

**When Goodbyes Matter: The Conditional Relationship Between Final Conversations and
Symptoms of Depression**

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The data is available from the first author upon request.

Abstract

An online survey of 528 people who lost someone close to them in the last 5 years was used to test associations between having final conversations (FCs) and depression. The direct effect was nonsignificant, but there were two significant moderation effects. Time since bereavement moderated the FC-depression relationship; there was a negative relationship between FCs and depression shortly following bereavement, but no relationship after more time had passed. The age of the deceased also moderated this relationship; there was a negative relationship between FCs and depression when the deceased was older, but no relationship when the deceased was younger.

Keywords: final conversations, depression, bereavement, grief

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Bereavement, which **occurs when one loses** a loved one through death, is a natural and normal part of life. Yet, reactions to bereavement vary widely. The intensity and duration of grief responses vary among individuals, with some experiencing prolonged grief (Mason et al., 2020). Bereavement **is related to an increased mortality risk** shortly following the loss, increased reports of physical symptoms such as headaches and chest pain, and increased rates of psychological symptoms such as depression, anxiety, and insomnia (Stroebe et al., 2007). Understanding the factors that might alleviate or exacerbate these bereavement outcomes is important for informing the work of medical professionals and counselors who support bereaved individuals and families. Scholars have identified several risk and protective factors that influence bereavement outcomes (Mason et al., 2020), and communication research on final conversations (FCs) may also inform this work (Keeley, 2007). **FCs are interactions that occur between a dying person and their loved ones when both parties are aware that the person is dying (Keeley & Yingling, 2007).** Having FCs with a loved one before they die may help individuals cope with bereavement (Generous & Keeley, 2021). Drawing on the risk and protective factors proposed in the integrative risk factor framework (Stroebe et al., 2006), FCs are explored as a protective factor for depression as a bereavement outcome.

The integrative risk factor framework proposes several risk and protective factors that help explain the diversity of reactions to bereavement. In the model, the term *risk factors* refers to both risk and protective factors, and *bereavement outcomes* refers to the responses to and effects of bereavement. In the integrative risk factor framework, the death of a loved one is defined as a stressor that influences bereavement outcomes such as the intensity of grief

reactions, mental and physical health, and social engagement (Stroebe et al., 2006).

Characteristics of the loss experience such as the cause of death, the degree of unexpectedness, the type of relationship with the deceased (i.e., parent, child), and the quality of the relationship are referred to as loss-oriented stressors and are considered risk/protective factors that influence bereavement outcomes. This model also includes interpersonal risk factors that derive from the social/cultural environment and interactions with others, and intrapersonal risk factors that derive from personal characteristics (Stroebe et al., 2006). Loss-oriented, interpersonal, and intrapersonal risk/protective factors have been shown to influence diverse bereavement outcomes including depressive symptoms (van der Houwen et al., 2010). In this study, we consider FCs as a loss-oriented risk/**protective** factor that might further explain bereavement outcomes.

Having FCs might aid bereaved individuals in coping with loss. These interactions generally consist of verbal and nonverbal expressions of love, statements confirming individual and relational identity, messages of spirituality or faith, talk about illness or dying, and efforts to address difficult relational issues (Keeley, 2007). We propose FCs as a loss-oriented risk/protective factor in the integrative risk factor framework because having FCs may buffer individuals against certain bereavement outcomes, while failing to have FCs may worsen them. Distress related to having unfinished relational business at the time of loss is related to more severe grief reactions (Klingspon et al., 2015), whereas acceptance has been shown to reduce depressive symptoms following the death of a loved one (Metzger & Gray, 2008). Bereaved individuals have reported that having FCs helped them cope with bereavement by confirming their belief in a peaceful afterlife, giving them a sense of closure and acceptance, allowing them to reminisce and reaffirm the relationship, reminding them that their loved one was no longer

suffering, and giving them guidance on moving forward in their lives (Generous & Keeley, 2021).

