently no research that examines the simultaneous influence of these moderators on the relationship between complicated grief and psychological well-being and depression. Participants were psychology undergraduate students who reported experiencing the death of loved one within the past 2 years, completed an informed consent, and a series of questionnaires that assessed the hypothesized concepts. Study hypotheses

were tested with correlational analyses, multiple regression and moderation analyses using SPSS PROCESS (Hayes, 2013). Results provided partial support for study hypotheses where the interaction of social support and psychological inflexibility moderated the prolonged grief and depression relationship. Findings are discussed in terms of practical guidance for clinicians when addressing complicated grief with clients.

Keywords: complicated grief, persistent complex bereavement disorder, psychological inflexibility, social support, psychological well-being, depression

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CHAPTER ONE:

INTRODUCTION

Grief, Depression, and Well-Being: The Role of Social Support and Psychological Inflexibility

Grief is a ubiquitous emotion experienced by many subsequent to the death of a loved one. When grief becomes prolonged or associated with distress or impairment in functioning, treatment may become necessary. This condition has been referred to as complicated grief (CG; Al-Gamal et al., 2018), prolonged grief disorder (PGD; Kustanti et al., 2021), persistent complex bereavement disorder in the appendix of the Diagnostic and Statistical Manual of Mental Disorders Fifth Edition (DSM-5; American Psychiatric Association (APA), 2013), and after considerable research recently designated as prolonged grief disorder in the trauma and stressor related disorders section in the DSM-5-TR (APA, 2022). In the DSM-5-TR, prolonged grief disorder (PGD) is described as an intense yearning or longing for the deceased accompanied by strong emotions of sorrow and emotional pain with a preoccupation with thoughts or memories of the deceased that has persisted for at least a one-year duration. (APA, 2022). In PGD, reported grief reactions occur most of the day, nearly every day for at least a month duration and is associated with clinically significant distress or impairment in social, occupational, or other important areas of functioning. Symptoms of DSM-5-TR PGD may include feeling as though part of oneself has died with the deceased, avoidance of reminders of the deceased, a strong sense

of disbelief that deceased has died, intense sorrow and emotional pain, difficulty moving on with life activities, loneliness and a sense of meaninglessness (APA, 2022). The addition of PGD in the DSM-5-TR trauma and stressor related disorders category was precipitated by previous research on the appendix diagnosis and the increase incidence of these symptoms post pandemic (APA, 2022).

Some complicating factors that affect grief intensity include bereavement after a lifelong spouse/partner has died (Norris & Murrell, 1990), the uncertainty of life and values after death of a loved one (Kennedy et al., 2021), and the specific manner in which the deceased died (e.g., traumatic grief; suicide, homicide or sudden, unexpected death; Nam, 2016). The prevalence of complicated grief is 2.4% - 4.8% in the general adult population (APA, 2013). However, a recent study examining the new PGD criteria in a large, representative bereaved sample, found PGD lifetime prevalence rates of 3–4% (Rosner et al., 2021). For convenience, the previously mentioned three grief terms are used interchangeably to describe problematic grief reactions.

Complicated grief can lead to other impairments in daily functioning and other distressing emotional outcomes (e.g., depression, anxiety, substance abuse, and greater sensitivity to traumatic events; Sung et al., 2011). Although psychological inflexibility has been shown to correlate positively with complicated grief, little is known about the role psychological inflexibility plays in the relationship between complicated grief and emotional outcomes (i.e., depression

and psychological well-being). Conversely, there is a plethora of research examining social support as a protective (buffer) factor on the relationship between complicated grief and emotional outcomes (depression and psychological well-being), but no research looks at psychological inflexibility and social support as interacting variables within the complicated grief and emotional outcomes relationship.

Depression versus Grief

Major depressive disorder is defined as a depressed mood that lasts two weeks or longer and is accompanied by five or more symptoms including appetite and or sleep disturbance, excessive fatigue, anhedonia, depressive mood, a sense of worthlessness, concentration problems and suicidal ideation (APA, 2013). Previous studies have examined the differences between complicated grief and depression. Ogrodniczuk and colleagues (2003) in a large study of 398 bereaved psychiatric patients examined symptoms of complicated grief and depression across five dimensions (grief symptoms, grief experiences and attitudes, depression-cognitive, grief avoidance, depression-somatic). Correlational analyses revealed only a small relationship between the grief and depression dimensions, suggesting some degree of independence between the concepts (Ogrodniczuk et al., 2003). Results revealed that complicated grief symptoms were associated with the death of the person (e.g., avoidance, intrusive thoughts and emotions, yearning, rumination of the lost loved one). Depression symptoms, on the other hand, were associated with self-blame,

despair, and excessive fatigue (Ogrodniczuk et al., 2003). Although complicated grief and depression have some degree of independence, these two conditions can be comorbid/concurrent (Dillen et al., 2009). Also, some have suggested that prolonged complicated grief can eventually result in depression due to additional factors such as decreased social support (Al-Gamal et al., 2018).

Al-Gamal and colleagues (2018) in a survey study of Saudi Arabian university students examined the relationship between prolonged grief disorder, depression, and social support. The purpose of their study was to investigate the associations between grief, depression, and social support in light of the increased incidence of PGD within the Saudi Arabian population and the paucity of research on PGD in Saudi Arabians. They found that the severity of prolonged grief was positively associated with severity of depression. Additionally, these authors found that peer support moderated the grief and depression relationship where social support was less likely when grief was associated with increases in depression (Al-Gamal et al., 2018). This finding suggests that when grief is associated with depression, the probability of receiving a protective factor social support is decreased. In the current study, we examined how significant other, family, and friend social support act as protective moderator in the PGD and depression relationship.

Nielson and colleagues (2017) in a large nationwide study (n = 9512) of recently bereaved Danish caregivers to terminally ill patients examined grief and depression symptoms. The purpose of their study was to investigate if end-of-life

caregiving and other demographic factors (e.g., age, gender, relation to deceased) were predictive of symptom severity of complicated grief and depression. They found that symptoms of depression and grief before the death were predictive of the development of complicated grief and the continuation of depressive symptoms post-loss (Nielsen et al., 2017). Furthermore, the type of relationship to the deceased (i.e., partner) and educational level (10 years or less) predicted outcomes of complicated grief. Depression symptoms after the death was predicted by age (i.e., younger), gender (i.e., female), relation (i.e., partner), and educational level (i.e., low). Additionally, previous research found that those who already had major depressive disorder before complicated grief had more severe complicated grief symptoms than their non-previously depressed counterparts (Sung et al., 2011). These previous findings suggest that depression may act as a precursor to complicated grief and/or may be an outcome of complicated grief symptom severity. Our current study further examined two potential processes (social support & psychological inflexibility) that may influence the relationship between complicated grief and depressive symptoms and the broader outcome of psychological well-being.

Norris and Murrell (1990) in a larger study consisting of adults who were either recent widows or had lost either a child or parent, and a control group of non-bereaved individuals, examined the effects conjugal bereavement (death of a spouse) on depression and physical health. More specifically, they examined the effect conjugal bereavement had on emotional (depression) and physical

health outcomes, as well as potential protective factors and exacerbating factors (those that hinder adjusting to the loss). The sample of widows were compared to the sample of non-bereaved, as well as the other sample of bereaved (death of child or parent). The longitudinal study was from a sample of 3,000 adults over a period of five waves (interviews); participants were interviewed every six months. Participants who experienced the death of a spouse (n = 48), parent (n = 38), or child (n = 33) during the study were kept as the remaining sample. Bereaved participants were then reassigned into three waves for the purpose of the study: interview preceding the death (Wave 1), after the death (Wave 2), and an interview six months after wave two (Wave 3). The independent variables (social support, new interests, financial pressures, global stress) and outcomes (depression and physical health) were measured across all three waves. They found that the widowed sample had significantly higher depression compared to the group who lost a parent or child and the non-bereaved. For the widowed group, wave one depression, wave two social embeddedness, wave three interests, financial pressures, and global stress significantly predicted depression in wave three. Conversely, only wave one depression and wave three global stress significantly predicted wave three depression in the parent/child bereaved group. Moreover, in all groups, depression before the death was a significant predictor of depression during bereavement (Norris & Murrell, 1990). This suggests that a major life event such as losing a loved one can result in comorbidity between mental health disorders such as complicated grief and

depression. Having depression before the death of a loved appears to exacerbate grief and subsequent depression. Our current study further examined the relationship between complicated grief and depression and how psychological inflexibility may further exacerbate the relationship.

Psychological Well-Being

Psychological well-being (PWB) is a multidimensional construct that includes positive emotions and relationships, agency, life satisfaction, personal growth, and happiness. Previous studies have examined psychological well-being as life satisfaction and positive daily functioning through six concepts (**self-acceptance**, **positive relations with others**, **autonomy**, **environmental mastery**, **purpose in life**, and **personal growth**; Ryff, 1989). In Ryff's psychological well-being model (1989), **Self-acceptance** refers to internalization and acceptance of positive views of self, versus a sense of shame and guilt. **Positive relations with others** is defined as a general capacity to form long-term, healthy, empathic, and affectionate relationships. **Autonomy** refers to a sense of individuation, internal locus of control and personal agency in making decisions consistent with values. **Environmental mastery** is defined as possessing agency and the ability to advance one's wishes through creative behavioral and/or mental activities. Environmental mastery involves an awareness of resources and movement towards opportunities for personal and career growth. **Purpose in life** involves setting goals and working towards them, finding positive meaning in experience, and living with intentionality. **Personal**

growth involves a continuing process of developing a higher level of personal potential (Ryff, 1989).

Prior research has indicated a relationship between psychological well-being and social support. Scott and colleagues (2020) in a systematic review of bereaved individuals who experienced an unexpected or violent death of their loved one, examined social support and well-being. Within their literature review, they found a general positive association in bereaved individuals between social support and psychological well-being. This finding suggests that social support may serve an important protective role via maintaining well-being in the face of distressing life events (Scott et al., 2020). Levi-Belz (2015) examined stress-related growth (a concept similar to post-traumatic growth and personal growth within PWB) and interpersonal factors including social support in a sample of 135 Israeli participants who lost a loved one to suicide. Specifically, the researchers examined both interpersonal coping (self-disclosure, social support) and cognitive coping strategies (adaptive and maladaptive) that may impact stress-related growth. Stress-related growth was defined as an ability to grow and recover from traumatic and/or stressful events (Tedeschi & Calhoun, 1996; Levi-Belz, 2015). They examined self-disclosure and social support as intertwined concepts in that, self-disclosure of one's reactions could sometimes result in social support (Shumaker & Brownell, 1984; Levi-Belz, 2015). Results revealed that both interpersonal and cognitive factors were significantly associated with stress-related growth. Specifically, interpersonal factors (including social support)

accounted for additional variance in stress-related growth above and beyond the variance accounted for by suicide and cognitive coping strategies. Moreover, the interaction between time since suicide and interpersonal factors accounted for an additional explanatory variance in stress-related growth (Levi-Belz, 2015). This suggests that cognitive coping strategies may not be sufficient on their own to enhance positive growth when dealing with grief and implementing social support networks could further protect well-being outcomes. Our study further examined social support as a protective factor within the complicated grief and PWB relationship, as well as, how psychological inflexibility interacts with social support in the maintaining of well-being.

