

Brief Report

Influence of the Social Network on Married and Unmarried Older Adults' Mental Health

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Abstract

Purpose of the Study: In later life, adults' social networks grow smaller through a combination of intentional selection and involuntary loss. This study examined whether older adults who lack a high-quality marriage compensate for this using support from other ties. We analyzed how relationships with family and friends are associated with depressive symptoms across multiple marital statuses.

Design and Methods: Data from 3,371 older adults who participated in the most recent wave of the National Social Life, Health, and Aging Project (NSHAP) were analyzed using analysis of variance (ANOVA) and ordinary least squares (OLS) regression.

Results: Individuals in high-quality marriages experienced fewer depressive symptoms than the widowed, never married, divorced/separated, and those in lower-quality marriages. Older adults' perceived family support, family strain, and friend strain were all significantly associated with depressive symptoms. The only difference in these effects according to marital status was for perceived family support, which was strongest for the never married.

Implications: The never married may depend more on family and friends than the previously or unhappily married. Any compensation efforts among the latter failed to reduce depressive symptoms relative to happily married others. Older adults in high-quality marriages benefit from their marital relationship, and also benefit from supportive family and friend ties.

Keywords: Depression, Social networks, Social support, Well-being

While the presence of social ties across the life course is fundamental, their benefits are contingent upon relationship quality: high-quality, supportive relationships foster health and well-being, whereas poor-quality or strained relationships can be more harmful long-term than relationship loss (Hawkins & Booth, 2005). Throughout the life course, individuals actively manage their social relationships to maintain health and well-being, expanding and contracting their social networks over time (Carstensen, Isaacowitz, & Charles, 1999).

Older adults' efforts at socioemotional selectivity face challenges, however. Some reductions in network size are

not freely chosen; loss of relationships to death, incapacity, or relocation are common (Rook, 2009). Moreover, although older adults strive to preserve emotionally meaningful relationships, not all meaningful ties are positive ones (Isaacowitz, Smith, & Carstensen, 2003). Both social isolation and negative relationships contribute to increased depressive symptoms among older adults, and depression is strongly associated with morbidity, mortality, and health-care costs, in addition to being undesirable itself (e.g., Bock et al., 2017).

The model of selection, optimization, and compensation (SOC) asserts that older adults who lose or otherwise

lack a close, high-quality relationship—particularly a marriage—will attempt to compensate by increasing the closeness or centrality of other social relationships, including with family and close friends (Carstensen et al., 1999). This perspective anticipates that perceived support from family and friends will play a larger role in the depressive symptoms of older adults who are widowed, never married, divorced/separated, or in lower-quality marriages than for older adults in high-quality marriages. [Perceived strain in family and friend relationships may be less likely to vary in importance across marital statuses, insofar as SOC is an intentional process by which people optimize the positive and discount the negative (Mather & Carstensen, 2005).]

Marriages pose barriers to successful compensation, however. For instance, marriage can be “greedy,” with friend and family ties weakening when adults select into marriage (Sarkisian & Gerstel, 2016). Further, it may be difficult for widowed or divorced older adults to rekindle relationships they had let lapse, particularly as social partners trim their own networks (Rook, 2009). Older adults may also lack the social connections necessary to initiate new relationships (Rook, 2009). Lastly, not all social ties are interchangeable; thus, the ability to compensate for losing or lacking a high-quality marriage by focusing on support in other network ties may be limited (Zettel & Rook, 2004). In short, later life attempts at compensation face numerous obstacles, while longer-term compensation behaviors may achieve greater success.

Therefore, we expect family and friend support to most strongly affect the depressive symptoms of never married older adults, since their reliance on these relationships is part of a continuous, lifelong process of socioemotional selectivity rather than a late life compensation process wherein they make up for a lost or unsatisfactory relationship (Shapiro & Keyes, 2008). This study assesses compensation, by examining how relationships with family and friends influence depressive symptoms for older adults across multiple marital statuses.

