



Article

Family Networks and Psychological Well-Being in Midlife

Megan Gilligan ^{1,*}, J. Jill Suitor ², Sangbo Nam ¹ , Brianna Routh ¹, Marissa Rurka ² and Gulcin Con ²

- Department of Human Development and Family Studies, Iowa State University, Ames, IA 50011, USA; sbnam@iastate.edu (S.N.); brouth@iastate.edu (B.R.)
- Department of Sociology, Purdue University, West Lafayette, IN 47907, USA; jsuitor@purdue.edu (J.J.S.); mrurka@purdue.edu (M.R.); gcon@purdue.edu (G.C.)
- * Correspondence: mgilliga@iastate.edu; Tel.: +1-515-294-5074

Received: 30 June 2017; Accepted: 9 August 2017; Published: 19 August 2017

Abstract: Scholarship has highlighted the importance of kin relations for well-being in adulthood. Much focus has been on relationships between spouses and between parents and children. However, limited research has explored the role of adult sibling relationships in well-being, and no studies have made direct comparisons among the effects of tension with these multiple family members. Using data collected from 495 adult children nested within 254 families, we examined the differential impact of tension with mothers, siblings, and spouses on depressive symptoms in midlife. Separate multi-level regression analyses showed that tension with spouses, mothers, and siblings each predicted depressive symptoms. Combined analyses revealed that greater tension with spouses was associated with higher depressive symptoms, but tension with mothers and siblings was not. However, Wald tests comparing the strength of these associations between tension and depressive symptoms indicated that these associations did not significantly vary across family members. Interactions with gender indicated that tension with mothers was more strongly associated with higher depressive symptoms for women than men. These findings highlight the importance of the quality of relationships with family members on individuals' psychological well-being, and call for researchers to consider multiple ties and gender when examining family relationships and well-being.

Keywords: parent-adult child relations; intergenerational relationships; adult siblings; spousal relations

1. Introduction

Theory and empirical research on interpersonal relations have emphasized the importance of the quality of relationships for individuals' well-being (Bar-Kalifa and Rafaeli 2013; Carr and Springer 2010; Cohen 2004; DeLongis et al. 2004; Fiori and Consedine 2013; Rook 2001; Umberson and Montez 2010). Further, this line of scholarship has shown that positive and negative elements of relationships have independent effects on well-being (Fiori and Consedine 2013; Ha 2010; Krause and Ellison 2007), with negative elements playing a more salient role in these processes (Lackner et al. 2013; Mavandadi et al. 2007; Newsom et al. 2003). Numerous studies have shown that family relationship quality is an important indicator of well-being for individuals (Bar-Kalifa and Rafaeli 2013; Carr and Springer 2010; Clarke et al. 2011; Cohen 2004; DeLongis et al. 2004; Fiori and Consedine 2013; Rook 2001; Umberson and Montez 2010). The majority of this work has focused on relationships between spouses (Carr and Springer 2010; Choi and Marks 2008; Kamp Dush et al. 2008; Williams 2003), although research on relations between parents and adult children has shown that the quality of this tie is also linked to well-being (Amato and Afifi 2006; Fingerman et al. 2008; Gilligan et al. 2015). A smaller set of studies has also demonstrated that relationships with siblings

impact psychological well-being in adulthood (Cicirelli 1989; Paul 1997). Taken together, this body of work has demonstrated that a variety of family relationships play important roles in well-being in adulthood.

Shedding light on the role of these family processes may be especially important for understanding well-being in midlife because the middle years may be a point in the life course where the consequences of negative relationships are especially detrimental. First, this is the period in which adults are likely to experience transitions that may fuel distress and discord with family members, such as launching young adult children and becoming caregivers to parents. Second, comparisons of emotion regulation across the life course have shown that midlife adults are more likely to react strongly to family conflict than are older adults (Blanchard-Fields et al. 2004; Charles and Carstensen 2007), consistent with socioemotional selectivity theory (Carstensen 1992), thus making midlife a period during which such transitions and ensuing conflict may be especially problematic.

Our aim in this article is to extend our understanding of the role of negative family interactions on adults in midlife. One question that has not been addressed in this literature that we propose is important to consider is whether the consequences of such tension differ by the role relationship between the individual and the source of tension. In other words, is conflict from some role partners more consequential for well-being? To address this question, in this article, we examine the differential impact of tension with spouses, mothers, and siblings on psychological well-being in midlife, using data collected from 495 adult children nested within 254 families.