Oexle and Sheehan (2020) in a study of 195 participants who experienced suicide of a loved one examined social support and associations with outcomes such as grief difficulties, suicidality, depressive symptoms, and personal growth. Regression analyses revealed after controlling for demographic variables (age, gender, mental illness before less, closeness, time since death, relationship) that greater perceived social support was significantly associated with a decrease in grief difficulties, depression symptoms, and suicidality. Furthermore, increases in social support were significantly associated with increased personal growth. These results suggest that social support can lessen negative emotional outcomes and help maintain well-being after experiencing the death of a loved one. Our study further investigated social support and psychological inflexibility

as potential moderators of the complicated grief, psychological well-being, and depression relationships.

Little research has examined the relationship between psychological inflexibility and grief, but there is plethora of research examining the relationship between psychological inflexibility and psychological well-being (PWB). Howell & Demuynck (2021) in a survey study of 408 Canadian psychology students, found that psychological flexibility/psychological inflexibility were strongly associated with psychological well-being. Specifically, results revealed that psychological flexibility/inflexibility accounted for a significant amount of variance in levels of meaning in life and life satisfaction within the psychological well-being scales (Howell & Demuynck, 2021). These findings suggest that psychological inflexibility may intensify the negative relationship between complicated grief and psychological well-being by impairing meaning and satisfaction components of psychological well-being. Based upon these findings, our study investigated the moderating role of psychological inflexibility within the complicated grief and PWB relationship.

Arslan and Allen (2022) in a study of 417 Turkey students examined well-being, psychological flexibility, and meaning in life pertaining to COVID-19 stress. They hypothesized that meaning in life and psychological flexibility would be mediators within the coronarius stress and well-being relationship. They found that psychological flexibility had a significant positive relationship with overall life satisfaction and meaning of life. Additionally, psychological flexibility and

meaning in life both significantly mediated the relationship between stress from coronavirus and well-being. These results suggest both psychological flexibility and a sense of meaning in life can be effective strategies in the face of stressful events such as coronavirus and improve well-being (Arslan & Allen, 2022). In relation to our study on complicated grief, the previous s findings could indicate that traumatic events such as complicated grief and its negative relationship to well-being can be intensified by maladaptive coping behaviors such as psychological inflexibility. Our study further investigated well-being in the face of grief and psychological inflexibility's negative impact on the relationship.

Stein and colleagues (1997) in a larger study of 30 male caregivers whose partners died from AIDS examined the relationship between positive or negative appraisals (including beliefs, goals, and emotions) and psychological well-being. Specifically, the purpose of their study was to examine how these appraisals are affected when dealing with the death of their partner. They used four different measures to assess psychological well-being (depressive mood, positive morale, positive states of mind, impact of death). Results revealed that positive beliefs, goal outcomes, and emotions were predictive of psychological well-being at both time of death and at 12-month follow-up. These findings suggest that having positive appraisals of the death of a loved one and having goals influenced a positive outcome of psychological well-being compared to negative appraisals (Stein et al., 1997). In our study we examined the role of psychological inflexibility (inaction; not engaging in one's personal goals) in relation to psychological well-

being and whether psychological inflexibility moderated the complicated grief and psychological well-being relationship.

Complicated Grief and Social Support

Social support acts as a protective factor for many health outcomes including physical and mental health as well as complicated grief. Cohen and Wills (1985) proposed two models of social support and its benefit towards psychological well-being; the main effects model and buffering model. Our current study focuses on the buffering model. The buffering model purports that social support acts as a moderator (protector) of an individual's well-being when dealing with distressing emotions or life events (e.g., protective factor when between high stress or grief and well-being); whereas the main effects model states that social support has a direct effect on outcomes irrespective of levels of stress, grief or other distressing emotions. (e.g., protective factor regardless of stress levels; Cohen, 1985; Scott et al., 2020). In other words, the main effects model suggests that individuals may be embedded in a large social network which could help avoid negative stressful events in the first place that could produce negative psychological outcomes, whereas the buffer model suggests that social support can intervene between stress of the event and possible psychological outcomes (Cohen 1985). Our study examined complicated grief as a stressful event, depression and psychological well-being as the outcomes, and social support as the buffering factor for psychological outcomes, i.e., depression and psychological well-being. Scott and colleagues (2020) found within their

systematic review, that when dealing with the expected or unexpected death of a loved one, the level of social support experienced after the death buffered the impact of the death and minimized depression and preserved psychological well-being.

Ogrodniczuk and colleagues (2002) examined the role of social support across two types of group grief treatments (interpretive or supportive group therapy) in a sample of 107 bereaved individuals. Surprisingly, the researchers found that perceived social support from friends but not from family was associated with better treatment outcomes (e.g., lower grief and general distress and higher life satisfaction) across both types of group therapies. Greater perceived social support from family was associated with poorer treatment outcomes for grief but better outcomes for general distress and life satisfaction (Ogrodniczuk et al., 2002). These results suggest that the source of social support may have a differential impact upon treatment outcomes for grief. In the current study we examined the relationship between three sources of social support (i.e., friends, family, and significant other) as well as psychological inflexibility on the relationships between grief and psychological well-being and depression.

Social support has been shown to help relieve symptoms of PGD. Song and colleagues (2021) examined bereaved Chinese parents who lost their only child and the role of social support systems upon PGD symptoms. They found that social support was negatively related to PGD symptoms. Greater levels of

social support in bereaved parents were associated with milder symptoms of PGD. The authors concluded that social support is an asset/strength for bereaved people and helps them to adapt and maintain well-being/daily functioning post-death (Song et al., 2021).

Sung et al., 2011, in a larger study of depression and stress in depressed outpatients compared patients diagnosed with depression with comorbid complicated grief, depressed patients without comorbid complicated grief and a non-depressed (healthy) control group. Results revealed that depressed patients with complicated grief reported higher levels of traumatic stress, alcohol dependence and lower levels of social support. These results suggest that social support has a buffering role in depressed individuals experiencing the death of a loved one (Sung et al., 2011). This may suggest that comorbidity between complicated grief and depression could exacerbate CG symptoms and diminish protective factors such as social support. Our study further examined the relationship between CG and depression and social support as a buffer within the relationship. Although there is a lot of literature on the relationship between grief and social support, there is a paucity of research on the relationship between grief and psychological inflexibility.

Psychological Flexibility and Psychological Inflexibility

Psychological Inflexibility is a concept found in the acceptance and commitment therapy model (ACT) and refers to a lifestyle in which behavior is excessively influenced by one's thoughts, feelings and other internal experiences

leading to excessive experiential avoidance of these experiences at the expense of more effective and meaningful life actions (Bond et al., 2011). Psychological inflexibility consists of six components: **experiential avoidance** (distancing from unpleasant experiences), **lack of contact with the present moment** (excessive focus on past or future with lack of awareness of current emotions and events), **self as content** (judging experience based upon preconceived and rigid schematic view of self, **fusion** (rigid connection with negative thoughts and experiences), **lack of contact with values** (disconnection from what is most important to the individual); and **inaction** (disconnection form behaviors that are consistent with one's values; Hayes et al., 1999; Rolffs et al., 2018). On the opposite end of the continuum, **Psychological flexibility**, an awareness of experience and values and commitment to said values, consists of six components: **acceptance** (full non-judgmental willingness to take in experience as it is), **contact with the present moment** (awareness of current experience), **self as context** (objective understanding of self as contextual/situational versus global), **defusion** (ability to separate from negative experiences or thoughts), **values** (being in tune with what is important in an individual's life),and **committed action** (engaging in behaviors towards personal goals; Hayes et al., 1999; Rolffs et al., 2018).

Howell & Demuynck (2021) in a sample of 408 Canadian psychology students, found that psychological inflexibility accounted for a large portion of the variance in psychological well-being. Psychological inflexibility is believed to be a

vulnerability mechanism for impaired psychological functioning and many mental disorders (Hayes et al., 1999). Kennedy and colleagues (2021) in a survey study consisting of participants from Australia, the United States, and the United Kingdom, examined individuals with a missing loved one (location unknown and in fear for their safety and well-being) and the relationship between intolerance of uncertainty (IU) and psychological symptoms (psychological distress, prolonged grief disorder, PTSD). Further, they analyzed two possible mediators within the IU and psychological symptom relationship; psychological inflexibility and emotion regulation difficulties. The average length of time since the person went missing was 14 years. The researchers found that IU was positively associated with psychological inflexibility, emotion regulation difficulties, psychological symptoms and prolonged grief disorder (PGD). Moreover, psychological inflexibility mediated the relationship between IU and psychological symptoms (psychological distress, prolonged grief disorder, PTSD). Specifically, they found that higher levels of IU predicted psychological inflexibility increase which then significantly predicted prolonged grief disorder symptoms among the other psychological outcomes. Emotion regulation difficulties did not mediate the IU and psychological symptoms relationship. Their results indicate that in the face of uncertainty/stress about the loss of a loved one, psychological inflexibility in response to this distress was associated with greater PGD, psychological distress, and PTSD (Kennedy et al., 2021). Our current study examined the

moderating role of psychological inflexibility on the relationship between complicated grief and psychological well-being, as well as depression.

Although there are a paucity of studies examining psychological inflexibility and grief, there are some studies that have examined grief and experiential avoidance, one of the six components of psychological inflexibility. Avoidance patterns (behavioral, experiential, etc.) are a strong component of both psychological inflexibility and of complicated grief. Experiential avoidance within complicated grief can be influenced by experiential avoidance in general by limiting activities once enjoyed with the deceased loved one due to fear of the resurfacing of emotions revolved around the loved one (Shear et al., 2007).