Method

Participants

The National Social Life, Health, and Aging Project began in 2005–2006 with a nationally representative sample of 3,005 community dwelling U.S. adults born between 1920 and 1947. The response rate was 75.5%. In 2010–2011, original participants, Wave 1 non-respondents, and a randomly-selected sample of spouses and coresident romantic partners were invited to participate in a second wave of self-administered questionnaires and in-person interviews. Overall, 87.8% of original participants, 23.1% of Wave 1 non-respondents, and 85.8% of spouses and partners participated in Wave 2. The completed second wave included interviews with 3,377 participants. Due to the

unavailability of marital quality for 6 individuals, our analytic sample included 3,371 participants.

Dependent Measure

Depressive symptoms were measured using the 11-item Center for Epidemiological Studies-Depression (CES-D) scale (Payne, Hedberg, Kozloski, Dale, & McClintock, 2014). Responses ranged from 1 (*rarely or none of the time*) to 4 (*most of the time*). Items were averaged ($\alpha = 0.79$). Due to significant skew we took the natural log of scores, then standardized the measure for ease of interpretation.

Type and Quality of Ties

Marital status was self-reported as *married/partnered*, *widowed*, *never married*, or *divorced/separated*. Married/partnered participants were asked about the extent to which they could (a) open up to and (b) rely upon their partner, and the extent to which their partner (c) criticized or (d) made demands on them (1 = *never/hardly ever/rarely*, 3 = *often*). We categorized the 61% of participants who reported that they could *often* open up to and rely upon their partner, and that their partner *never, hardly ever, or rarely* criticized or made demands upon them, as being in *high-quality* marriages. The remaining participants in *lower-quality* marriages were those who rated their marriage as less than the most desirable score on one or more of the four measures. Thus these “lower-quality” marriages may represent “less than perfect” rather than “poor-quality” relationships *per se*.

Perceived family support was measured using two items concerning how often participants could open up to and rely on their family members, excluding their spouse/partner (1 = *never/hardly ever/rarely*, 3 = *often*). The items correlated at 0.44 ($p < .001$) and were averaged. *Perceived family strain* was measured using three items concerning how often participants’ family members, excluding their spouse/partner, got on their nerves, made too many demands, and criticized them (1 = *never*, 3 = *some of the time/often*). The items were averaged ($\alpha = 0.57$).

Perceived friend support and *perceived friend strain* were measured using the same questions as family support and strain, asked about participants’ friends. For friend support, items correlated at 0.56 ($p < .001$) and were averaged. For friend strain, $\alpha = 0.55$ and items were averaged.

Control Measures

Network size measures included *number of living children*, including stepchildren; *number of friends*; and *number of close relatives*, excluding spouse/partner (friends and relatives: *none, one, 2–3, 4–9, 10–20, and more than 20*). Demographic measures included age (years); gender (*male, female*); race/ethnicity (*White non-Hispanic, Black non-Hispanic, Hispanic, Other race/ethnicity*); education (*less*

than high school, high school only, some college or associate's degree, bachelor's degree or more); and income (split at \$50,000 annually).

Analytic Strategy

The majority of cases—95%—were complete. Missing data diagnostics revealed no predictable patterns of missingness. We used multiple imputation by chained equations to address missing data, including all predictors and the outcome in our imputation equations.

Analysis of variance tests (ANOVAs) examined mean differences in the number and quality of non-marital network ties by marital status and quality. Three ordinary least squares (OLS) regression models analyzed depressive symptoms. All three models adjusted for non-independence due to having both partners of some married couples in the sample. The first model tested the main effects of marital status and quality, adjusted for all demographic controls. The second model added the measures of non-marital network size and perceived support and strain. In a model not shown here, we estimated interaction effects between each of the

Table 1. Non-Marital Network Quality by Marital Status and Quality, National Social Life, Health, and Aging Project, 2010–2011 (N = 3,371)