In this study we focus on depression as a bereavement outcome. Depression is a common experience in bereavement (Stroebe et al., 2007), and although individuals with severe grief reactions often experience deteriorated mental health (Ott, 2010), bereavement related depression is distinct from **prolonged** grief (Tsai et al., 2018). In the context of bereavement, having FCs may reduce depressive symptoms by creating a sense of closure and acceptance. Yamashita et al. (2017) found that individuals who had left something unsaid, unresolved, or unfinished in their relationship experienced higher depression post bereavement. Similarly, feeling lack of preparedness for the death was positively related to depressive symptoms four and nine months after bereavement (Barry et al., 2002). Conversely, Metzger and Gray (2008) found that pre-loss communication that promoted acceptance was related with less depression following bereavement. Thus, drawing from the work on FCs and the integrative risk factor framework, we propose the following hypothesis:

H1: Individuals who had final conversations with the deceased will report lower symptoms of depression than those who did not have a final conversation.

Other contextual and interpersonal factors may also influence this relationship. Shah and Meeks (2012) have called for the examination of mediating and moderating variables that might further explain relationships between personal, interpersonal, and contextual factors and bereavement outcomes. Answering this call, we examine three factors that might moderate the FCs-depression relationship: the age of the deceased, time since death, and social support. **Grief** reactions vary in intensity based on the age of the deceased (Burke & Neimeyer, 2013), and it is likely that FCs may have differential effects on bereavement outcomes based on the age of the

deceased. Normal grief reactions also diminish with time. Thus, FCs may have stronger effects shortly following bereavement when grief is strongest. Finally, social support has been shown to reduce grief reactions including depression (Burke et al., 2010), and FCs might have differing effects for individuals who feel more or less supported by family and friends. Thus, we propose the following:

H2: The final conversation-depression relationship be moderated by (a) the time since bereavement, (b) the age of the deceased, and (c) social support.

Methods

Participants & Procedure

Data for this study were collected through [Amazon's crowdsourcing workforce, Mechanical Turk \(MTurk\)](#). After receiving approval from the [Institutional Review Board](#) and consent from participants¹, we conducted a screening survey of 2278 US [MTurk](#) workers to identify those who qualified to participate in the study. Only those who reported that someone very close to them had died in the last five years were invited to participate in the study ($N = 841$). Participants received \$0.12 for completing the screening survey and \$2.00 for completing the study survey. In total, 606 [MTurk](#) workers completed the study survey. Several cases were removed for low-quality responses. Seven responses were removed because they completed less than 25% of the questions or because they completed the survey in 25% less than the median completion time for the sample. Forty-four cases were removed because they failed a bot detection test, and 27 cases were removed because one or more responses regarding the ages of the participant and the deceased, the relationship with the deceased, the cause of death, or

¹ Participants provided consent by selecting "yes" in response to the question/statement, "I consent to participate in this study" which appeared immediately following the consent information and was the first question in the Qualtrics survey. Participants who selected "no" were automatically routed out of the survey.

anticipation of death did not make sense together (e.g., a 28-year-old participant whose parent died in the last 5 years at age 25; a 1-year-old who died of dementia; a homicide cause of death that was anticipated for over a week). The final sample consisted of 528 cases.

Participants were 19-58 years old ($M = 38.88$, $SD = 11.75$), and mostly White (76.1%) with the remaining participants identifying as Black (9.3%), Asian (5.5%), Hispanic/Latino (4.5%), American Indian/Alaskan native (.6%), Middle Eastern (.2%), and multiracial/other (3.4%). Gender within the sample was relatively evenly divided between male (49.2%) and female (48.5%), with 1.9% identifying as non-binary. Participants reported on the loss of their parent (32.0%), grandparent (23.7%), aunt/uncle or cousin (13.6%), spouse/partner (4.7%), sibling (6.6%), child (2.3%), close friend (13.6%), or other close relationship (3.4%). The deceased were between 5-100 years of age ($M = 63.28$, $SD = 20.37$). Most participants had lost their loved one within one (35.8%) or two years (23.1%) of completing the study. The remaining participants had lost their loved one three (16.9%), four (10.8%), or five (13.4%) years prior to the study.