Nam (2016) in a study of 859 conjugally bereaved adults from South Korea, examined experiential avoidance as a mechanism within the suicide bereavement and complicated grief relationship in a larger study investigating mechanisms in complicated grief. Specifically, the researchers examined complicated grief severity between those who experienced a traumatic death (suicide death) and those who experienced non-traumatic or natural death. Additionally, the researchers assessed if experiential avoidance mediated the relationship between suicide bereavement and complicated grief. Results revealed that experiential avoidance was significantly associated with suicidal bereavement and complicated grief and moreover, mediated the relationship. These findings suggest that engaging in experiential avoidance in the face of traumatic grief (e.g., losing a loved one through a traumatic way such as suicide

or unexpected death) may exacerbate and complicate the grief reaction (Nam, 2016) and thus was examined in our current study on the relationship between complicated grief and psychological outcomes of well-being and depression.

Eisma and colleagues (2013) in a 12-month prospective study of 282 bereaved adults, examined the role of four types of avoidance (i.e., thought suppression, experiential avoidance, behavioral avoidance, death-reality avoidance) as a mediating variable on the relationship between grief rumination at time one and complicated grief and depression 12 months later. The main findings were that experiential avoidance and not the other types of avoidance fully mediated the grief rumination and complicated grief relationship. Additionally, results revealed that only experiential avoidance and behavioral avoidance fully mediated the relationship between grief rumination and depression symptoms. These results suggest that experiential avoidance, a major component of psychological inflexibility and a more global form of avoidance that includes elements of the other forms of avoidance studied, may prevent the bereaved individual from processing the death effectively and this mechanism accounts for the grief rumination and complicated grief and depression relationships. The fact that behavioral avoidance also mediated the grief rumination and depression relationship suggest that behavioral avoidance in the face of grief can be a mechanism for subsequent depression. These results provide evidence for the importance of the role of experiential avoidance, a major component of psychological inflexibility, on the relationships between forms of

grief and psychological outcomes. Our study further examined the broader variable of psychological inflexibility to assess the intensification role that psychological inflexibility may plays in the direct relationships between complicated grief and depression and psychological well-being.

Past research has examined the impact avoidance behaviors have on symptoms of complicated grief. Boelen and Bout (2010) in a survey study of bereaved individuals recruited from mental health clinics, examined the role of avoidance behaviors surrounding the death on complicated grief and depression symptoms. Specifically, the main purpose of their study was to investigate the possible mechanisms (anxious avoidance, AA; depressive avoidance, DA) that may play a role in complicated grief development. They hypothesized that after controlling for shared variance between DA and AA, these types of avoidance would still be associated with symptom severity of complicated grief. Furthermore, they also hypothesized that DA and AA would have a stronger association with complicated grief symptoms than depression and PTSD. Results revealed that DA and AA were associated with CG, depression, and PTSD symptom levels. Moreover, results indicated that AA and DA added unique significant variance in explaining CG even after controlling for other relevant demographic and death-related variables. DA added unique variance for depression after accounting for other variables, but not AA. DA and AA did not add significant variance for PTSD (Boelen & Bout, 2010). These results suggest that emotional avoidance patterns are strongly associated with CG, possibly due

to emotional avoidance of memories of the deceased reducing opportunities for reprocessing of the death of the loved one.

Past research has also examined grief and values, one of the other components of psychological inflexibility (lack of contact with values). Murrell and colleagues (2018) examined experiential avoidance, values, and resiliency within a sample of college students (ranging from 18 to 43 years) who lost a parent at 18 years old or younger. They hypothesized that placing an emphasis on values would lower bereavement difficulty and experiential avoidance. Additionally, they hypothesized that experiential avoidance would be associated with heightened bereavement difficulties. After controlling for funeral attendance (12% of the variance), experiential avoidance significantly predicted bereavement difficulties (26% variance). These results suggest that experiential avoidance as a coping strategy, a major component of psychological inflexibility accounts for significant variance in complicated grief. Furthermore, there was no significant relationship between values and experiential avoidance, but higher values were significantly correlated with an increase in resiliency (20% variance). These findings suggest individuals with more specific values have less detrimental outcomes of bereavement and other psychological outcomes (depression, distress, anxiety, etc.), regardless of level of experiential avoidance. Furthermore, their results may indicate that a lack of values (psychological inflexibility) may further increase complicated grief symptoms (Murrell et al., 2018). The current study explored psychological inflexibility globally, including experiential avoidance and values,

and examined the influence of psychological inflexibility within complicated grief, depression, and psychological well-being relationships.

Past research also examined coping strategies aligned with psychological flexibility (acceptance and values). Davis and colleagues (2016) in a study of bereaved Australian university students, examined valued-living and acceptance as strengths and how these variables may relate to adjusting to grief and death. Specifically, they hypothesized that decreased levels of acceptance and valued-living would predict increased levels of grief. Results revealed that after accounting for demographics (closeness, number of deaths, months since death) acceptance and valued-living significantly accounted for 21% of the variance in grief. These results suggest that coping strategies such as psychological flexibility could help during the grief process (Davis et al., 2016). It may also suggest that a hindrance in coping strategies (psychological inflexibility) can create negative emotional outcomes (depression and psychological well-being). Our study examined psychological inflexibility and if it intensifies the relationship between complicated grief, depression, and well-being.

While there is little research examining psychological inflexibility and complicated grief, there is research that examines the impact psychological inflexibility has on depression. Kato (2016) study surveyed 663 Japanese college students in Japan measuring psychological inflexibility, depression symptoms, and sleep difficulty. Results revealed that after controlling for sleep difficulty, psychological inflexibility was positively correlated with depression symptoms

(Kato, 2016). The current study will further examine psychological inflexibility as an intensifying moderator in the complicated grief and depression relationship, as well as the relationship between complicated grief, social support, and psychological well-being.

To date, there is a paucity of research examining the relationship between psychological inflexibility and social support. It can be surmised that psychological inflexibility and experiential avoidance would reduce the capacity of individuals to seek out social support. In one study, Meyer et al., (2019) in a larger study examining post-employment adjustment, PTSD, psychological inflexibility, social support, and personality variables in a sample of Iraq war veterans found that psychological inflexibility and social support were negatively correlated. This one finding supports the notion that psychologically inflexible individuals are less likely to seek out and profit from social support. The current study examined these variables as both independent and combined moderators on the relationships between complicated grief and depression and psychological well-being.

In the present study, we identified two specific moderators (e.g., social support and psychological inflexibility) of the relationships between complicated grief and the psychological outcomes of depression and psychological well-being. Social support is proposed as a buffering moderator of the aforementioned relationships and psychological inflexibility is proposed as an intensifying moderator of these same relationships. Although research has examined the

moderating role of social support, there is a dearth of research examining the moderating role of psychological inflexibility on the relationship between complicated grief and the psychological outcomes of well-being and depression. Moreover, there is no research examining the moderating influence of the interaction of psychological inflexibility and social support on the relationship between complicated grief and psychological well-being/depressed mood.

Present Study

Complicated grief has been presented as a significant issue that impacts psychological well-being and depression. Understanding the role of psychological inflexibility and social support can help clinical researchers better understand the processes that influence the relationship between complicated grief, psychological well-being, and depression.

Hypotheses

Based upon the reviewed literature we hypothesized that the relationships between complicated grief and the psychological outcomes of depression and psychological well-being would be moderated by social support (buffer), psychological inflexibility (intensifier) and their interaction. Specifically, greater levels of psychological inflexibility was hypothesized to intensify the relationship between complicated grief and the psychological outcomes of depression and psychological well-being. Additionally, greater levels of social support was hypothesized to buffer the relationship between complicated grief and the psychological outcomes of depression and psychological well-being. Lastly, we

hypothesized that the interaction of social support and psychological inflexibility would moderate the relationship between complicated grief and the psychological outcomes of depression and psychological well-being.

The current study will fill a gap in the literature and may help explain why some grieving individuals may have better outcomes in psychological well-being and depression compared with others.

CHAPTER TWO:

METHOD

Method

Participants

Participants were recruited from a selected (must have reported distress over the death of a loved one within past two years), convenience sample of psychology undergraduate students from a southern California university. Those who participated were compensated through extra class credit. A total of 210 participants consisting of 153 females, 53 males, and four non-binary/other were included for analyses. The average age of participants was 25.00 years (SD = 7.41) with a range from 18 years to 61 years. The ethnic composition of the sample was 66% Latinx, 14% White, 5.2% African American, 3.8% Asian/Pacific Islander, 8.1% Bi-Cultural and 2.9% Other.

Measures (See Appendix A)

Pre-Screen Question. Participants were asked to indicate whether or not they had experienced distress over the death of a loved one, close friend or significant other in the past two years. Only participants that indicated “Yes” to this question were eligible for participation in the larger study.

Demographics Form. Demographics questions were included to assess participant age, gender, ethnicity, primary language spoken at home by parents, and level of education by primary caretakers/parents. Additionally, participants will answer questions about a recently (within past 2 years) deceased person

they knew (degree of relatedness, nature of relationship, how close they were to the person, cause of death, age of deceased).

Inventory of Complicated Grief (ICG; Prigerson et al., 1995). The ICG is a 19-item scale measuring complicated grief. Sample items include “I feel disbelief over what happened” and “I cannot accept the death of the person who died”. Items are measured on a five-point Likert scale ranging from 0 (*never*) to 4 (*always*). Prigerson et al., (1995) report this measure has high internal consistency with a reported α = .94 The ICG correlates highly with other measures of depression and grief (i.e., Beck Depression Inventory, Texas Revised Inventory of Grief, Grief Measurement Scale).

Multidimensional Scale of Perceived Social Support (MSPSS; Zimet et al., 1988). The MSPSS scale consists of 12 items measuring social support across three domains (**significant other subscale, family subscale, and friends**). Sample items include “I can count on my friends when things go wrong” and “I can talk about my problems with my friends”. Participants rate their responses using a seven-point Likert scale ranging from 1 (*very strongly disagree*) to 7 (*very strongly agree*). Adequate internal consistency was reported with alpha coefficients ranging from .85 to .91 across the three subscales. Zimet et al. (1988) established construct validity between the MSPSS subscales and the Depression and Anxiety subscales of the Hopkins Symptom Checklist (HSCL). The family subscale was adequately correlated with depression and anxiety; the

friend subscale correlated with depression; and the significant other subscale was significantly correlated with depression.