	Married high-quality (N = 1,448) ^a	Married lower-quality (N = 917) ^b	Widowed (N = 646) ^c	Never married (N = 77) ^d	Divorced/ separated (N = 283) ^e	Significant differences
	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	
Perceived family support (1 = lowest; 3 = highest)	2.49 (0.58)	2.32 (0.60)	2.57 (0.55)	2.29 (0.73)	2.48 (0.59)	AB, BC, CD
Perceived family strain (1 = lowest; 3 = highest)	1.89 (0.53)	2.05 (0.54)	1.85 (0.59)	1.97 (0.70)	1.95 (0.62)	AB, BC
Perceived friend support (1 = lowest; 3 = highest)	2.13 (0.66)	1.98 (0.67)	2.10 (0.70)	2.15 (0.72)	2.14 (0.67)	AB, BC, BE
Perceived friend strain (1 = lowest; 3 = highest)	1.66 (0.46)	1.73 (0.50)	1.62 (0.53)	1.74 (0.57)	1.74 (0.57)	AB, BC, CE

Note. Values reported prior to multiple imputation. One-way analysis of variance (ANOVA) tests with post hoc Scheffe tests were used to evaluate significant differences ($p < .05$) among the groups. Significant differences are denoted as follows: ab = married/high-quality versus married/lower-quality; bc = married/lower-quality versus widowed; be = married/lower-quality versus divorced/separated; cd = widowed versus never married; ce = widowed versus divorced/separated. The superscripts in the table are the group labels used for these comparisons

Table 2. Ordinary Least Squares Regression Models of Depressive Symptoms, National Social Life, Health, and Aging Project, 2010–2011 (N = 3,371)

	Model 1 B (SE)	Model 2 B (SE)	Model 3 B (SE)
Marital status (reference: married/high-quality)			
Married (lower quality)	0.29*** (0.04)	0.21*** (0.04)	0.22*** (0.04)
Widowed	0.29*** (0.05)	0.28*** (0.05)	0.28*** (0.05)
Never married	0.30* (0.13)	0.23 (0.12)	1.28** (0.44)
Divorced or separated	0.22** (0.07)	0.19** (0.06)	0.19** (0.06)
Quality of non-marital ties			
Perceived family support (1 = lowest; 3 = highest)		-0.12*** (0.03)	-0.11*** (0.03)
Perceived family strain (1 = lowest; 3 = highest)		0.23*** (0.03)	0.23*** (0.03)
Perceived friend support (1 = lowest; 3 = highest)		-0.04 (0.03)	-0.04 (0.03)
Perceived friend strain (1 = lowest; 3 = highest)		0.13** (0.04)	0.12** (0.04)
Significant interaction			
Never married * Perceived family support			-0.46** (0.18)
F; df	49.44; 14	44.09; 21	42.47; 22

Note. Depressive symptoms are measured in standard deviations. All models control for age, gender, race/ethnicity, educational attainment, and income. Models 2 and 3 additionally control for number of children, number of friends, and number of close relatives.

* $p < .05$ ** $p < .01$ *** $p < .001$.

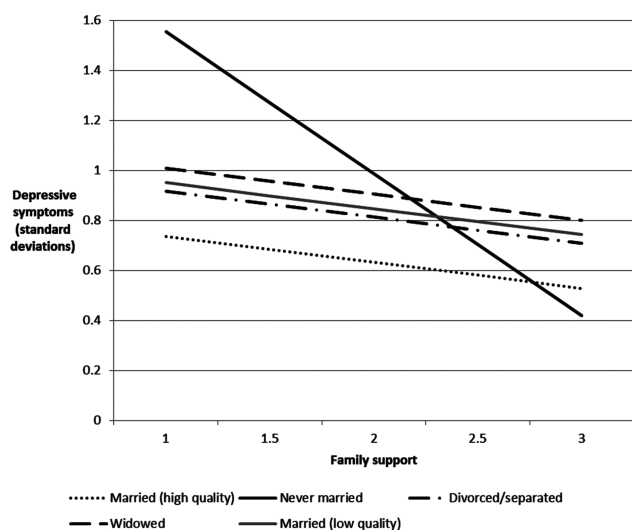


Figure 1. Depressive Symptoms by Marital Status and Level of Perceived Family Support.

marital status and quality categories and the measures of family and friend support. One interaction was statistically significant, and the third model shown adds that interaction term to the second model. We also tested interaction effects between marital status and quality and the measures of family and friend strain (not shown). As anticipated, none of these interactions was statistically significant.

