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Moderators in the Relationship between Social Contact and Psychological Distress among Widowed Adults

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Abstract

Objectives—This study examines: (1) the effect of widowed persons' frequency of contact with friends and relatives on their depressive and grief symptoms six months following spousal loss and (2) the extent to which the effects of social contact are contingent upon the degree of emotional support received from these relationships and the congruence between widowed persons' preferred and actual levels of social contact.

Method—Analyses are based on the Changing Lives of Older Couples (CLOC) study, a prospective study of a two-stage area probability sample of 1,532 married men and women aged 65 or older. Depressive and grief symptoms 6 months after spousal loss were regressed on social contact, support, and congruence between preferred and actual social contact.

Results—Frequency of contact did not have a significant influence on psychological distress when contextual factors are controlled. Social support and the incongruence between preferred and actual social contact were significantly associated with decreased psychological distress for several outcomes. As for the moderating effects of social support and incongruence on the link between social contact and distress, those who had high social contact and high social support experienced less anger and fewer intrusive thoughts than their counterparts; and those who had low social contact but preferred high social contact experienced greater anger.

Conclusion—The findings highlight the importance of understanding the quality of widowed persons' relationships as well as the congruence between their preferred and actual social contact.

Keywords

widowhood; social support; social isolation; grief

Widowhood is an extremely stressful life event that not only creates psychological distress but also brings significant social changes to the surviving spouse (Carr & Utz, 2002; Heinemann & Evans, 1990; M. S. Stroebe, Hansson, Stroebe, & Schut, 2001). When widowed, surviving spouses lose one of their most important sources of social support. In consequence, widowed individuals must rely on other relationships for emotional and instrumental support. Although much research has attested to the problem of social isolation following bereavement (Antonucci et al., 2002; Berardo & Berardo, 2000), few studies have examined the extent to which the impact of social contact on widowed persons' mental health is moderated by other contextual factors.

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The current study builds on previous research by examining two questions. First, how does widowed persons' frequency of contact with friends and relatives affect their depressive and grief symptoms six months following spousal loss? Second, are the effects of social contact with friends and relatives on mental health contingent upon contextual factors such as: 1) the degree of emotional support received from these relationships and 2) the congruence between widowed persons' preferred and actual levels of social contact? This study includes both general (e.g., depressive symptoms) and loss-related (e.g., grief symptoms) psychological distress in order to examine whether these outcomes respond differently to three factors: amount of social contact, levels of social support, and congruence between preferred and actual social contact. Because depressive symptoms and grief symptoms can be distinct (Prigerson, 1995), it may be that different configurations of social contact and social support are able to alleviate particular symptoms related to the loss of a spouse. If so, identifying these configurations can contribute to interventions that may diminish psychological distress within this vulnerable population. Our work seeks to address this promising line of research. In the following sections, we review relevant literature on these relationships and summarize our hypotheses.

Effects of Social Contact on Widowed Persons' Depressive and Grief Symptoms

One of the common assumptions that people hold about widowed older adults is that social engagement helps and that isolation kills (Heller, Thompson, Trueba, Hogg, & Vlachosweber, 1991). In fact, several studies have found that the frequency of contact with friends and other relatives is associated with better psychological and physical health among the widowed (Beckman, 1981; Silverstein & Bengtson, 1994). Clinical researchers have also found that widowed older adults who received social support interventions such as being matched with a peer who shared similar bereavement experiences or participating in self-help/support groups showed enhanced support satisfaction and increased positive affect (Silverman, 2004; Stewart, Craig, MacPherson, & Alexander, 2001).