Multi-Dimensional Psychological Flexibility Inventory (MPFI; Rolffs et al., 2016). The MPFI is a 60-item scale that measures the 12 dimensions of the Psychological Flexibility/Inflexibility from the Acceptance and Commitment Therapy (ACT) Hexaflex model. Our current study used a shorter global composite consisting of a 12-item global inflexibility composite subscale. Sample items include “I was attentive and aware of my emotions” and “I tried to distract myself when I felt unpleasant emotions”. Questions are answered on a six-point Likert scale ranging from 1 (*never true*) to 6 (*always true*). The internal consistency for the global composite inflexibility subscale was adequate with scores ranging from .962 to .948. Rolffs et al. (2016) found the subscales were highly correlated with other inflexibility scales (the AAQ, the AAQ-2, and the AFQ-Y), demonstrating the concurrent validity of the subscales.

Psychological Well-Being Scale (PWB; Ryff & Singer, 1989). The PWB is a 42-item scale measuring six dimensions of well-being (**self-acceptance, positive relations with others, autonomy, environmental mastery, purpose in life, personal growth**). Sample items include “For me, life has been a continuous process of learning, changing, and growth” and “In many ways I feel disappointed about my achievements in life”. Items are measured on a seven-point Likert-type scale from 1 (*strongly agree*) to 7 (*strongly disagree*). Ryff and Singer (1996) found the measure to have high internal consistency with subscale

α's ranging from α = .86 to α = .93. The researchers also established concurrent validity relative to other valid and well-known well-being scales.

Center for Epidemiologic Studies- Depression Scale (CES-D; Radloff, 1977). The CES-D is a 20-item, four-point Likert scale measuring depression. Sample items include "I had trouble keeping my mind on what I was doing" and "I thought my life had been a failure". Scores are rated on a four-point Likert scale ranging from 0 (*rarely or none of the time*) to 3 (*most or all of the time*). Previous research indicates the measure has high internal consistency for general population α = .85, and patient samples α = .90, and Concurrent validity has been established for patient and population groups across severity levels of depressive symptoms (Radloff, 1977).

Procedure

Participation was only open to CSUSB Psychology participant pool students who indicated during a pre-screen that they had experienced distress in response to the death of a loved one, close family member or close friend within the past two years. The surveys were made available to participants through the SONA research management system and disseminated through the Qualtrics online survey system. After participants provided informed consent, they were directed to the study questionaries presented in random order. The demographics questions were always provided after completion of the questionnaires. A post-study information form with counseling referrals was provided last.

CHAPTER THREE:

RESULTS

Results

Design and Analyses

The current study examined both the simultaneous and unique contributions of complicated grief, psychological inflexibility and social support as predictors of psychological well-being (PWB) and depression in a non-experimental correlational design. Further, we tested the hypothesis that social support and psychological inflexibility each would moderate the relationship between complicated grief and PWB and complicated grief and depression. Moreover, we tested the hypothesis that the interaction of social support and psychological inflexibility would moderate the relationship between complicated grief and PWB and depression. Study hypotheses were tested with IBM SPSS version 27 (IBM Corporation, Armonk, NY, USA) through correlational analyses, multiple regression, and moderation analyses using the SPSS macro, Model 3 in PROCESS (Hayes, 2013).

Descriptive statistics, internal consistency, and correlation coefficients are provided for illustrative purposes. Consistent with study hypotheses, correlational analyses indicated that complicated grief was positively associated with psychological inflexibility and depression and negatively associated with social support and PWB. Additionally, psychological inflexibility was negatively associated with social support. (See Table 1).

Table 1. Descriptive and Correlational Statistics

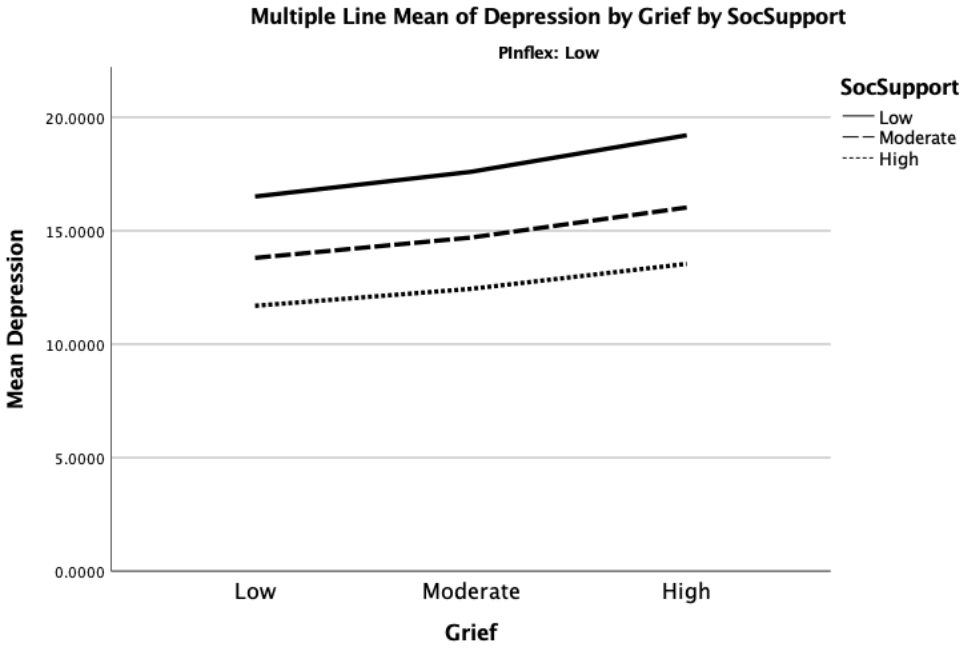
Variable	*n*	*α*	*M*	*SD*	1	2	3	4	5
1. Complicated Grief	210	.93	24.73	15.05	-				
2. PWB	210	.91	-131.9	31.7	-.230**	-			
3. Depression	210	.89	21.9	10.9	.365**	-.603**	-		
4. Social Support	210	.91	63.32	14.12	-.135	.376**	-.360**	-	
5. PI	210	.89	39.6	11.15	.402**	-.602**	.687**	-.267**	-

** = Correlation is significant at the 0.01 level; * = approached significance $p = .05$

Complicated Grief, Social Support, Psychological Inflexibility and Depression

Results of a moderated-moderation regression analysis utilizing PROCESS Model 3 with complicated grief, social support, psychological inflexibility and their interactions as predictors of the outcome of depression revealed that the total model accounted for 53.3% of the variance in depression ($R^2 = .53$; F (7, 202) = 33.03, $p < .0001$). Specifically, the main effects of psychological inflexibility ($B = 6.50$, $t = 11.02$, $p < .0001$), social support ($B = -1.08$, $t = -.39$, $p < .0001$) and complicated grief ($B = 1.39$, $t = 2.30$, $p < .03$) each were unique, significant predictors of depression. Contrary to study hypotheses, the complicated grief X psychological inflexibility ($B = .31$, $t = .55$, $p > .05$), complicated grief X social support ($B = .41$, $t = 1.38$, $p > .05$) and the

psychological inflexibility X social support (B = .03, t = .11, p > .05) were all non-significant in the prediction of depression. However, consistent with study hypotheses, the moderation analysis revealed that the three-way interaction of complicated grief X psychological inflexibility X social support was significant (B = .47, t = 2.09, p < .04). The relationship between complicated grief and depression was strongest under conditions of high inflexibility regardless of level of social support. See Figure 1.



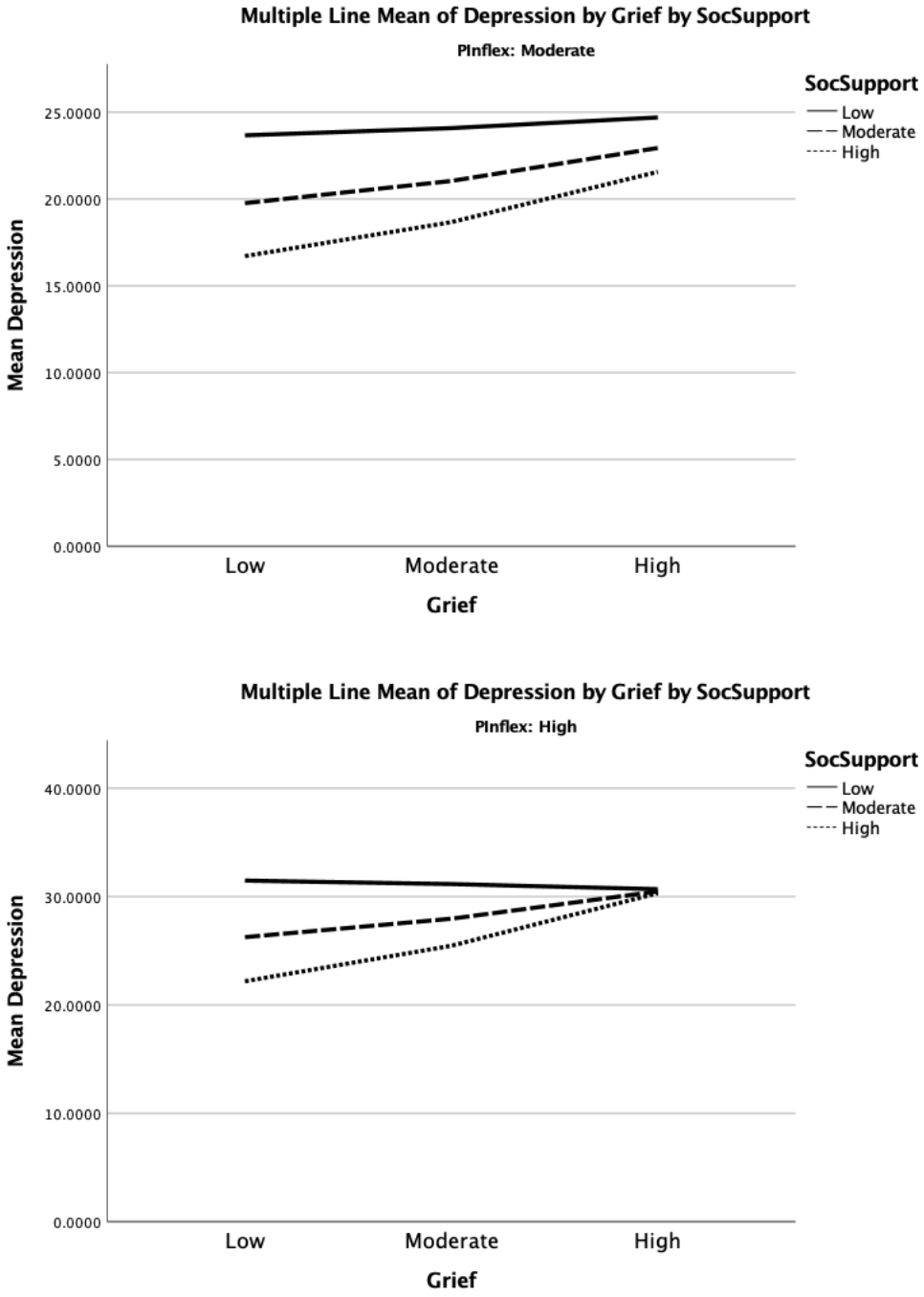


Figure 1: Three-Way Interaction between Grief, Depression, Psychological Inflexibility, and Social Support