Results

Descriptive statistics and ANOVA results for network size and quality by marital status are reported in Table 1. Table 2 displays the results of our regression models. Model 1 shows that older adults who were in lower-quality marriages ($B = 0.29, p < .001$), widowed ($B = 0.29, p < .001$), never married ($B = 0.30, p < .05$), or divorced/separated ($B = 0.22, p < .01$) all experienced significantly greater depressive symptoms than those in high-quality marriages.

After accounting for non-marital network size and quality (Model 2) marital status differences in depressive symptoms were slightly attenuated, but only the coefficient for never married became non-significant. Perceived family support ($B = -0.12, p < .001$) was significantly associated with fewer depressive symptoms, although friend support was not. Additionally, both perceived family strain ($B = 0.23, p < .001$) and perceived friend strain ($B = 0.13, p < .01$) were significantly associated with greater depressive symptoms.

Model 3 incorporates the one significant interaction found, for perceived family support within the never married group ($B = -0.46, p < .01$). The negative coefficient indicates that the link between perceived family support and reduced depressive symptoms was stronger for the never married than for those in high-quality marriages. The main effect of perceived family support was also significant ($B = -0.11, p < .001$), revealing that perceived family support remains

significantly—if less strongly—associated with experiencing fewer depressive symptoms for the other marital status groups, as well. This interaction is illustrated in Figure 1.

Discussion

In keeping with prior research, this study found that individuals in high-quality marriages experienced fewer depressive symptoms than widowed, never married, and divorced/separated individuals, as well as those in lower-quality marriages (e.g., Mirowsky & Ross, 1992). Additionally, perceived family support, perceived family strain, and perceived friend strain were associated with older adults' depressive symptoms. The only difference in compensation by marital status was for the never married, among whom perceived family support had a significantly stronger effect.

Whatever compensation previously married older adults and those in lower-quality marriages engage in does not appear to eliminate gaps in depressive symptoms according to marital status. That is, adults of all marital statuses are affected by the support and strain they receive from friends and family, and adults in high-quality marriages additionally benefit from marriage. This is consistent with research indicating that older adults find it difficult to make new friends and strengthen old ties (Rook, 2009; Zettel & Rook, 2004).

Meanwhile, never married older adults have higher levels of depressive symptoms than those in high-quality marriages, and do not report greater perceived support from their friends or family (e.g., Mirowsky & Ross, 1992; Shapiro & Keyes, 2008). However, their depressive symptoms are more responsive to family support. This heightened influence may be due to family relationships being continuously central in the lives of never married adults, uninterrupted by marriage (Sarkisian & Gerstel, 2016). Yet never married adults were not more sensitive than their peers to family strain, because socioemotional selectivity does not simply heighten individuals' vulnerability to relationship cues of all types: People show a marked preference for positive information (Mather & Carstensen, 2005).

There were also no differences by marital status in the effects of support from friends. It is possible that people of all marital statuses effectively employ socioemotional selection on their friend networks, cutting ties with poor-quality or straining friendships and retaining supportive ones, since friendship is the most voluntary of personal ties (Blieszner & Roberto, 2004).

This study retains a number of limitations. First, the heightened importance of family support to never married persons could be due to compositional differences in who comprises "family," as never married older adults had fewer adult children than ever-married persons did. Second, the data lacked direct measures of compensatory or supportive

behaviors. Third, correlation and alpha coefficients for the support and strain measures were only moderate.

Overall, our results suggest that perceived support from family and friends remains influential for depressive symptoms in later life across all marital status groups, and especially for never married older adults. Those in high-quality marriages, then, experience fewer depressive symptoms not only due to the quality of their marriages, but also thanks to their network of supportive family and friend relationships.

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