However, a number of studies have reported contrary findings. For example, Heller and others (1991) found little evidence that interventions involving increased telephone contact with friendly staff and peers led to lower depression and loneliness. These findings are in line with earlier research indicating that widowed older adults often mention negative aspects of relationships with family members (Morgan, 1989; Talbott, 1990). In Zettel and Rook's (2004) study, although the authors did not examine the effect of frequency of social contact per se, findings suggest that widowed persons' revitalized social ties do not exert a significant influence on their well-being. Furthermore, Carstensen and Fremouw (1988) have pointed out that in an overcrowded environment such as nursing homes with high population density, social interactions can provoke negative feelings such as anxiety. Hence, previous research suggests that while social engagement may have a beneficial effect on older adults' well-being, such effects are equivocal and may depend on the context within which the social engagement occurs.

Moderating Effects of Contextual Factors

There are a number of contextual factors that may moderate the relationship between social contact and psychological distress. In this study, we focus on two such factors. One factor that may account for variations in the effect of social contact on widowed persons' psychological distress is the amount of emotional support provided by the members of their social network. In other words, the quality of their social relationships may play a key role in influencing the effect of social contact on widows' mental health. This perspective is undergirded by socioemotional selectivity theory which holds that the goal of social engagement in old age is to reap emotional fulfillment (Carstensen, 1991). Thus, the extent to which frequent social contacts with friends and relatives have a positive effect on

widowed persons' mental health may depend on the perceived level of emotional support from these relationships. More specifically, when widowed individuals experience high levels of support from their social network, frequent social contact may be associated with lower distress. However, when levels of support from the social network are low, frequent social contact may be more distressing than infrequent contact.

A second contextual factor that may influence the extent to which frequency of contact affects widowed persons' mental health is the congruence between their preferred and actual levels of social contact with friends and relatives. Some widowed people may experience congruence. To illustrate, a widow may prefer a large amount of social contact and actually have a large amount of social contact. Others may experience incongruence. For example, another widow may also prefer a large amount of social contact but actually have a small amount of social contact. Such differences in congruence vs. incongruence may play a moderating role in the relationship between social contact and distress. This perspective draws upon Higgins' (1987) self-discrepancy theory. His theory posits that extreme differences between individuals' ideal and real selves results in negative mental health outcomes such as disappointment, frustration, and depression. When applied to our research, self-discrepancy theory predicts that widowed persons who experience incongruence between their ideal social network and their real social network are likely to experience higher levels of depression and, perhaps, more symptoms of grief. On the one hand, if widowed persons are not interested in social interactions, greater social contact may do more harm than good with respect to mental health outcomes. A similar negative outcome may result if a widowed person is interested in greater social contact but experiences less contact than she/he would like. On the other hand, widowed individuals who perceive social connections as important and have a rich social support network are likely to experience greater psychological well-being.

In sum, we aim to examine two research questions with the following hypotheses. First, we examine the extent to which the frequency of contact with friends and relatives affects widowed persons' depressive and grief symptoms. We hypothesize that more frequent social contact with friends and relatives will be associated with fewer depressive and grief symptoms. Second, drawing upon Carstensen's (1991) socio-emotional selectivity theory and Higgins (1987) self-discrepancy theory, we examine whether the effect of social contact on psychological well-being is influenced by two contextual factors: the level of social support from friends and relatives and the congruence between widowed persons' preferred and actual levels of social contact. We hypothesize that those who report greater levels of support and those who experience a correspondence between preferred and actual level of social contact will have fewer symptoms of depression and grief. Further, we hypothesize that the positive effect of social contact on such symptoms will be stronger among those who receive greater support from friends and relatives and those whose actual and preferred levels of social contact are congruent.

The present study adds to the existing research on the influence of social relationships during widowhood in two important ways. One way in which it adds is by examining the influence of multiple social relationship measures (i.e., social contacts, social support, and congruence between preferred and actual level of social involvement). The second contribution is the inclusion of both depression and grief as two distinctly different kinds of psychological outcomes that are frequently experienced by widowed individuals.