Complicated Grief, Social Support, Psychological Inflexibility and Psychological Well-Being

Results of a multiple regression, moderated-moderation analysis utilizing PROCESS Model 3 with complicated grief, social support, psychological inflexibility and their interactions as predictors of the outcome of psychological well-being revealed that the total model accounted for 42.5% of the variance in psychological well-being (R^2 = .42; F (7, 202) = 21.28, p < .0001). Specifically, the main effects of psychological inflexibility (B = -17.04, t = -8.92, p < .0001) and social support (B = 2.90, t = 3.29, p < .0002) but not complicated grief (B = -.14, t = -07, p > .05) were unique, significant predictors of psychological well-being. Contrary to study hypotheses, the complicated grief X psychological inflexibility (B = 3.23, t = 1.77, p > .05), complicated grief X social support (B = -.44, t = -.46, p > *.05*) and the psychological inflexibility X social support (B = .72, t = .84, p > .05) were all non-significant in the prediction of psychological well-being. Likewise, the moderation analysis revealed that the three-way interaction of complicated grief X psychological inflexibility X social support was non-significant (B = .37, t = .51, p > *.05*). Results revealed that there was no support for moderation hypotheses of the complicated grief and psychological well-being relationship.

CHAPTER FOUR:

DISCUSSION

Discussion

In the present study, we examined the relationships between complicated grief and psychological well-being, and complicated grief and depression. Further, we examined the potential role of psychological inflexibility as an intensifier and social support as a buffer within these relationships. Consistent with hypotheses, correlational analyses revealed that complicated grief was positively associated with psychological inflexibility and depression and negatively associated with social support and psychological well-being. Simultaneous multiple regression analyses revealed that complicated grief, psychological inflexibility and social support were significant predictors of depression, however when entered with other study predictors for psychological well-being, complicated grief was not a significant predictor of psychological well-being. Contrary to study hypotheses, psychological inflexibility and social support individually did not moderate either the complicated grief and depression relationship, nor the complicated grief and PWB relationship. Consistent with study hypotheses there was a significant interaction between psychological inflexibility and social support as moderators of the complicated grief and depression but not the psychological well-being relationship.

Moderation: Social Support

Social support did not moderate the relationship between complicated grief and psychological well-being, as well as the relationship between complicated grief and depression. This negative finding may be due to the decision to examine social support as an aggregate variable combining different types of social networks (friends, family, and significant other). Measuring these three social support groups together using the multidimensional scale of perceived social support (MSPSS) could mask potential moderation effects that previous research has found for specific support networks. Post hoc moderation analyses were run individually for the three social support network subscales (friends, family, significant other) and revealed that significant other (B = 1.57, t = 2.11, p = *.04*) and friends (B = 1.38, t = 2.21, p = *.03*) but not family (B = .0353, t = .0502, $p > .05$) moderated the relationship between CG and depression. No individual social network moderated the CG and psychological well-being relationship. As grief levels increased, the buffering effect of social support from friends and significant others was diminished. The relationship between grief and depression was only buffered under lower levels of grief. Specifically, as grief increased, the buffering effects of social support diminished. These results are consistent with Ogrodniczuk and colleagues (2002) findings that social support from family was associated with poorer treatment outcomes compared to social support from friends. This may suggest that perceived social support in certain social networks (friends and significant other) could act as a protective factor in

the face of lower levels of grief, whereas social support from family may complicate the emotional outcomes as family members are likely simultaneously grieving the death of the same person and may be less able to provide social support. Consequently, social support from family may exacerbate complicated grief reactions as the bereaved and their family may be engaging in maladaptive grief inflexible coping dispositions (e.g., experiential avoidance), which may reduce the effectiveness of family support in the face of death of a loved one. (Ogrodniczuk et al., 2002).

Post hoc analyses showed no moderation of social support networks (family, friends, significant other) within the CG and psychological well-being relationship. Previous studies revealed that social support is beneficial to psychological well-being and other related concepts. Levi-Belz (2015) found that interpersonal variables (such as social support) added significant variance in stress-related growth (component of well-being). Disclosing personal emotions and information to others (social support) could help the bereaved deal with the death of a loved one in a more positive light. Further, interpersonal factors such as social support may help bereaved cope with the death and confront the death rather than avoid it (Levi-Belz, 2015). In the current study, moderation may have not occurred for CG and psychological well-being because CG may override possible protective factors in well-being, regardless of level of social support.

Moderation: Psychological Inflexibility

Psychological inflexibility did not moderate the relationship between complicated grief and psychological well-being, as well as the relationship between complicated grief and depression. These findings suggest that the level of psychological inflexibility has no effect on the relationships between complicated grief and depression or psychological well-being. However, Eisma and colleagues (2013) found that experiential avoidance, a component of PI, was a mediator of the grief rumination (complicated grief) and depression relationship. This could suggest that experiential avoidance and psychological inflexibility (PI) is more of a causal mechanism (mediator) rather than an intensifier (moderator) of the relationship. Post-hoc analyses revealed that psychological inflexibility mediated both the CG and depression relationship (B = 7.001, t = 11.8, $p < .001$, LL: 5.83, UL: 8.17) and CG and psychological well-being relationship (B = -19.26, t = -10.03, $p < .001$, LL: -23.05, UL: -15.47). These post-hoc findings suggest that in grieving individuals, inflexible coping strategies may be the mechanism through which complicated grief develops into depression or diminished psychological well-being and may be a key mechanism to address in grief interventions (e.g., experiential avoidance of the pain over the death and the suspension of shared valued activities). Eisma and colleagues (2013) suggested that rumination could possibly interfere with emotional processing of conceptual information within autobiographical memory. This may explain why there is a decrease in likelihood of individuals retrieving negative emotions/memories about

the death of their loved one which then interferes with coping with the grief and accepting the death (Eisma et al., 2013). For the current study, this could suggest that psychological inflexibility has a direct effect on the grief, psychological well-being, and depression relationship.

Although social support and psychological inflexibility did not individually moderate the relationships, there was a significant interaction between them within the complicated grief and depression relationship (see Figure 1). Regardless of the level of social support (low, medium, high), the grief and depression relationship were strongest in the high inflexibility condition. This finding suggests that under conditions of high psychological inflexibility the buffering effects of social support are hindered. On an individual level, psychologically inflexible individuals with strong negative emotions and experiential avoidance may not be able to access social support to its full potential. These results contrast past literature that supports social support as a protective factor in psychological outcomes, however these studies did not examine the influence of psychological inflexibility. Song and colleagues (2021) found that increases in social support was associated with decreased symptoms of PGD in bereaved parents. They suggested that bereaved individuals with an ability to be more objective about the death and contextualize the deceased's life and the bond they had with them are more likely to accept social support to help them cope with the death (Song et al., 2021). For the current study, this suggests that the stronger psychological inflexibility is, the less willing and able individuals

are to accept social support due to experiential avoidance and not accepting the death.

Past literature may help explain why high levels of psychological inflexibility diminish social support as a protective factor in the CG and depression relationship. Sung and colleagues (2011) found that depressed individuals with complicated grief had higher levels of negative psychological outcomes such as traumatic stress and lower levels of social support compared to depressed individuals without complicated grief. Their findings were consistent with previous studies (Ott, 2003; Prigerson et al., 1997) that found bereaved individuals with complicated grief reported lower levels of social support and an increased likelihood of negative psychological outcomes (Sung et al., 2011). This may suggest that psychological disorders or certain mechanisms (such as psychological inflexibility) suppresses protective factors such as social support and could give a possible explanation as to why grief and depression increases, despite having high levels of social support. Another possible explanation is that under conditions of high psychological inflexibility, social support utilization is hindered and does not allow for the buffering effect of social support.

Limitations and Future Research

A limitation of the current study was the use of a non-clinical university sample. A non-clinical sample limited generalizability to those with more severe levels of grief and depression (e.g., those seeking psychotherapy or with diagnoses of PGD or depression). Future research that employs a clinical sample

can assess whether the observed results emerge in a sample with higher levels of grief and depression and presumably more interference in social occupational functioning. Perhaps in this type of sample, social support may have a more buffering effect on this relationship. Additionally, future research can examine how different evidence-based therapies may impact social support as a buffer and psychological inflexibility as an intensifier. A future study can examine different kinds of interventions for CG (cognitive-behavioral, group therapy, etc.) to see if specific therapies can unleash the positive influence of social support and diminish the detrimental influence of psychological inflexibility on the relationship between complicated grief, psychological well-being, and depression. Another limitation is using self-report measures only which may cause recall errors. Future studies could implement self-report measures closer to the time of death and/or include open-ended questions to help improve recall memory. Another limitation of the current study was that the study employed a cross sectional design versus a prospective design that precludes the temporal analysis of these relationships over time (e.g., assessing grief at one time versus assessing grief over time, such as around the time of death, to six months and a year after the death of the loved one). Thus, future studies can implement a longitudinal/prospective design to examine how social support and psychological inflexibility may impact complicated grief, depression, and psychological well-being relationships over time.

Implications and Conclusion

Social support and psychological inflexibility are influential mechanisms that could drastically impact how an individual deals with grief. Understanding the difference in perceiving social support and utilizing support given would give insight into how clinical interventions could implement social networks better. The current study also has implications on how clinical interventions can help individuals become more psychologically flexible in the face of grief, which may in return help social support be a stronger protective asset to someone with complicated grief. Interventions should focus on treating specific areas of psychological inflexibility (experiential avoidance, fusion, rumination, unclear value, and commitment) which in return could enhance social supports benefits within the CG, psychological well-being, and depression relationships. Finally, study implications suggest that ACT treatment may be beneficial in the face of grief. Being more psychologically flexible in response to grief emotions could potentially unlock other assets such as social support that in return could maintain psychological well-being and lessen depression. Without targeting psychological inflexibility first, the benefits of social support may be suppressed and not allow the bereaved individual to process the death effectively and have more complicated grief outcomes.

APPENDIX A:

MEASUREMENT MATERIALS

DEMOGRAPHICS FORM

Demographics form. Each participant will complete a demographics form which includes information about gender, age, ethnicity, marital status, income, and educational attainment of primary caretakers.