1.1. Family Networks and Psychological Well-Being

Scholarship on role salience provides a basis for anticipating differential effects of multiple family relationships on psychological well-being (McCall and Simmons 1966; Nevill and Super 1986; Super 1990). In particular, theoretical and empirical work on interpersonal relations has shown that the more salient a role partner's position within one's social network, the greater the impact of negative interaction with that individual on well-being (Carr et al. 2014; Cheng et al. 2011). Further, Kahn and Antonucci's convoy model suggests that role partners' salience within an individual's social network may vary depending on an individual's stage in the life course (Kahn and Antonucci 1980). In this paper, we are particularly interested in the impact of ties with family members whose salience is especially high in midlife. The literature on family networks suggests that in midlife, the most salient kin ties, beyond one's own children, are spouses, mothers, and siblings (Antonucci et al. 2001, 2004; Rossi and Rossi 1990; Suitor et al. 2015c).

Based on the theoretical and empirical literature, we propose a set of three hypotheses regarding the relative salience of ties with spouses, mothers, and siblings for psychological well-being. As mentioned previously, the literature on family relationships and well-being in adulthood has focused primarily on the benefits and costs of marriage (Carr and Springer 2010). By midlife, marriages are typically well-established, and for many individuals, spouses are primary sources of support (Antonucci et al. 2001; Cutrona 1996). Thus, it is perhaps not surprising that the spousal relationship is strongly associated with well-being. Research on marriage and mental health has demonstrated that the impact of marriage on well-being is highly dependent on the quality of the marital relationship (Umberson et al. 2013). In particular, marital dissatisfaction is detrimental for psychological well-being (Proulx et al. 2007; Umberson et al. 2013). Given the primacy of the spousal relationship, we expected that spousal tension would be more strongly associated with depressive symptoms compared to tension with mothers or siblings.

The attention to spousal relationships mirrors a larger pattern in family scholarship that has tended to emphasize the marital tie (Fingerman and Hay 2002), and reflects an assumption that as individuals age and form new family ties (e.g., spouses), those ties take priority, whereas the ties with their families of origin (e.g., parents and siblings) become less important (Carr and Springer 2010; Umberson et al. 2013). Research over the last several decades, however, has shown that parents and adult children maintain enduring ties across the life course, regardless of whether adult children

marry (Suitor et al. 2013). Further, a growing body of research has demonstrated that relationships between parents and children have implications for the well-being of both generations in adulthood (Gilligan et al. 2015; Polenick et al. 2016; Suitor et al. 2015b; Umberson 1992). In midlife, individuals often indicate that their relationship with their mother is very central in their lives, but they often rank this relationship below their relationships with their spouse and own children in terms of importance (Antonucci et al. 2004). Taken together, the literature on adult families demonstrates that mothers remain a central member of individuals' family networks across the life course; therefore, we predicted that tension with mothers would influence the well-being of midlife individuals. However, given the primacy of the spousal relationship, we expected that the impact of tension with mothers would be weaker compared to the impact of tension with spouses.

Relative to spouses and parents, the sibling relationship has been given little attention in the study of relationship quality and well-being in adulthood. The absence of attention to adult siblings is surprising, given that family scholars have documented the important role that siblings play in one another's lives throughout the life course. In particular, adult siblings typically express feelings of closeness, conflict, and ambivalence toward one another (Antonucci et al. 2004; Fingerman et al. 2004; Gilligan et al. 2013; Suitor et al. 2009), maintain contact (Connidis and Campbell 1995; Spitze and Trent 2006) and continue to exchange emotional and instrumental support (Campbell et al. 1999; Connidis and Campbell 1995; White 2001; White and Riedmann 1992). In fact, for many individuals the sibling tie is one of the most enduring kin relations across the life course (Bedford and Avioli 2012). In midlife, individuals report especially close relationships with siblings; however, individuals typically situate siblings as less important members of their network than spouses and mothers (Antonucci et al. 2004). Nevertheless, earlier studies have demonstrated an association between sibling relationship quality and psychological well-being in adulthood (Cicirelli 1989; Paul 1997).

In this work, Cicirelli (1989) was not able to compare the impact of sibling relations relative to relationships with other key members of the kin network. Paul (1997) did provide such a comparison, finding variations in the associations between the quality of ties with mothers, spouses, and siblings and a variety of well-being outcomes. However, due to the small sample size, it was not possible to either include controls or make comparisons between the impacts of relationships with various family members.

Taken together, based on the literature on the maintenance of strong ties between siblings in adulthood and bivariate correlations found in other studies, we anticipated that sibling tension would be associated with psychological well-being, but such tension would be less strongly associated with depressive symptoms than would tension with spouses and mothers.