Measures

To determine whether they had a FCs, participants were asked, “Were you able to have a conversation with your loved one before they died during which both of you knew that your loved one was likely to die soon?” (36.3% yes, 63.8% no). Depression was measured using the PROMIS-Depression short form ($\alpha = .94$; Pilkonis et al., 2011). This 7-item scale assesses feelings of depression over the last two weeks and includes items such as “I felt unhappy” and “I felt depressed” with Likert responses ranging from 1 = *never* and 5 = *always* ($M = 2.48$, $SD = 1.00$). In the analyses, we used a natural log transformation of this variable because it was slightly positively skewed. Age of the deceased was assessed with the question, “Approximately,

what was the age of your loved one when they died?” with responses ranging from *1 year old or less* to *100 years old or older* (measured in one-year increments). Time since death was assessed with the question, “Approximately how long ago did your parent, sibling, child, spouse/romantic partner, or someone else you were very close to die?” with responses ranging from 1 = *1 year or less* and 5 = *5 years ago* ($M = 2.43$, $SD = 1.41$). Social support was measured using a single question, “To what degree do you feel supported by the people in your life?” Responses ranged from 1 = *I do not feel supported* to 3 = *I feel very supported* ($M = 2.37$, $SD = 0.64$).

Results

Prior to conducting the hypothesis tests, a power analysis was conducted in SAS Studio 3.8 with the PROC POWER module. In a multiple regression model with three variables, based on a sample of $n = 528$, the power to detect a small effect size of $R^2 = .01$ is .37. The power to detect a medium sized effect of $R^2 = .09$ is in excess of .99. With a sample of this size, the smallest effect that could be detected at power = .80 is $R^2 = .03$.

Tests of hypothesis 1 (those who had FCs would have lower symptoms of depression than those who did not) and hypothesis 2, testing potential moderators of the FCs-depression association, were conducted using the PROCESS module (ver. 3.4.1) in SPSS 26. PROCESS is a regression-based path modeling utility that was used to test the moderators. Specifically, three models were tested, each with symptoms of depression specified as the dependent variable and having FCs, dummy coded as 1 = yes, 2 = no, as the independent variable. Models 1-3 included time since death, **age of the deceased**, and perceptions of social support, respectively, as potential moderating variables. Following procedures outlined by Aiken and West (1991) all predictor variables were mean centered prior to testing each model. Also, because tests of statistical interactions in nonexperimental settings are notoriously underpowered (McClelland & Judd,

1993), we elected to deconstruct any interaction effect post hoc with an associated p value of $< .10$. Results from these three models appear in Table 1.

As evident from the top of Table 1, the effect of having FCs was not statistically significant. In effect, people who had FCs with their loved one had symptoms of depression ($M = 0.74$, $SD = 0.43$) that were equivalent to those who did not have FCs ($M = 0.84$, $SD = 0.44$), disconfirming hypothesis 1. However, there was a significant effect for time since death ($b = .10$, $p = .047$) such that symptoms of depression were higher as a function of greater time since death. However, this simple effect was qualified by a statistically significant interaction effect with having FCs ($b = -.06$, $p = .039$). As the plot of conditional effects at the top of Figure 1 shows, among those who had FCs, symptoms of depression started out lower than those who did not have FCs. However, symptoms of depression appear to increase among those participants who had experienced the death farthest from the present. In contrast, the association between symptoms of depression and time since death was negative for those who did not have a conversation (i.e., symptoms of depression were lowest among those who experienced the death farthest from the present).