Methods

Sample

The analyses are based on data from the Changing Lives of Older Couples (CLOC) Study, a prospective study of a two-stage area probability sample of 1,532 married men and women (Carr, Wortman, & Nesse, 2005). To be eligible for the study, respondents had to be English-speaking members of a married couple in which the husband was aged 65 or older. Baseline interviews were conducted from June 1987 through April 1988. Response rate was 65%, which is consistent with the response rate from other Detroit studies. After baseline interviews, those who lost their spouse were re-interviewed at six months (Wave 1), 18 months (Wave 2), and 48 months (Wave 3). Of the 319 participants who lost a spouse during the study, 86% (n=276) participated in at least one of the three follow-up interviews. The primary reasons for non-response were refusal to participate (38%) and ill health or death at follow-up (42%).

This paper uses an analytic sample of 209 widowed persons who were interviewed both at baseline and at the six-months following spousal death (i.e., Wave 1). The sample size is weighted to account for non-response and different probabilities of selection. Wave 1 data are used because depressive and grief symptoms are typically most acute during the first few months following widowhood (Bonnano, 2002). Our preliminary analysis also shows that depressive and grief symptoms six months following spousal loss are correlated with long-term psychological distress, although the pattern of changes in depressive and grief symptoms may differ across individuals. Table 1 shows the sample characteristics. The majority of the sample was female (72%) and White (85%) and the mean age of the sample was 73.50. Asians and Hispanic populations were not included in the dataset. The average length of education was 11.27.

Measures

Dependent variables—Depressive symptoms and six loss-related grief symptoms scales are used as dependent variables. *Depressive symptoms* (α= .81) at Wave 1 was assessed with a subset of nine items from the 20-item Center for Epidemiologic Studies Depression (CES-D) scale (Radloff, 1977). Respondents were asked to indicate how often they experienced each of nine symptoms in the week prior to interview. The nine symptoms were: (a) I felt depressed, (b) I felt everything I did was an effort, (c) My sleep was restless, (d) I felt lonely, (e) People are unfriendly, (f) I did not feel like eating, my appetite was poor, (g) I felt sad, (h) I felt that people disliked me, (i) I could not get “going.” Response categories were: hardly ever, some of the time, or most of the time. The scale is standardized, and higher scores reflect more depressive symptoms.

Grief symptoms are assessed with six scales which tap various aspects of widowed persons' psychological reactions to the loss of a spouse: *loss- related anxiety* (α = .71), *despair* (α = . 64), *shock* (α = .77), *anger* (α = .68), *yearning* (α = .75), and *intrusive thoughts* (α = .66). The items for these scales were drawn from widely used grief scales including the Bereavement Index (Jacobs, Kasl, & Ostfeld, 1986), Present Feelings About Loss (Singh & Raphael, 1981), and Texas Revised Inventory of Grief (Zisook, DeVaul, & Click, 1982). A complete listing of items in each scale and their response categories are presented in Table 1. Higher scores indicate higher levels of grief.

Independent variables—*Frequency of contact with friends and relatives* at Wave 1 (6-month follow-up) is assessed with two questions. The first question asked: “In a typical week, about how many times do you talk on the telephone with friends, neighbors or relatives?” Response categories ranged from 1= never or no phone to 5 = more than once a

day. The second question asked: “How often do you get together with friends, neighbors, or relatives and do things like go out together or visit in each other's homes?” Response categories ranged from 1 = never to 5 = more than once a week. The correlation between these two items was .23 ($p = .003$). The mean of these items was used as the main independent variable. The scale is standardized and higher scores represent more contact.

Moderating variables—*Social support from friends and relatives* at Wave 1 ($\alpha = .71$) was assessed with two questions: “On the whole, how much do your friends and relatives make you feel loved and cared for?” and “How much are they willing to listen when you need to talk about your worries or problems?” Response categories ranged from 1 = not at all to 5 = a great deal. The scale is standardized and higher scores indicate better support quality.