Please answer each question to the best of your knowledge.
1. Age: _____
2. Gender: M ___ F ___ Other ___
3. Ethnicity:
Asian (Asian American) ____
African American (Black) ____
Caucasian (White)____
Native American ____
Latino (Hispanic) _____
Bi-cultural ____ (please specify multiple ethnic origins)
_____
Other ____ (please specify) _____
4. Primary caretaker
Mother_____
Father_____
Mother and Father_____
5. Primary Language(s) spoken by parents or primary caretakers
_____

6. Student Yearly Income:

$0 - $14,999	_____	$15,000-$29,999	_____
$30,000-$44,999	_____	$45,000-$59,999	_____
$60,000-$74,999	_____	$75,000-$89,999	_____
$90,000-$99,999	_____	Over $100,000	_____

7. Highest education level completed by parent or caretaker (Check one):
Grade school ____
Middle school ____
Some High school ____
High school diploma or GED____
Some College ____
College Degree ____
Post-Graduate ____

8. Did you experience distress upon learning of the death of a loved one, close family member or close friend within the past two years?" Y/N

9. How many people did you know who have died in the past two years? __

For the following questions, please respond in relationship to the single most distressing death:

10. What was the cause of death?

COVID ___
Accident ___
Natural causes ___
Illness (e.g., heart disease, diabetes, Cancer, other illness) ___
Suicide ___
Murder ___
Other (Specify) ___
Decline to answer __

11. What was the nature of your relationship with the deceased?
Grandparent __
Parent __
Sibling __
Child __
Cousin __
Uncle/Aunt __
Decline to answer __

12. What was the degree to which you expected the death of the deceased?
Completely unexpected __
Somewhat unexpected __
Both expected and unexpected __
Somewhat expected __
Completely expected __
Decline to answer __

13. For the loved one referenced above, how close was your relationship with the deceased?
Not at all close __
Somewhat close __
Moderately close __
Close __
Very close __
Decline to answer __

14. For the person referenced above, how old were they at the time of their death?

___
Decline to answer __

Prigerson, H. G., Maciejewski, P. K., Reynolds, C. F., Bierhals, A. J., Newsom, J. T., Fasiczka, A., Frank, E., Doman, J., & Miller, M. (1995). Inventory of complicated grief: A scale to measure maladaptive symptoms of loss. *Psychiatry Research, 59*(1-2), 65-79. https://doi.org/10.1016/0165-1781(95)02757-2

Multidimensional Scale of Perceived Social Support

Instructions: We are interested in how you feel about the following statements. Read each statement carefully. Indicate how you feel about each statement.

Circle the "1" if you **Very Strongly Disagree**
Circle the "2" if you **Strongly Disagree**
Circle the "3" if you **Mildly Disagree**
Circle the "4" if you are **Neutral**
Circle the "5" if you **Mildly Agree**
Circle the "6" if you **Strongly Agree**
Circle the "7" if you **Very Strongly Agree**

	Very Strongly Disagree	Strongly Disagree	Mildly Disagree	Neutral	Mildly Agree	Strongly Agree	Very Strongly Agree
1. There is a special person who is around when I am in need.	1	2	3	4	5	6	7
2. There is a special person with whom I can share joys and sorrows.	1	2	3	4	5	6	7
3. My family really tries to help me.	1	2	3	4	5	6	7
4. I get the emotional help & support I need from my family.	1	2	3	4	5	6	7
5. I have a special person who is a real source of comfort to me.	1	2	3	4	5	6	7
6. My friends really try to help me.	1	2	3	4	5	6	7

7. I can count on my friends when things go wrong. 1 2 3 4 5 6 7

8. I can talk about my problems with my family. 1 2 3 4 5 6 7

9. I have friends with whom I can share my joys and sorrows. 1 2 3 4 5 6 7

10. There is a special person in my life who cares about my feelings. 1 2 3 4 5 6 7

11. My family is willing to help me make decisions. 1 2 3 4 5 6 7

12. I can talk about my problems with my friends. 1 2 3 4 5 6 7

Scale Reference:

Zimet GD, Dahlem NW, Zimet SG, Farley GK. The Multidimensional Scale of Perceived Social Support. *Journal of Personality Assessment* 1988;52:30-41.

Scoring Information:

To calculate mean scores:

Significant Other Subscale: Sum across items 1, 2, 5, & 10, then divide by 4.

Family Subscale: Sum across items 3, 4, 8, & 11, then divide by 4.

Friends Subscale: Sum across items 6, 7, 9, & 12, then divide by 4.

Total Scale: Sum across all 12 items, then divide by 12. More information at:

http://gzimet.wix.com/mspss

Other MSPSS Scoring Options:

There are no established population norms on the MSPSS. Also, norms would likely vary on the basis of culture and nationality, as well as age and gender. I have typically looked at how social support differs between groups (e.g., married compared to unmarried individuals) or is associated with other measures (e.g., depression or anxiety). With these approaches you can use the mean scale scores.

If you want to divide your respondents into groups on the basis of MSPSS scores there are at least two ways you can approach this process:

1. You can divide your respondents into 3 equal groups on the basis of their scores (trichotomize) and designate the lowest group as low perceived support, the middle group as medium support, and the high group as high support. This approach ensures that you have about the same number of respondents in each group. But, if the distribution of scores is skewed, your low support group, for example, may include respondents who report moderate or even relatively high levels of support.

2. Alternatively, you can use the scale response descriptors as a guide. In this approach any mean scale score ranging from 1 to 2.9 could be considered low support; a score of 3 to 5 could be considered moderate support; a score from 5.1 to 7 could be considered high support. This approach would seem to have more validity, but if you have very few respondents in any of the groups, it could be problematic.

Multidimensional Psychological Flexibility Inventory (MPFI)

FLEXIBILITY SUBSCALES						
ACCEPTANCE						
IN THE LAST TWO WEEKS…	**Never TRUE**	**Rarely TRUE**	**Occasionally TRUE**	**Often TRUE**	**Very Often TRUE**	**Always TRUE**
I was receptive to observing unpleasant thoughts and feelings without interfering with them.	O	O	O	O	O	O
I tried to make peace with my negative thoughts and feelings rather than resisting them	O	O	O	O	O	O
I made room to fully experience negative thoughts and emotions, breathing them in rather than pushing them away	O	O	O	O	O	O
When I had an upsetting thought or emotion, I tried to give it space rather than ignoring it	O	O	O	O	O	O
I opened myself to all of my feelings, the good and the bad	O	O	O	O	O	O
PRESENT MOMENT AWARENESS						
IN THE LAST TWO WEEKS…	**Never TRUE**	**Rarely TRUE**	**Occasionally TRUE**	**Often TRUE**	**Very Often TRUE**	**Always TRUE**
I was attentive and aware of my emotions	O	O	O	O	O	O
I was in tune with my thoughts and feelings from moment to moment	O	O	O	O	O	O
I paid close attention to what I was thinking and feeling	O	O	O	O	O	O
I was in touch with the ebb and flow of my thoughts and feelings	O	O	O	O	O	O
I strived to remain mindful and aware of my own thoughts and emotions	O	O	O	O	O	O

SELF AS CONTEXT

IN THE LAST TWO WEEKS…	Never TRUE	Rarely TRUE	Occasionally TRUE	Often TRUE	Very Often TRUE	Always TRUE
Even when I felt hurt or upset, I tried to maintain a broader perspective	O	O	O	O	O	O
I carried myself through tough moments by seeing my life from a larger viewpoint	O	O	O	O	O	O
I tried to keep perspective even when life knocked me down	O	O	O	O	O	O
When I was scared or afraid, I still tried to see the larger picture	O	O	O	O	O	O
When something painful happened, I tried to take a balanced view of the situation	O	O	O	O	O	O

DEFUSION

IN THE LAST TWO WEEKS…	Never TRUE	Rarely TRUE	Occasionally TRUE	Often TRUE	Very Often TRUE	Always TRUE
I was able to let negative feelings come and go without getting caught up in them	O	O	O	O	O	O
When I was upset, I was able to let those negative feelings pass through me without clinging to them	O	O	O	O	O	O
When I was scared or afraid, I was able to gently experience those feelings, allowing them to pass	O	O	O	O	O	O
I was able to step back and notice negative thoughts and feelings without reacting to them	O	O	O	O	O	O
In tough situations, I was able to notice my thoughts and feelings without getting overwhelmed by them	O	O	O	O	O	O

VALUES

IN THE LAST TWO WEEKS…	Never TRUE	Rarely TRUE	Occasionally TRUE	Often TRUE	Very Often TRUE	Always TRUE
I was very in-touch with what is important to me and my life	O	O	O	O	O	O
I stuck to my deeper priorities in life	O	O	O	O	O	O
I tried to connect with what is truly important to me on a daily basis	O	O	O	O	O	O
Even when it meant making tough choices, I still tried to prioritize the things that were important to me	O	O	O	O	O	O
My deeper values consistently gave direction to my life	O	O	O	O	O	O

COMMITTED ACTION

IN THE LAST TWO WEEKS…	Never TRUE	Rarely TRUE	Occasionally TRUE	Often TRUE	Very Often TRUE	Always TRUE
Even when I stumbled in my efforts, I didn't quit working toward what is important	O	O	O	O	O	O
Even when times got tough, I was still able to take steps toward what I value in life	O	O	O	O	O	O
Even when life got stressful and hectic, I still worked toward things that were important to me	O	O	O	O	O	O
I didn't let set-backs slow me down in taking action toward what I really want in life	O	O	O	O	O	O

I didn't let my own fears and doubts get in the way of taking action toward my goals	O	O	O	O	O	O

INFLEXIBILITY SUBSCALES

EXPERIENTIAL AVOIDANCE

IN THE LAST TWO WEEKS…	**Never TRUE**	**Rarely TRUE**	**Occasionally TRUE**	**Often TRUE**	**Very Often TRUE**	**Always TRUE**
When I had a bad memory, I tried to distract myself to make it go away	O	O	O	O	O	O
I tried to distract myself when I felt unpleasant emotions	O	O	O	O	O	O
When unpleasant memories came to me, I tried to put them out of my mind	O	O	O	O	O	O
When something upsetting came up, I tried very hard to stop thinking about it	O	O	O	O	O	O
If there was something I didn't want to think about, I would try many things to get it out of my mind	O	O	O	O	O	O