In the middle of Table 1, the results show that the deceased's age was significantly and negatively associated with symptoms of depression ($b = -.01$, $p = .006$). In other words, symptoms of depression were highest when the deceased was relatively young. There was also a marginal statistical interaction with having FCs ($b = .004$, $p = .065$). Conditional effects to illustrate this interaction appear at the bottom of Figure 1. Symptoms of depression **were lower for people who had FCs than for those who did not have FCs when the deceased was older, but there was little difference in symptoms of depression when the deceased was young.**

The bottom of Table 1 shows that perceived social support was negatively associated with participants' symptoms of depression ($b = -.26, p = .010$). Participants with greater perceived social support reported symptoms of depression that were lower than those who perceived less social support. There was no significant interaction between having FCs and perceptions of social support in predicting symptoms of depression.

Discussion

The first hypothesis of this study, predicting that people who had FCs would report lower symptoms of depression was not supported. However, two of the three tests of moderation were significant. This suggests a more nuanced relationship between FCs and depression in bereavement. Participants in qualitative research about FCs have reported that having FCs helps them cope with loss (Generous & Keeley, 2021). These moderation effects shed light on the contextual factors that qualify the effect of FCs on depression as a bereavement outcome.

We found a significant moderation effect for the time since death. Having FCs was significantly related to lower depression for those who had lost their loved one more recently, however, there was no significant effect of FCs on symptoms of depression for those who had lost their loved one less recently. This finding reflects a sort of "regression to the mean" effect. Although having FCs seems to help reduce depression shortly after the loss, over time, this effect appears to wear off as bereaved individuals move toward mean levels of depression. Although having FCs may not have long lasting effects, this finding demonstrates the value of FCs in helping bereaved individuals cope with the loss shortly after the death. Considering that, for most people, grief reactions are most intense in the time immediately following a loss (Howarth, 2011), FCs may provide an important resource for managing grief at the most critical point in the grieving process.

Age of the deceased was also a significant moderator of the FCs-depression relationship. Having FCs seemed to have little effect in reducing depression when the deceased was very young, but they were related to lower levels of depression when the deceased was older. This suggests that FCs are most important in the grieving process for normative losses (e.g., death of an older adult) rather than for off-time losses (e.g., death of a young adult). Longitudinal research shows that negative grief reactions are more common when the person who died was younger (Leopold & Lechner, 2015), and having FCs may not be able to ameliorate the pain of a life cut short. However, our results show that having FCs was related with significantly lower depression when the deceased was older. In these cases, having FCs may play an important role in providing closure and completion to the relationship, thus, enabling the bereaved individual to better process their grief.

These results have implications for literature on FCs and bereavement. This study suggests that communication before death can serve as a loss-oriented protective factor in the integrative risk factor framework (Stroebe et al., 2006), particularly for the death of older adults. Years of qualitative work have established FCs as a resource for individuals and families during bereavement (Generous & Keeley, 2021; Keeley & Yingling, 2007). The results of this study support and extend this body of research by revealing under which conditions FCs will be most beneficial. The cross-sectional nature of this data limits claims of causality, and future research should explore these effects longitudinally. **This sample did not include older adults but rather focused on participants ages 19-58. Future research should investigate the role of FCs for older adults who often experience an accumulation of bereavements of many types including friends, siblings, and romantic partners.** Further, because this sample was predominately White, future work should focus on FCs in minority and underrepresented populations. Finally, in this

investigation participants were simply asked if they had FCs. It would be helpful for future research to explore the content of these conversations as well as survivors' satisfaction with them to better understand the influence of FCs on bereavement outcomes.

In conclusion, FCs are a potentially valuable resource in helping individuals cope with the death of a close loved one. Specifically, having FCs appears to be most efficacious shortly following the death, and is more beneficial for those whose loved ones die at a normative time. In these contexts, FCs may help reduce the negative effects of grief and improve emotional health following a loss. This research highlights the value of communication at the end of life. Although these conversations can be emotional and sometimes difficult, **and hence may be avoided**, engaging in FCs with a dying loved one may help create a sense of closure and aid individuals and families in processing their grief and adjusting to life without their loved one.

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