Congruence between preferred and actual level of social contact at Wave 1 is a dichotomous variable which assesses whether respondents' interest in social contact with friends and relatives matched their perceived levels of social contact following widowhood. Two questions were used to construct this variable. One question assessed the level of preferred contact: “Compared to when your (husband/wife) was alive, do you have more interest, less interest, or about the same amount of interest in having contact with relatives and friends?” The other question assessed the level of actual contact: “Since becoming widowed, do you have contact with your other relatives and friends more, less, or about the same as before?” When the responses to these questions did not match with each other (e.g., preferring to have more social contact vs. actually having less social contact), a code of 0 was given. If the responses matched (e.g., preferring more social contact and actually having more social contact), a code of 1 was given. Table 2 shows the cross-tabulation of these two variables. A total of 149 respondents (71.3%) of the analytic sample reported congruence and 60 respondents (28.7%) reported incongruence between actual and preferred level of social contact after spousal loss.

Control variables—We controlled for sociodemographic factors that may affect both widowed persons' capacity to engage in social activities and their mental health (Utz, Carr, Nesse, & Wortman, 2002). These factors included *age*, *gender* (1 = female, 0 = male), *education* (in years), *race* (1 = White, 0 = Black), and *number of children*.

Analytic Plan

We first conducted analyses to provide descriptive statistics of the sample (see Table 3). Next, we conducted a series of multivariate Ordinary Least Squares (OLS) regressions to test the main and moderating effects of our key variables. We began by examining the main effects of social contact and the contextual factors, while controlling for the demographic variables. We then explored the possibility that the effect of social contact on the depression and grief outcomes was influenced by the inclusion of the contextual factors. To do so, we compared one model in which we included only social contact and the control variables with a second model in which we added the two contextual factors. Subsequently, we conducted OLS regressions that examined the main effects of our key variables of interest and the moderating effects of the contextual variables.

Results

Main Effects of Social Contact and Contextual Factors

The first objective of this paper was to examine the extent to which the frequency of social contact with friends and relatives and the two contextual factors (i.e., social support and the congruence between preferred and actual contact) affect widowed persons' depressive and

grief symptoms six months after spousal loss. Table 4 presents the results for depressive symptoms and Table 5 presents results for grief symptoms.

When depression is the outcome variable, frequency of social contact is associated with fewer depressive symptoms when other contextual factors are not included in the model (see Table 4, Model 1a). However, when the two contextual factors are included (see Table 4, Model 1b), frequency of social contact no longer exerts a significant influence on depressive symptoms. When considering the grief symptoms as outcomes, frequency of social contact is not significantly associated with any of the grief symptoms whether or not the two contextual factors are included in the model. (Therefore, we did not include Model 1a in Table 5).

The two contextual factors are significantly associated with several of the depression and grief outcomes. Specifically, higher levels of social support are associated with lower levels of depressive symptoms, anxiety, despair, shock, and intrusive thoughts. In addition, the congruence between preferred and actual level of social contact is associated with lower levels of depressive symptoms, shock, anger, and intrusive thoughts.

Among the control variables, women show higher levels of anxiety but lower levels of anger than men. Older widowed persons show lower levels of anger than younger widowed persons. Compared to Black widowed older adults, Whites show higher levels of despair, anger, and yearning. Those who have more children experience lower levels of yearning.

Moderating Effects of Contextual Factors

In the subsequent models, we evaluated whether social support from friends and relatives (Model 2) and the congruence between preferred and actual social contact (Model 3) moderated the link between the frequency of social contact and psychological distress of widowed older adults. The results in Model 2 (in Table 5) show that social support significantly moderates the effects of frequency of social contact on anger and intrusive thoughts, both of which are grief symptoms. Interestingly the contextual factors do not moderate the relationship between social contact and depressive symptoms (in Table 4).

As illustrated in Figure 1, the negative relationship between frequent social contact and anger is stronger among those who receive higher levels of social support. When widowed people receive greater amounts of social support, their level of social contact has a strong dampening effect on their feelings of anger. In contrast, when widowed people experience low amounts of social support, their frequency of social contacts has a minimal effect on their feelings of anger. In the case of the model predicting intrusive thoughts (see Figure 2), frequent social contact is associated with lower levels of intrusive thoughts among those who receive high amounts of social support. In contrast, frequent social contact is related to higher levels of intrusive thoughts among those who receive lower amounts of social support.