In summary, based on a combination of theoretical arguments and empirical evidence, we hypothesized that there would be notable differences in the consequences of ties with these three role partners, with relationship quality with spouses having the greatest impact, followed by relationship quality with mothers, and finally with siblings. It is important to note that although we anticipated substantial variations in the impact of these ties on well-being, we hypothesized that all three would predict depressive symptoms.

1.1.1. Gender within the Context of Family Networks

Up until this point, we have discussed the association between family networks and psychological well-being without taking gender into consideration. Classic arguments developed by Chodorow (1989) and Gilligan (1982) regarding socialization have often been used to explain girls' and women's stronger emphasis on interpersonal relations across the life course, relative to that of boys and men (LaSala 2002; Silverstein et al. 1998; Suitor and Pillemer 2006; Suitor et al. 2015a). Given the stronger bonds women form in interpersonal relationships, it is reasonable to assume that these interpersonal relationships have stronger consequences on women's than men's psychological well-being. However, the empirical

findings regarding gender differences in the association between interpersonal relationships and well-being are inconsistent (Umberson et al. 1996).

Recent research comparing the association between marital quality and well-being outcomes has produced mixed results, and some scholars have shown that the effects of marital quality on psychological well-being are similar for men and women (Lee and Szinovacz 2016; Umberson et al. 2006; Williams 2003). Similarly, some studies have not found gender differences between parent–child relationship quality and well-being for sons and daughters (Fingerman et al. 2008; Suitor et al. 2015b). Further, the research on sibling relationships in adulthood suggests that the association between sibling relationship quality and psychological well-being varies by gender depending upon the dimension of relationship quality and psychological well-being considered (Cicirelli 1989; Paul 1997).

Thus, based on the theoretical literature on gender and interpersonal relations, we thought that it was important to explore whether patterns in the association between psychological well-being and tension with various family ties differ by gender. However, given the inconsistency in the literature on family ties and psychological well-being, we did not make a specific hypothesis regarding the strength of the association between tension with spouses, mothers, and siblings and psychological well-being for men and women.

1.1.2. Other Factors Affecting Psychological Well-Being

It is important to control for several characteristics that have been found to predict depressive symptoms. These include age, educational attainment, parental status, employment, and self-rated health. Specifically, poor physical health and unemployment predict increased depressive symptoms (Clarke et al. 2011; Schieman and Glavin 2011), whereas age has been found to have a curvilinear relationship to depressive symptoms (Clarke et al. 2011). Educational attainment also predicts depressive symptoms, with those who are better educated reporting fewer depressive symptoms than those who are less educated (Clarke et al. 2011). Therefore, we included these characteristics throughout the analyses.

2. Data and Methods

The data used in the present analyses were collected as part of the Within-Family Differences Study (WFDS). The design of the study involved selecting a sample of community-dwelling mothers 65–75 years of age with at least two living adult children. Mothers were interviewed between 2001 and 2003; in 2008, the original study was expanded to include a second wave of data collection. Mothers were asked to provide contact information for their adult children, and these adult children were also interviewed during both waves of the study. The variables of central interest in this analysis were collected at T2.

2.1. Procedures

With the assistance of the Center for Survey Research at the University of Massachusetts, Boston, the researchers drew a probability sample of women aged 65–75 with two or more children from the greater Boston area (see (Gilligan et al. 2013), and (Suitor et al. 2014) for a more detailed description of the sampling procedures for T1). The T1 sample consisted of 566 mothers, which represented 61% of those who were eligible for participation, a rate comparable to that of similar survey strategies in the past decade (Dixon and Tucker 2010). Approximately 63% of the mothers provided contact information for their children, and approximately 70% of the children who were contacted agreed to participate. These procedures yielded a total of 774 adult child participants nested within 299 families at T1.

Data collection for the second wave of the study occurred between 2008 and 2011. Each of the respondents was interviewed for approximately an hour including both close-ended and Soc. Sci. 2017, 6, 94 5 of 14

semi-structured interview questions. More than 90% of the interviews were taped and fully transcribed. Field notes were prepared for each interview that was not fully taped.

The survey team attempted to contact each mother who participated in the original study. At T2, 420 mothers were interviewed. Of the 146 mothers who participated at only T1, 78 died between waves, 19 were too ill to be interviewed at T2, 33 refused, and 16 could not be reached. Thus, the 420 represent 86% of mothers who were living at T2. Comparison of the T1 and T2 samples revealed that the respondents differed on subjective health, educational attainment, marital status, and race. Mothers who were not interviewed at T2 were less healthy, less educated, and less likely to have been married at T1; they were also more likely to be Black. Comparisons between the mothers alive at T2 who did and did not participate revealed that they differed on only education and subjective health.