LACK OF CONTACT WITH THE PRESENT MOMENT

IN THE LAST TWO WEEKS…	**Never TRUE**	**Rarely TRUE**	**Occasionally TRUE**	**Often TRUE**	**Very Often TRUE**	**Always TRUE**
I did most things on "automatic" with little awareness of what I was doing.	O	O	O	O	O	O
I did most things mindlessly without paying much attention.	O	O	O	O	O	O
I went through most days on auto-pilot without paying much attention to what I was thinking or feeling	O	O	O	O	O	O

I floated through most days without paying much attention.	O	O	O	O	O	O
Most of the time I was just going through the motions without paying much attention	O	O	O	O	O	O

SELF AS CONTENT

IN THE LAST TWO WEEKS…	Never TRUE	Rarely TRUE	Occasionally TRUE	Often TRUE	Very Often TRUE	Always TRUE
I thought some of my emotions were bad or inappropriate and I shouldn't feel them	O	O	O	O	O	O
I criticized myself for having irrational or inappropriate emotions	O	O	O	O	O	O
I believed some of my thoughts are abnormal or bad and I shouldn't think that way	O	O	O	O	O	O
I told myself that I shouldn't be feeling the way I'm feeling	O	O	O	O	O	O
I told myself I shouldn't be thinking the way I was thinking	O	O	O	O	O	O

FUSION

IN THE LAST TWO WEEKS…	Never TRUE	Rarely TRUE	Occasionally TRUE	Often TRUE	Very Often TRUE	Always TRUE
Negative thoughts and feelings tended to stick with me for a long time.	O	O	O	O	O	O
Distressing thoughts tended to spin around in my mind like a broken record.	O	O	O	O	O	O

It was very easy to get trapped into unwanted thoughts and feelings.	O	O	O	O	O	O
When I had negative thoughts or feelings it was very hard to see past them.	O	O	O	O	O	O
When something bad happened it was hard for me to stop thinking about it.	O	O	O	O	O	O

LACK OF CONTACT WITH VALUES

IN THE LAST TWO WEEKS…	**Never TRUE**	**Rarely TRUE**	**Occasionally TRUE**	**Often TRUE**	**Very Often TRUE**	**Always TRUE**
My priorities and values often fell by the wayside in my day to day life	O	O	O	O	O	O
When life got hectic, I often lost touch with the things I value	O	O	O	O	O	O
The things that I value the most often fell off my priority list completely	O	O	O	O	O	O
I didn't usually have time to focus on the things that are really important to me	O	O	O	O	O	O
When times got tough, it was easy to forget about what I truly value	O	O	O	O	O	O

INACTION

IN THE LAST TWO WEEKS…	**Never TRUE**	**Rarely TRUE**	**Occasionally TRUE**	**Often TRUE**	**Very Often TRUE**	**Always TRUE**
Negative feelings often trapped me in inaction	O	O	O	O	O	O
Negative feelings easily stalled out my plans	O	O	O	O	O	O
Getting upset left me stuck and inactive	O	O	O	O	O	O

Negative experiences derailed me from what's really important	O	O	O	O	O	O
Unpleasant thoughts and feelings easily overwhelmed my efforts to deepen my life	O	O	O	O	O	O

PERMISSION FOR USE: We developed the MPFI scales to be freely available for research and clinical use. No further permission is required beyond this form and the authors will not generate study-specific permission letters.

SCORING:
Subscales – To score the MPFI subscales, you assign responses point values from 1 to 6 (left to right as presented above) and then average the responses across the items of each scale so that higher scores reflect higher levels of the dimension being assessed by each set of items.

Global Composites – The averages of the 6 flexibility subscales can be averaged to create a composite representing global flexibility. Similarly, the averages of the 6 inflexibility subscales can be averaged to create a global inflexibility composite.

Shorter Global Composites – The first two items of each of the flexibility subscales can be averaged to create a shorter 12-item global flexibility composite. Similarly, the first 2 items of each of the inflexibility subscales can be averaged to create a shorter 12-item global inflexibility composite.

NOTE – When we present the scale to participants, we do not show them the titles of the subscales. Those were included above in the interest of clarity.

INTERPRETATION:
Normative Information – The research article developing the MPFI (Rolffs, Rogge, & Wilson, 2016; see citation below) presents basic normative data on its subscales (e.g., means and standard deviations by gender). That information will help to place individual scores into a larger context.

Reliable Change – The article also presents Minimal Detectible Change (MDC_{95}; Stratford, Finch, et al., 1996) estimates for each subscale and for the global composites. These MDC_{95} estimates tell researchers and clinicians how many points an individual would need to change on each scale between assessments for that change to be statistically significant. Thus, these MDC_{95} estimates allow ACT researchers and clinicians to identify clinically significant (i.e., reliable) change groups as suggested by Jacobson and Truax (1991).

Online Interpretative Profiles – The research team is currently working on developing algorithms to create standardized flexibility/inflexibility profiles for use in clinical settings. Although use of the MPFI will remain open and free of any charges, these profiles will be available for small fees from a secure website (to cover the costs of their development and ongoing validation). Please email Dr. Rogge at rogge@psych.rochester.edu if you wish to be informed when those additional online clinical tools become available.

CITATION: If you are using this scale, then you should cite the research article validating it as follows:

Rolffs, J. L., Rogge, R. D., & Wilson, K. G. (2016). Disentangling Components of Flexibility via the Hexaflex Model Development and Validation of the Multidimensional Psychological Flexibility Inventory (MPFI). *Assessment*, 1073191116645905.

Psychological Well-being (42 items)

This survey accompanies a measure in the SPARQTools.org Measuring Mobility toolkit, which provides practitioners curated instruments for assessing mobility from poverty and tools for selecting the most appropriate measures for their programs.To get a copy of this document in your preferred format, go to "File" and then "Download as" in the toolbar menu.

Age: Adult
Duration: 6-8 minutes
Reading Level: 6th to 8th grade
Number of items: 42
Answer Format: 1 = strongly agree; 2 = somewhat agree; 3 = a little agree; 4 = neither agree or disagree; 5 = a little disagree; 6 = somewhat disagree; 7 = strongly disagree.

Scoring:
The Autonomy subscale items are Q1, Q13, Q24, Q35, Q41, Q10, and Q21.The Environmental Mastery subscale items are Q3, Q15, Q26, Q36, Q42, Q12, and Q23. The Personal Growth subscale items are Q5, Q17, Q28, Q37, Q2, Q14, and Q25. The Positive Relations with Others subscale items are Q7 , Q18, Q30, Q38, Q4 , Q16, and Q27. The Purpose in Life subscale items are Q9, Q20, Q32, Q39, Q6, Q29, and Q33. The Self-Acceptance subscale items are Q11, Q22, Q34, Q40, Q8, Q19, and Q31.

Q1, Q2, Q3, Q4, Q6, Q7, Q11, Q13, Q17, Q20, Q21, Q22, Q23, Q27, Q29, Q31, Q35, Q36, Q37, Q38, and Q40 should be reverse-scored. Reverse-scored items are worded in the opposite direction of what the scale is measuring. The formula for reverse-scoring an item is:

((Number of scale points) + 1) - (Respondent's answer)

For example, Q7 is a 7-point scale. If a respondent answered *3* on Q7, you would re-code their answer as: (7 + 1) - 3 = 5.

In other words, you would enter a *5* for this respondents' answer to Q7.

To calculate subscale scores for each participant, sum respondents' answers to each subscale's items.

Sources:
Ryff, C., Almeida, D. M., Ayanian, J. S., Carr, D. S., Cleary, P. D., Coe, C., … Williams, D. (2010). *National Survey of Midlife Development in the United States (MIDUS II), 2004-2006: Documentation of psychosocial constructs and*

composite variables in MIDUS II Project 1. Ann Arbor, MI: Inter-university Consortium for Political and Social Research.

Ryff, C. D. (1989). Happiness is everything, or is it? Explorations on the meaning of psychological well-being. *Journal of Personality and Social Psychology, 57*(6), 1069-1081.

Instructions: Circle one response below each statement to indicate how much you agree or disagree.

1. “I am not afraid to voice my opinions, even when they are in opposition to the opinions of most people.”

Strongly agree	Somewhat agree	A little agree	Neither agree nor disagree	A little disagree	Somewhat disagree	Strongly disagree

2. “For me, life has been a continuous process of learning, changing, and growth.”

Strongly agree	Somewhat agree	A little agree	Neither agree nor disagree	A little disagree	Somewhat disagree	Strongly disagree

3. “In general, I feel I am in charge of the situation in which I live.”

Strongly agree	Somewhat agree	A little agree	Neither agree nor disagree	A little disagree	Somewhat disagree	Strongly disagree

4. “People would describe me as a giving person, willing to share my time with others.”

Strongly agree	Somewhat agree	A little agree	Neither agree nor disagree	A little disagree	Somewhat disagree	Strongly disagree

5. “I am not interested in activities that will expand my horizons.”

Strongly agree	Somewhat agree	A little agree	Neither agree nor disagree	A little disagree	Somewhat disagree	Strongly disagree

6. “I enjoy making plans for the future and working to make them a reality.”

Strongly agree	Somewhat agree	A little agree	Neither agree nor disagree	A little disagree	Somewhat disagree	Strongly disagree

7. “Most people see me as loving and affectionate.”

Strongly agree	Somewhat agree	A little agree	Neither agree nor disagree	A little disagree	Somewhat disagree	Strongly disagree

8. “In many ways I feel disappointed about my achievements in life.”

Strongly agree	Somewhat agree	A little agree	Neither agree nor disagree	A little disagree	Somewhat disagree	Strongly disagree

9. “I live life one day at a time and don't really think about the future.”

Strongly agree	Somewhat agree	A little agree	Neither agree nor disagree	A little disagree	Somewhat disagree	Strongly disagree

10. “I tend to worry about what other people think of me.”

Strongly agree	Somewhat agree	A little agree	Neither agree nor disagree	A little disagree	Somewhat disagree	Strongly disagree

11. “When I look at the story of my life, I am pleased with how things have turned out.”

Strongly agree	Somewhat agree	A little agree	Neither agree nor disagree	A little disagree	Somewhat disagree	Strongly disagree

12. “I have difficulty arranging my life in a way that is satisfying to me.”

Strongly agree	Somewhat agree	A little agree	Neither agree nor disagree	A little disagree	Somewhat disagree	Strongly disagree

13. “My decisions are not usually influenced by what everyone else is doing.”

Strongly agree	Somewhat agree	A little agree	Neither agree nor disagree	A little disagree	Somewhat disagree	Strongly disagree

14. “I gave up trying to make big improvements or changes in my life a long time ago.”

Strongly agree	Somewhat agree	A little agree	Neither agree nor disagree	A little disagree	Somewhat disagree	Strongly disagree

15. “The demands of everyday life often get me down.”