The congruence between preferred and actual social contact also has a significant moderating effect on the relationship between social contact and anger. As illustrated in Figure 3, for those who experience incongruence, less frequent contact predicts higher levels of anger. However, for those who experience congruence, the effect of the frequency of social contact on anger is minimal.

Discussion

This paper focused on an exploration of the extent to which frequency of social contact with friends and relatives is associated with widowed persons' depressive and grief symptoms six

months after spousal loss, and whether this association is influenced by the levels of social support from friends and relatives and the congruence between preferred and actual social contact. In the following section, we highlight the key findings, and discuss their implications for practice and further research.

Summary of Findings

Our first objective was to examine the effect of social contact on mental health of widowed older adults. Partially in support of our hypothesis, our analyses showed that frequent social contact is associated with fewer depressive symptoms. However, this effect was significant only when other contextual factors are not included in the model, suggesting that the context of relationships is more important than the amount of social contact in fulfilling emotional needs of widowed older adults (Carstensen, 1991). Contrary to our hypothesis, the analyses showed no significant effect of the frequency of social contact on any of the grief symptoms. This lack of significant effects is consistent with findings in previous literature that newly developed or revitalized relationships cannot compensate for the loss of a spouse (Zettel & Rook, 2004). That is, although social relationships may be important, frequency of social contact with friends and relatives in itself may not extend much help in reducing symptoms that are unique to widowhood.

Two theoretical frameworks, socio-emotional selectivity theory (Carstensen, 1991) and self-discrepancy theory (Higgins, 1987) helped guide our study. The findings from this study are consistent with socio-emotional selectivity in that, among widowed people, increased social support was associated with reduced symptoms of depression, anxiety, despair, shock, and intrusive thoughts. In addition, the finding that the congruence between preferred and actual contact also had a significant negative influence on many of the outcomes for widowed people (e.g., depressive symptoms, shock, anger, and intrusive thoughts) is supportive of the self-discrepancy hypothesis which suggests that lack of discrepancy between ideal and actual social contact is associated with decreased psychological distress. Our findings build upon the early work of Higgins (1987) whose focus was primarily on depression as an outcome variable. Specifically, we found that widowed individuals' actual and preferred contact also played a role in their symptoms of grief.

While the two contextual factors addressed in our research played an influential role in decreasing depressive symptoms and most of the grief symptoms (i.e., shock, anger, anxiety, despair, and intrusive thoughts), it is important to note that one symptom of grief was not responsive to either of these two contextual factors. That is, we found that yearning was not affected by either social support or the congruence between preferred and actual social contact. This may be because yearning is a grief symptom that captures the widowed person's unique tie with the deceased spouse. Proponents of attachment theory have suggested that social support from friends cannot replace the support previously provided by the spouse, because the bereaved spouse yearns for a specific person to whom they are attached, their dead spouse (W. Stroebe, M. Stroebe, Abakoumkin, & Schut, 1996). Our results provide a further indication that widowed persons' psychological response to a specific loss may be difficult to restore with social contact or support from friends and relatives, and may need to be especially targeted in psychological interventions.

The second objective of this paper was to examine the moderating effects of social support and the congruence between preferred and actual contact. Consistent with our hypothesis, among those who receive greater levels of social support, the association between more frequent social contact and improved mental health was stronger. Specifically, widowed individuals with more social support experienced a stronger relationship between higher levels of social contact and lower levels of anger. However, contrary to our hypothesis, the congruence between preferred and actual social contact did not strengthen the positive

relationship between social contact and mental health. Rather, the beneficial effect of social contact on reducing anger was only apparent among those whose preferred and actual social contact did not correspond with each other. That is, for widowed individuals whose actual and preferred contact was incongruent, more social contact was related to reduced anger. This unexpected finding may be related to the fact that, in our study, incongruence was measured by combining many different combinations of actual vs. preferred levels of social contact. A post-hoc analysis indicated that anger was higher with respect to some types of incongruence (i.e., preferring more contact after widowhood but actually receiving less contact) as compared to other types (i.e., preferring the same amount of contact after widowhood but actually receiving more contact). This finding points to the need for further study of the differential effects of different kinds of incongruence between preferred and actual amount of social contact.