Following the interview, mothers were asked for contact information for their adult children; 81% of the mothers provided contact information—a rate higher than typically found in studies of multiple generations (Rossi and Rossi 1990; Kalmijn and Liefbroer 2011). Seventy-five percent of the adult children for whom contact information was available agreed to participate, resulting in a final sample of 826 children. For the present analyses, we used data on adult children who were interviewed at T2, had living mothers, were married and provided complete information on all of the variables of interest, resulting in a sample of 495 adult children nested within 254 families. In 42% of these families, only one child participated at T2; in 32% of the families two children participated at T2, and in 26% three or more children participated. Using these criteria, 64 children whose mothers had died between T1 and T2, nine children who had no living siblings at T2, 18 children who were Asian or Hispanic, and 229 children who were not married were omitted. Further, 11 children were omitted because they were missing data on variables of interest.

2.2. Measures

Dependent Variable. To measure depressive symptoms as an indicator for psychological well-being, we employed the seven-item version of the Center for Epidemiological Studies Depression (CES-D) scale (Ross and Mirowsky 1988). Each sibling was asked how often in the past week they felt a certain way. The items comprising the scale are: (a) Everything I did was an effort; (b) I had trouble getting to sleep or staying asleep; (c) I felt lonely; (d) I felt sad; (e) I could not get going; (f) I felt I could not shake off the blues; and (g) I had trouble keeping my mind on what I was doing. In this sample, the scale for adult children at T2 ranged from 7 to 28, with a mean of 11.56 (SD = 4.63); the Cronbach's alpha = 0.84.

Independent Variables. To create the measure of spousal tension, we combined three items: (a) How often does your husband/wife/partner create tensions/arguments with you? (b) How often does your husband/wife/partner make too many demands on you? and (c) How often does your husband/wife/partner criticize you? The response categories for the three variables were very often (5), fairly often (4), sometimes (3), rarely (2), and never (1). Consistent with other studies using that have used similar measures of relationship quality (Sechrist et al. 2011; Ward 2008; Ward et al. 2009), the distributions of tension were highly skewed; for this reason, we collapsed the lowest categories of each item, so that the scores of both range from 1 to 4. The range on the spousal tension scale was 3 to 12 (M = 6.83; SD = 2.18); the Cronbach's alpha = 0.70.

To create the measure of mother tension, we combined the following three items: (a) Sometimes no matter how close we may be to someone, the relationship can also at times be tense and strained. Use any number from 1 to 7, where 1 is *not at all tense and strained* and 7 is *very tense and strained*. What number would you use to describe how tense and strained the relationship between you and (your child/your mother) is nowadays? (b) How often would you say the two of you typically have disagreements or conflicts—very often (5), fairly often (4), sometimes (3), rarely (2), or never (1)? and (c) Does (your child/your mother) make too many demands on you very often (5), fairly often (4), sometimes (3), rarely (2), or never (1)? We then transformed the items so that they would range from 1 to 4 before combining them. The range of the combined scale was 3–12. The mean for mothers was 6.26 (SD = 2.16). The Cronbach's alpha was 0.65.

To create the measure of sibling tension, we combined three items: (a) How often do your siblings create tensions/arguments with you? (b) How often do your siblings make too many demands on you? and (c) How often do your siblings criticize you? The response categories for the three variables were very often (5), fairly often (4), sometimes (3), rarely (2), and never (1). The range on the sibling tension scale was 3 to 12 (M = 5.80; SD = 2.00); the Cronbach's alpha = 0.70.

Control Variables. Race was measured by asking the mothers to select from a card listing several races and ethnicities (e.g., White, Black or African American, Hispanic or Latina, Asian). Children whose mothers identified as White or Black were included in this analysis. Children were coded 1 if their mothers identified as only Black, and they were coded 0 if their mothers identified as only White. (7 children were excluded from the analysis because their mothers identified as Asian, Hispanic or Other). Family size was measured as the number of living adult children in a family at T2. Age was a continuous variable. Gender was coded as 0 = son; 1 = daughter. Parental status was coded as 0 = no children and 1 = has children. Self-rated physical health was coded as 1 = poor, 2 = fair, 3 = good, 4 = very good, and 5 = excellent. Educational attainment was coded into the following categories based on the respondent's level of educational attainment: 1 = eighth grade or less, 2 = 1-3 years of high school, 3 = high school graduate, 4 = vocational or other non-college post-secondary, 5 = 1-3 years college, 6 = college graduate, and 7 = graduate work.