Strongly agree	Somewhat agree	A little agree	Neither agree nor disagree	A little disagree	Somewhat disagree	Strongly disagree

16. “I have not experienced many warm and trusting relationships with others.”

Strongly agree	Somewhat agree	A little agree	Neither agree nor disagree	A little disagree	Somewhat disagree	Strongly disagree

17. “I think it is important to have new experiences that challenge how you think about yourself and the world.”

Strongly agree	Somewhat agree	A little agree	Neither agree nor disagree	A little disagree	Somewhat disagree	Strongly disagree

18. “Maintaining close relationships has been difficult and frustrating for me.”

Strongly agree	Somewhat agree	A little agree	Neither agree nor disagree	A little disagree	Somewhat disagree	Strongly disagree

19. “My attitude about myself is probably not as positive as most people feel about themselves.”

Strongly agree	Somewhat agree	A little agree	Neither agree nor disagree	A little disagree	Somewhat disagree	Strongly disagree

20. “I have a sense of direction and purpose in life.”

Strongly agree	Somewhat agree	A little agree	Neither agree nor disagree	A little disagree	Somewhat disagree	Strongly disagree

21. “I judge myself by what I think is important, not by the values of what others think is important.”

Strongly agree	Somewhat agree	A little agree	Neither agree nor disagree	A little disagree	Somewhat disagree	Strongly disagree

22. “In general, I feel confident and positive about myself.”

Strongly agree	Somewhat agree	A little agree	Neither agree nor disagree	A little disagree	Somewhat disagree	Strongly disagree

23. “I have been able to build a living environment and a lifestyle for myself that is much to my liking.”

Strongly agree	Somewhat agree	A little agree	Neither agree nor disagree	A little disagree	Somewhat disagree	Strongly disagree

24. “I tend to be influenced by people with strong opinions.”

Strongly agree	Somewhat agree	A little agree	Neither agree nor disagree	A little disagree	Somewhat disagree	Strongly disagree

25. “I do not enjoy being in new situations that require me to change my old familiar ways of doing things.”

Strongly agree	Somewhat agree	A little agree	Neither agree nor disagree	A little disagree	Somewhat disagree	Strongly disagree

26. “I do not fit very well with the people and the community around me.”

Strongly agree	Somewhat agree	A little agree	Neither agree nor disagree	A little disagree	Somewhat disagree	Strongly disagree

27. “I know that I can trust my friends, and they know they can trust me.”

Strongly agree	Somewhat agree	A little agree	Neither agree nor disagree	A little disagree	Somewhat disagree	Strongly disagree

28. “When I think about it, I haven’t really improved much as a person over the years.”

Strongly agree	Somewhat agree	A little agree	Neither agree nor disagree	A little disagree	Somewhat disagree	Strongly disagree

29. “Some people wander aimlessly through life, but I am not one of them.”

Strongly agree	Somewhat agree	A little agree	Neither agree nor disagree	A little disagree	Somewhat disagree	Strongly disagree

30. “I often feel lonely because I have few close friends with whom to share my concerns.”

Strongly agree	Somewhat agree	A little agree	Neither agree nor disagree	A little disagree	Somewhat disagree	Strongly disagree

31. “When I compare myself to friends and acquaintances, it makes me feel good about who I am.”

Strongly agree	Somewhat agree	A little agree	Neither agree nor disagree	A little disagree	Somewhat disagree	Strongly disagree

32. “I don’t have a good sense of what it is I’m trying to accomplish in life.”

Strongly agree	Somewhat agree	A little agree	Neither agree nor disagree	A little disagree	Somewhat disagree	Strongly disagree

33. “I sometimes feel as if I've done all there is to do in life.”

Strongly agree	Somewhat agree	A little agree	Neither agree nor disagree	A little disagree	Somewhat disagree	Strongly disagree

34. “I feel like many of the people I know have gotten more out of life than I have.”

Strongly agree	Somewhat agree	A little agree	Neither agree nor disagree	A little disagree	Somewhat disagree	Strongly disagree

35. “I have confidence in my opinions, even if they are contrary to the general consensus.”

Strongly agree	Somewhat agree	A little agree	Neither agree nor disagree	A little disagree	Somewhat disagree	Strongly disagree

36. “I am quite good at managing the many responsibilities of my daily life.”

Strongly agree	Somewhat agree	A little agree	Neither agree nor disagree	A little disagree	Somewhat disagree	Strongly disagree

37. “I have the sense that I have developed a lot as a person over time.”

Strongly agree	Somewhat agree	A little agree	Neither agree nor disagree	A little disagree	Somewhat disagree	Strongly disagree

38. “I enjoy personal and mutual conversations with family members and friends.”

Strongly agree	Somewhat agree	A little agree	Neither agree nor disagree	A little disagree	Somewhat disagree	Strongly disagree

39. “My daily activities often seem trivial and unimportant to me.”

Strongly agree	Somewhat agree	A little agree	Neither agree nor disagree	A little disagree	Somewhat disagree	Strongly disagree

40. “I like most parts of my personality.”

Strongly agree	Somewhat agree	A little agree	Neither agree nor disagree	A little disagree	Somewhat disagree	Strongly disagree

41. “It’s difficult for me to voice my own opinions on controversial matters.”

Strongly agree	Somewhat agree	A little agree	Neither agree nor disagree	A little disagree	Somewhat disagree	Strongly disagree

42. “I often feel overwhelmed by my responsibilities.”

Strongly agree	Somewhat agree	A little agree	Neither agree nor disagree	A little disagree	Somewhat disagree	Strongly disagree

Validity Questions for Survey Research

V-1. Choose the sum of three plus three

1 = “6”

2 = “3”

3 = “4”

4 =”2”

V-2. Please indicate choice "d" on this item.

1 = “a”

2 = “b”

3 = “c”

4 = “d”

V-3. Please leave this item blank

1 = “a”

2 = “b”

3 = “c”

4 = “d”

V-4. There are many reasons for completing a research study, not the least of which is receiving needed extra credit. The award of your credit is already assured. At times, however, participants respond too quickly or do not read questions fully before responding, which results in data that confuses the scientific research. Do you feel that the responses that you have given were your best effort to respond accurately?

1 = “YES”

2 = “NO”

CES-D

Circle the number for each statement which best describes how often you felt or behaved this way during the past week.

0 - Rarely or none of the time (less than 1 day)

1 - Some or little of the time (1-2 days)

2 - Occasionally or a moderate amount of time (3-4 days)

3 - Most or all of the time (5-7 days)

During the past week:

1. I was bothered by the things

that don't usually bother me.

0 1 2 3

2. I did not feel like eating; my appetite was poor.

0 1 2 3

3. I felt that I could not shake off the blues even with help from my family or friends.

0 1 2 3

4. I felt that I was just as good asother people.

0 1 2 3

5. I had trouble keeping my mind on what I was doing.

0 1 2 3

6. I felt depressed.

0 1 2 3

7. I felt that everything I did was an effort.

0 1 2 3

8. I felt hopeful about the future.

0 1 2 3

9. I thought my life had been a failure.

0 1 2 3

10. I felt fearful.

0 1 2 3

11. My sleep was restless.

0 1 2 3

12. I was happy.

0 1 2 3

13. I talked less than usual.

0 1 2 3

14. I felt lonely.

0 1 2 3

15. People were unfriendly.

0 1 2 3

16. I enjoyed life.

0 1 2 3

17. I had crying spells.

0 1 2 3

18. I felt sad.

0 1 2 3

19. I felt that people disliked me.

0 1 2 3

20. I could not “get going.”

0 1 2 3

Radloff, L. S. (1977). The CES-D scale: A self-report depression scale for research in the general population. *Center for Epidemiologic Studies National Institute of Mental Health, 1*(3), 385-401. https://doi.org/10.1177/014662167700100306

APPENDIX B:

INSTITUTIONAL REVIEW BOARD APPROVAL

CALIFORNIA STATE UNIVERSITY SAN BERNARDINO

Ashley Wicochea <006810993@coyote.csusb.edu>

IRB-FY2022-23 - Renewal: IRB Protocol Renewal and Continuing Review Letter

1 message

do-not-reply@cayuse.com <do-not-reply@cayuse.com> Mon, Sep 12, 2022 at 10:59 AM
To: 006810993@coyote.csusb.edu, MLewin@csusb.edu

CALIFORNIA STATE UNIVERSITY
SAN BERNARDINO

September 12, 2022

CSUSB INSTITUTIONAL REVIEW BOARD
Protocol Renewal
IRB-FY2022-23
Status: Exempt

Michael Lewin Ashley Wicochea
CSBS - Psychology, Users loaded with unmatched Organization affiliation.
California State University, San Bernardino
5500 University Parkway
San Bernardino, California 92407

Dear Michael Lewin Ashley Wicochea:

Your protocol renewal to use human subjects, titled "Complicated Grief, Depression and Psychological Well-being: The Role of Psychological Inflexibility and Social Support" has been reviewed and approved by the Chair of the Institutional Review Board (IRB).

Your renewal is approved as of September 12, 2022. Your study will require an annual check-in report on -- and you can use the renewal form to complete your annual report. Please note the Cayuse IRB system will notify you when your protocol comes up for renewal at 90, 60, and 30 days before the protocol expires. If you are no longer conducting the study you can submit a study closure through the Cayuse IRB system.

Important Notice: This approval notice does not replace any departmental or additional campus approvals which may be required including access to CSUSB campus facilities and affiliate campuses due to the COVID-19 pandemic. Visit the Office of Academic Research website for more information at https://www.csusb.edu/academic-research.

You are required to notify the IRB of the following by submitting the appropriate form (modification, unanticipated/adverse event, renewal, study closure) through the online Cayuse IRB Submission System.

1. If you need to make any changes/modifications to your protocol submit a modification form as the IRB must review all changes before implementing in your study to ensure the degree of risk has not changed.
2. If any unanticipated adverse events are experienced by subjects during your research study or project.
3. If your study has not been completed submit a renewal to the IRB.
4. If you are no longer conducting the study or project submit a study closure.

You are required to keep copies of the informed consent forms and data for at least three years.

If you have any questions regarding the IRB decision, please contact Michael Gillespie, Research Compliance Officer. Mr. Gillespie can be reached by phone at (909) 537-7588, by fax at (909) 537-7028, or by email at mgillesp@csusb.edu.

Please include your application identification number (above) in all correspondence.

Best of luck with your research.

Sincerely,

King-To Yeung

King-To Yeung, Ph.D., IRB Chair
CSUSB Institutional Review Board

KY/MG

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