Future Directions and Limitations

The findings of the current study help us understand the influence of social relational contexts on widowed persons' psychological adjustment. It is important to note that, in this study, several of the indicators of psychological distress were significantly influenced both by the widowed individuals' amount of social support and the congruence between their preferred and actual levels of social contact. These findings suggest that it may be helpful to think about other contextual factors that could moderate the relationship between social contact and psychological distress for widowed people. One fruitful area of exploration could be the extent to which widowed people are involved in the giving and receiving of social support since degree of reciprocity is likely to have complex interactions with social contact. Our work also points to the possibility that focusing interventions on specific aspects of social relationships can influence psychological well-being for widowed people. The effectiveness of peer interventions, such as the Widow-to-Widow Program (Silverman, 2004), may be enhanced by improving the quality of support provided to widowed individuals and/or by helping them address the incongruence between actual and preferred levels of contact.

While our findings have important implications for practitioners, there are some limitations in this study which future research should address. First, some of the subscales of grief symptoms have low measurement reliability, possibly contributing to an attenuation of the relationships that we examined. Also, our measures of social contact and support do not distinguish friends from relatives, although they may be distinct groups who serve different functions in older adults' lives (Litwak, 1985). For example, friends may be more likely to fulfill needs for companionship whereas relatives may provide instrumental or financial support (Messeri, Silverstein, & Litwak, 1993). Thus, more frequent contact may have different meanings depending on the kinds of support implicated in these relationships. Future studies should explore this issue using measures of social support that distinguish among supportive relationships.

Second, we did not explore how negative social interactions may shape the role of social contact among widowed older adults. In the past few decades, several studies have shown that close social relationships are not always positive and that negative social interactions within close relationships can exert detrimental effects on well-being (Rook, 1997). Research has also shown that well-intended support from others can yield negative consequences when the support is provided at inappropriate times (Newsom & Schulz, 1998), enhances feelings of incompetence and guilt (Coyne, Wortman, & Lehman, 1988), or results in greater helplessness (Cimarolli, Reinhardt, & Horowitz, 2006). Future studies should expand upon our research by exploring how different aspects of social support affect widowed persons' adjustment and further investigating the circumstances under which people benefit from less contact rather than more contact from friends and relatives. These

different aspects of social support should include older adults' giving support to others, which has been found to be beneficial for their adjustment to widowhood (Brown, Brown, House, & Smith, 2008).

Third, our analyses were based on cross-sectional analyses of the relationship between social contact and psychological distress. Thus, we cannot completely eliminate the possibility that the direction of the influence is reversed, with depressive and grief symptoms leading widowed older adults to evaluate their social support more negatively.

Finally, our sample is based on the cohort of older adults who became widowed in the early 1990s. A condition for inclusion in the sample was that participants needed to be married when they were interviewed at baseline. Given increasing diversity in marital arrangements (e.g., increased divorce rate and cohabitation as well as same sex partnerships), current and future cohorts of older adults may show different patterns of adjustment following widowhood.

In conclusion, this research offers important insights on the relative impact of social contact and contextual factors on psychological distress among widowed persons. Our results highlight the importance of using multiple measures to examine symptoms of depression and grief. In so doing, we found that some of these symptoms were susceptible to social relationships but other symptoms were not. While our study finds little evidence that frequency of social contact contributes to widowed persons' mental health, it suggests that contextual factors can shape the influence of social contact. Thus, researchers and practitioners should be careful about assuming that lower levels of social contact are a predictor of psychological distress. Instead, they should focus their efforts on understanding and addressing the quality of widowed persons' relationships as well as the congruence between their preferred and actual social contact.