We asked mothers about their children's employment at T1; 0 = no, 1 = yes. We did not ask about children's current employment status at T2. Instead, we collected information on children's recent unemployment, rather than employment changes from T1 to T2. Mothers were asked whether each child had "not had a job when he/she wanted to work" in the previous year (0 = no, 1 = yes).

Table 1 presents the demographic characteristics of the respondents.

Characteristics of Respondents	M, SD, %
Family Level Characteristics	
Family size (M, SD)	4.21 (1.85)
Race	
White (%)	87.7
Adult Child Level Characteristics	
Age (M, SD)	49.1 (5.62)
Daughters (%)	55.4
Parents (%)	86.9
Employed (%)	85.7
Subjective Health (<i>M</i> , <i>SD</i>)	3.93 (0.98)
Educational Attainment (%)	
Less than high school	3.4
High school graduate	14.7
Some college	17.7
College graduate	64.1

Table 1. Sample characteristics (N = 495).

2.3. Plan of Analysis

Because the respondents were nested within families, we used multilevel analyses, which account for nonindependence and allow for correlated error structure. The analyses were conducted using Stata version 14. Listwise deletion was used to handle missing data because there was less than 1% missing on all variables in the analysis (cf. Allison 2010). Wald tests were conducted to compare the strength of the association between tension with spouses, mothers, and siblings and depressive symptoms. To examine how the association between tension with spouses, mothers, and siblings and

Soc. Sci. 2017, 6, 94 7 of 14

psychological well-being varies by gender, we included a series of interaction terms in an additional multilevel regression analysis.

3. Results

Table 2 presents the bivariate correlations between tension with spouses, mothers, and siblings and depressive symptoms. As shown in this table, all three family ties were correlated with depressive symptoms (spousal tension r = 0.12, p < 0.05; mother tension r = 0.13, p < 0.01; sibling tension r = 0.12, p < 0.05). Table 3 presents the results of the multilevel regression analyses predicting each source of tension separately. As seen in Models 1–3, tension with spouses, mothers, and siblings each predicted depressive symptoms (b = 0.21, p < 0.01; b = 0.20, p < 0.01; b = 0.21, p < 0.01).

Table 2. Bivariate Correlations among Key Study Variables.

Measure	Depressive Symptoms	Spouse Tension	Mother Tension	Sibling Tension
Depressive Symptoms	1.00	0.12 *	0.13 **	0.12 *
Spouse Tension		1.00	0.10 *	0.20 **
Mother Tension Sibling Tension			1.00	0.34 ** 1.00

^{*} *p* < 0.05, ** *p* < 0.01.

Table 3. Mixed Model Results Predicting Depressive Symptoms with Tension (N = 495).

	Mode	lodel 1 N		Model 2 Model 3		
_	Estimate	SE	Estimate	SE	Estimate	SE
Family Size	-0.23 *	0.10	-0.21 *	0.10	-0.25 **	0.10
Age	-0.01	0.03	-0.02	0.03	-0.02	0.03
Education	0.09	0.12	0.12	0.12	0.08	0.12
Parent	-1.44 **	0.46	-1.36 **	0.46	-1.35 **	0.46
Employed	-1.46 **	0.46	-1.57 ***	0.46	-1.43**	0.46
Health	-1.34 ***	0.17	-1.32***	0.17	-1.34 ***	0.17
Race (White = 1)	0.69	0.53	0.88	0.54	0.75	0.53
Daughters	0.50	0.33	0.17	0.32	0.24	0.32
Spouse Tension	0.21 **	0.08	-	-	-	-
Mother Tension	-	-	0.20 **	0.08	-	-
Sibling Tension	-	-	-	-	0.21 **	0.08
Constant	17.28 ***	2.00	17.61 ***	1.99	17.87 ***	1.96
Model Statistics						
-2logL	2632	.31	2633.	33	2633.0	51
AIC	2656	.31	2657.	33	2657.0	51
BIC	2706	.76	2707.	78	2708.0	07

^{*} p < 0.05, ** p < 0.01, *** p < 0.001.

Model 1 in Table 4 presents the results of the main effects multilevel regression analysis predicting depressive symptoms including all three tension variables. As shown in this model, spousal tension was associated with depressive symptoms (b = 0.17, p < 0.05). Neither tension with mothers nor tension with siblings predicted depressive symptoms (b = 0.14, p = n.s.; b = 0.11, p = n.s.). It is important to note, however, that Wald tests performed to compare the strength of the associations between tension with spouses, mothers, and siblings indicated that the strength of the associations for these three family ties did not vary significantly (results not shown).