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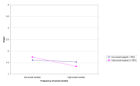

Figure 1.
Moderating effect of social support on the relationship between social contact and anger

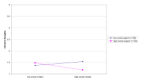

Figure 2.
Moderating effect of social support on the relationship between social contact and intrusive thoughts

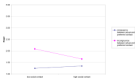

Figure 3.
Moderating effect of congruence between actual and preferred contact on the relationship between social contact and anger

Table 1

List of Items in the Sub-scales of Grief

Anxiety (α = .71)	Afraid of what is ahead
	Felt anxious or unsettled
	Worried about how you would manage your day to day affairs
Despair (α = .64)	Life seemed empty
	Felt empty inside
	Felt life had lost its meaning
Shock (α = .77)	Felt in a state of shock
	Couldn't believe what was happening
	Felt emotionally numb
Anger (α = .68)	Felt resentful or bitter about death
	Felt death was unfair
	Felt anger towards God
Yearning (α = .75)	Longing to have him/her with you
	Painful waves of missing him/her
	Feelings of intense pain and grief
	Feelings of grief or loneliness
Intrusive Thoughts (α = .66)	Difficulty falling asleep, thoughts of him/her kept coming into your mind
	Tried to block out memories or thoughts of him/her
	Couldn't get thoughts about him/her out of my head

* Response categories for all items are: no, never; yes, but rarely; yes, sometimes; and yes, often.

Table 2

Widowed Persons' Preferred and Actual Level of Contact with Friends and Relatives

		Preferred level of social contact with friends/relatives since widowhood			
		more	**same**	**less**	**Total**
Actual level of social contact with friends/relatives since widowhood	more	23	23	0	46
	same	10	115	15	140
	less	1	11	11	23
Total		34	149	26	209

Table 3

Descriptive Statistics

	Range	Mean	SD
Dependent variables			
Depressive symptoms, W1	−1.04 — 6.07	0.42	1.22
Anxiety, W1	1 – 4	1.84	0.92
Despair, W1	1 – 4	2.64	0.85
Shock, W1	1 – 4	1.72	0.91
Anger, W1	1 – 4	1.50	0.70
Yearning, W1	1 – 4	2.84	0.82
Intrusive Thoughts, W1	1 – 4	1.77	0.91
Independent variables			
Frequency of social contact with friends/ relatives, W1	−2.11 — 2.47	1.18	0.98
Support from friends/relatives, W1	−2.73 — 1.53	0.27	1.01
Congruence in preferred and actual contact, W1	0, 1	0.71	0.46
Control variables			
Age, W1	52.67 – 89.75	73.50	6.91
Sex (1 = female; 0 = male)	0, 1	0.72	0.45
Race (1 = white; 0 = black)	0, 1	0.85	0.36
Years of education, BL	3 – 17	11.27	2.91
Number of children, W1	0 – 14	2.66	1.85

Note: BL represents baseline (pre-loss) and W1 represents Wave 1 (6-month follow-up).

Table 4

OLS Regression Predicting the Effect of Social Contact and the Contextual Factors on Depressive Symptoms

	Depressive symptoms, W1			
	Model 1a	**Model 1b**	**Model 2**	**Model 3**
(Constant)	−0.80	−0.75	−0.75	−0.73
Frequency of social contact with friends/relatives, W1	−0.24**	−0.15	−0.15	−0.17
Contextual factors				
Support from friends/relatives, W1		−0.25**	−0.21	−0.25**
Congruence between preferred and actual contact, W1		−0.43**	−0.42**	−0.46
Control variables				
Age, W1	0.01	0.02	0.02	0.02
Sex (1 = female; 0 = male)	0.34	0.33	0.32	0.33
Race (1 = white; 0 = black)	0.28	0.28	0.28	0.28
Years of education, BL	0.01	0.01	0.01	0.01
Number of children, W1	−0.04	−0.03	−0.04	−0.03
Contact × Support			−0.04	
Contact × Congruence				0.02
Adjusted R^2	0.02	0.78	0.75	0.74