Table 4. Mixed Model Results Predicting Depressive Symptoms with Combined Tension Measures and Gender Interactions (N = 495).

	Model 1		Model 2		
	Estimate	SE	Estimate	SE	
Family Size	-0.23 *	0.10	-0.25 **	0.10	
Age	-0.01	0.03	-0.01	0.03	
Education	0.08	0.12	0.09	0.12	
Parent	-1.46***	0.46	-1.45***	0.45	
Employed	-1.49 ***	0.46	-1.63 ***	0.46	
Health	-1.30 ***	0.17	-1.27 ***	0.17	
Race (White $= 1$)	0.85	0.53	0.83	0.53	
Daughters	0.37	0.33	0.53	1.41	
Spouse Tension	0.17 *	0.08	0.31 **	0.11	
Mother Tension	0.14	0.08	-0.10	0.13	
Sibling Tension	0.11	0.09	0.19	0.14	
Daughters X Spouse Tension			-0.25	0.15	
Daughters X Mother Tension			0.37 *	0.16	
Daughters X Sibling Tension			-0.11	0.18	
Constant	15.88 ***	2.06	15.59 ***	2.20	
Model Statistics					
-2logL	2625.34		2617.84		
AIC	2653.34		2651.84		
BIC	2712.21	L	2723.31		

^{*} p < 0.05, ** p < 0.01, *** p < 0.001.

Model 2 in Table 4 presents the results of the moderating effects of gender on the associations between tension with spouses, mothers, and siblings and depressive symptoms. As we hypothesized, gender moderated the association between tension with mothers and depressive symptoms (b = 0.37, p < 0.05). Specifically, as shown in Figure 1, tension with mothers was more strongly associated with higher depressive symptoms for women than men. However, contrary to expectations, gender did not moderate the association between psychological well-being and tension with either spouses or siblings.

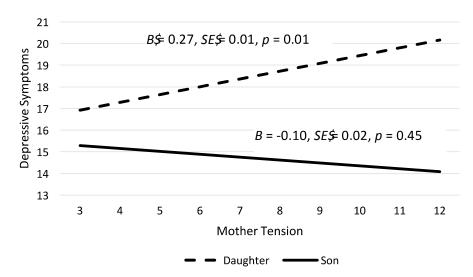


Figure 1. Moderation of Gender on Mother Tension in Association with Depressive Symptoms.

4. Conclusions

Our central aim in this article was to extend our understanding of the role of family relationships in well-being by examining the differential effects of tension with multiple family members. In particular,

our findings shed new light on the role of interpersonal relations on well-being by comparing the impact of tension in three family ties that are particularly salient in adulthood—spouses, mothers, and siblings (Antonucci et al. 2001). We address this question using data collected from adults in midlife—a period in the life course in which individuals are more likely to experience transitions that are often associated with discord with family members, such as launching young adult children and becoming caregivers to parents. Further, this is also a period in which the life course during which adults may be affected more strongly by negative interactions than at later periods in their lives (Blanchard-Fields et al. 2004; Charles and Carstensen 2007).

Guided by theories of role salience (McCall and Simmons 1966; Nevill and Super 1986; Super 1990) and the convoy model of support (Kahn and Antonucci 1980), we hypothesized that tension with spouses, mothers, and siblings would all predict depressive symptoms but that there would be substantial variations in the impact of these ties on well-being based on the salience of these roles in individuals' family networks. In particular, given the primacy of the spousal relationship in middle-aged individual's lives (Antonucci et al. 2001, 2004), we expected that spousal tension would be more strongly associated with psychological well-being than would tension with mothers and siblings. Although spousal tension predicted depressive symptoms, whereas tension with mothers and with siblings did not, Wald tests indicated that the strength of the associations between these three family ties and psychological well-being did not vary significantly. This absence of significant differences in the impact of these three ties is important considering that family scholars have greatly emphasized the spousal relationship in the adult family literature (Carr and Springer 2010; Fingerman and Hay 2002). Consistent with other studies, our findings indicate that, when examined separately, the quality of ties to spouses, mothers, and siblings predict psychological well-being (Cicirelli 1989; Gilligan et al. 2015; Paul 1997); however, we go beyond these studies by showing little variation in the impact of these three relationships.

We also examined whether the association between tension with spouses, mothers, and siblings and psychological well-being varied by gender. Gender differences in family relationships have been a long-standing interest of scholars, however, empirical research has called into question whether there are consistent gender differences in the impact of relationship quality on well-being (Umberson et al. 1996). Our findings indicated that the only association that varied by gender was between tension with mothers and psychological well-being. Specifically, we found that tension with mothers was more strongly associated with depressive symptoms for women than men. This finding highlights the salience of the mother-daughter relationship in the family network in midlife. Throughout the life course, mothers and daughters typically report feeling greater closeness and conflict with each other than any other gender combination (Fingerman 2001; Rossi and Rossi 1990; Suitor and Pillemer 2006). Our findings contribute to the study of gender and parent–child relations by demonstrating the greater salience of tensions with mothers for daughters' well-being than for sons' well-being.

This study extends the literature on family relationships and well-being in midlife by directly comparing the association between depressive symptoms and tension with key members of middle-aged individuals' family network—spouses, mothers, and siblings. We suggest several directions for future research on this important family relationship. First, we are examining these associations using cross-sectional data and are not able to determine the causal direction between tension with family members and psychological well-being. Studies that have examined the marital relationship across time have shown reciprocal effects between marital quality and psychological well-being, but overwhelmingly this work has found stronger support for the impact of relationship quality on well-being (Kamp Dush et al. 2008; Kim and McKenry 2002; Proulx et al. 2007). Therefore, longitudinal data would allow for the examination of the impact of tension with various family ties on well-being as individuals move across the life course.

Second, the WFDS measure of sibling tension is an aggregate measure that asks respondents to report on their relationships with all of their siblings. As a result, we were not able to determine how

sibling relationships vary within the family and how these individual sibling relationships contribute to individuals' health and well-being outcomes. There is a growing interest in within-family differences in parent–child relationships (Suitor et al. 2017); however, most of the work on sibling relationships in adulthood is limited by aggregate reports or reports on a single target sibling (Spitze and Trent 2016). Future studies designed to examine adult sibling relationships should ask respondents to report on their relationships with each of their siblings in order to capture variability in this family tie. Further, this would allow for the examination of whether sibling gender moderates the association between tension and psychological well-being.

Third, it is important to note that tension is only one dimension of interpersonal relationship quality. Given the large body of literature demonstrating the substantial impact of negative relationship quality on psychological well-being (Lackner et al. 2013; Mavandadi et al. 2007; Newsom et al. 2003), these findings are an important first step to understanding the association between relationship quality and well-being in midlife. However, future research should extend this line of inquiry to include other dimensions of relationship quality, such as emotional closeness and ambivalence.

Further, although depressive symptoms, particularly as measured by the CES-D, is one of the most commonly used constructs to study psychological well-being (Fingerman et al. 2008; Gilligan et al. 2015; Suitor et al. 2017), it is only one of many indicators that capture well-being. We hope that future studies will extend the study of the consequences of family ties on well-being using a wider array of such measures.

There are also many ways to conceptualize the "salience" of a tie. In the present work, we have approached the question of relative salience by comparing the consequences of tension on psychological well-being across three central relationships in adults' lives. However, there are alternative approaches to this question, including developing measures of self-reported salience, much like those used in work on Kahn and Antonucci's Convoy Model of Support (Antonucci et al. 2001, 2004; Kahn and Antonucci 1980).

Finally, the study of relative salience of family relationships for well-being can be expanded to include a wider range of ties, such as those with fathers, adult children, and extended family members. Not only do these ties represent structurally different positions in the family, but they also represent different socioemotional and contextual experiences with family members that may play a role in the consequences of relationship quality for well-being. For example, tensions with mothers and siblings may have differential salience on depressive symptoms in the context of family caregiving.

In summary, this study contributes to our understanding of family relationships and psychological well-being in midlife. Specifically, the findings of this study underscore the importance of examining multiple family ties when studying well-being in midlife. Recent demographic transitions—including postponement and abstention from marriage, increases in divorce, alternative union forms, non-marital childbearing, decreases in remarriage and fertility paired with increases in longevity—may impact how individuals experience multiple family ties (Suitor et al. 2015c). In particular, we propose that these changes may result in some family ties, such as those with parents and siblings, taking on greater salience in future years. Future scholars should continue to consider the interconnectedness of family relations and well-being in these changing demographic contexts.

Acknowledgments: This project was supported by grants from the National Institute on Aging (RO1 AG18869-01; 2RO1 AG18869-04), J. J. Suitor and K. Pillemer (co-PIs). J. J. Suitor, M. Rurka and G.Con also acknowledge support from the center on Aging and the Life Course at Purdue University.