* *p≤.05*

** *p≤.01*

*** *p≤.001*

Table 5

OLS Regression Predicting the Effect of Social Contact and the Contextual Factors on Subscales of Grief

	Anxiety			Despair			Shock		
	Model 1	**Model 2**	**Model 3**	**Model 1**	**Model 2**	**Model 3**	**Model 1**	**Model 2**	**Model 3**
(Constant)	2.52	2.52	2.51	2.45	2.44	2.57	2.72	2.71	2.86
Frequency of social contact with friends/ relatives, W1	0.00	0.00	0.00	0.01	0.02	−0.12	−0.04	−0.04	−0.19
Contextual factors									
Support from friends/relatives, W1	−0.18**	−0.12	−0.18**	−0.16**	−0.15**	−0.16**	−0.17**	−0.13	−0.17**
Congruence between preferred and actual contact, W1	−0.15	−0.15	−0.14	−0.23	−0.23	−0.45*	−0.37**	−0.36**	−0.61**
Control variables									
Age, W1	−0.02	−0.02	−0.02	0.00	0.00	0.00	−0.01	−0.01	−0.01
Sex (1 = female; 0 = male)	0.41**	0.40**	0.41**	0.01	0.00	0.00	0.26	0.25	0.25
Race (1 = white; 0 = black)	0.18	0.19	0.18	0.51***	0.51***	0.55***	0.12	0.12	0.16
Years of education, BL	0.02	0.02	0.02	0.03	0.03	0.03	0.00	0.00	0.00
Number of children, BL	0.00	−0.01	0.00	−0.06	−0.06	−0.06	0.01	0.00	0.00
Contact × Support		−0.08			−0.02			−0.05	
Contact × Congruence			0.01			0.19			−0.21
Adjusted R^2	0.09	0.09	0.08	0.10	0.10	0.10	0.07	0.07	0.07

	Anger			Yearning			Intrusive thoughts		
	Model 1	**Model 2**	**Model 3**	**Model 1**	**Model 2**	**Model 3**	**Model 1**	**Model 2**	**Model 3**
(Constant)	3.65	3.64	3.83	2.97	2.96	2.92	2.46	2.45	2.49
Frequency of social contact with friends/ relatives, W1	−0.02	−0.02	−0.22*	−0.05	−0.05	−0.01	0.10	0.10	0.07
Contextual factors									
Support from friends/relatives, W1	−0.07	0.00	−0.07	−0.04	0.04	−0.04	−0.13*	−0.03	−0.13*
Congruence between preferred and actual contact, W1	−0.33***	−0.33***	−0.65***	−0.15	−0.14	−0.08	−0.45***	−0.44***	−0.49*
Control variables									
Age, W1	−0.03***	−0.03***	−0.03***	0.00	0.00	0.00	0.00	0.00	0.00
Sex (1 = female; 0 = male)	−0.26**	−0.28**	−0.27**	−0.17	−0.19	−0.17	0.03	0.01	0.03
Race (1 = white; 0 = black)	0.39**	0.40**	0.45***	0.31*	0.32*	0.29	−0.07	−0.06	−0.06

	Anger			Yearning			Intrusive thoughts		
	Model 1	**Model 2**	**Model 3**	**Model 1**	**Model 2**	**Model 3**	**Model 1**	**Model 2**	**Model 3**
Years of education, BL	0.01	0.01	0.01	0.00	0.00	0.00	−0.02	−0.02	−0.02
Number of children, BL	−0.03	−0.04	−0.04	−0.10**	−0.10***	−0.10**	−0.06	−0.07	−0.06
Contact × Support		−0.08*			−0.09			−0.11*	
Contact × Congruence			0.26**			−0.06			0.04
Adjusted R^2	0.14	0.16	0.17	0.06	0.07	0.05	0.06	0.08	0.06

* *p≤.05*

** *p≤.01*

*** *p≤.001*