Author Contributions: M. Gillian took lead in planning and writing the paper and conducting the data analysis. J. J. Suitor collaborated on writing the article, conducting the data analysis, and revising the paper for submission. S. Nam and B. Routh collaborated on conducting the data analysis and revising the paper for submission. M. Rurka and G. Con contributed to develop and revising the paper for submission.

Conflicts of Interest: The authors declare no conflict of interest.

References

Allison, Paul D. 2010. Missing Data. In *Handbook of Survey Research*. Edited by James D. Wright and Peter V. Marsden. Bingley: Emerald, pp. 631–58.

- Amato, Paul R., and Tamara D. Afifi. 2006. Feeling Caught between Parents: Adult Children's Relations with Parents and Subjective Well-being. *Journal of Marriage and Family* 68: 222–35. [CrossRef]
- Antonucci, Toni C., Hiroko Akiyama, and Alicia Merline. 2001. Dynamics of Social Relationships in Midlife. In *Handbook of Midlife Development*. Edited by Margie E. Lachman. Hoboken: John Wiley & Sons Inc., pp. 571–98.
- Antonucci, Toni C., Hiroko Akiyama, and Keiko Takahashi. 2004. Attachment and Close Relationships across the Life Span. *Attachment & Human Development* 6: 353–70.
- Bar-Kalifa, Eran, and Eshkol Rafaeli. 2013. Disappointment's Sting is Greater than Help's Balm: Quasi-signal Detection of Daily Support Matching. *Journal of Family Psychology* 27: 956–67. [CrossRef] [PubMed]
- Bedford, Victoria H., and Paula S. Avioli. 2012. Siblings in Middle and Late Adulthood. In *Handbook of Families and Aging*, 2nd ed. Edited by Rosemary Blieszner and Victoria H. Bedford. Santa Barbara: Praegar, pp. 125–53.
- Blanchard-Fields, Fredda, Renee Stein, and Tonya L. Watson. 2004. Age Differences in Emotion-Regulation Strategies in Handling Everyday Problems. *The Journals of Gerontology Series B: Psychological Sciences and Social Sciences* 59: 261–69. [CrossRef]
- Campbell, Lori D., Ingrid A. Connidis, and Lorraine Davies. 1999. Sibling Ties in Later Life: A Social Network Analysis. *Journal of Family Issues* 20: 114–48. [CrossRef]
- Carr, Deborah, and Kristen W. Springer. 2010. Advances in Families and Health Research in the 21st Century. *Journal of Marriage and Family* 72: 743–61. [CrossRef]
- Carr, Deborah, Vicki A. Freedman, Jennifer C. Cornman, and Norbert Schwarz. 2014. Happy Marriage, Happy Life? Marital Quality and Subjective Well-being in Later Life. *Journal of Marriage and Family* 76: 930–48. [CrossRef] [PubMed]
- Carstensen, Laura. 1992. Social and emotional patterns in adulthood: Support socioemotional selectivity theory. *Psychology and Aging* 7: 331–38. [CrossRef] [PubMed]
- Charles, Susan Turk, and Laura L. Carstensen. 2007. Emotion Regulation and Aging. In *Handbook of Emotion Regulation*. Edited by James J. Gross. New York: Guilford Press, pp. 307–27.
- Cheng, Sheung-Tak, Kin-Kit Li, Edward M. F. Leung, and Alfred C. M. Chan. 2011. Social Exchanges and Subjective Well-being: Do Sources of Positive and Negative Exchanges Matter? *Journals of Gerontology Series B: Psychological Sciences and Social Sciences* 66: 708–18. [CrossRef] [PubMed]
- Chodorow, Nancy J. 1989. Feminism and Psychoanalytic Theory. New Haven: Yale University Press.
- Choi, Heejeong, and Nadine F. Marks. 2008. Marital Conflict, Depressive Symptoms, and Functional Impairment. *Journal of Marriage and Family* 70: 377–90. [CrossRef] [PubMed]
- Cicirelli, Victor G. 1989. Feelings of Attachment to Siblings and Well-being in Later Life. *Psychology and Aging* 4: 211–16. [CrossRef] [PubMed]
- Clarke, Philippa, Victor Marshall, James House, and Paula Lantz. 2011. The Social Structuring of Mental Health over the Adult Life Course: Advancing Theory in the Sociology of Aging. *Social Forces* 89: 1287–313. [CrossRef]
- Cohen, Sheldon. 2004. Social Relationships and Health. American Psychologist 59: 676-84. [CrossRef] [PubMed]
- Connidis, Ingrid A., and Lori D. Campbell. 1995. Closeness, Confiding, and Contact among Siblings in Middle and Late Adulthood. *Journal of Family Issues* 16: 722–45. [CrossRef]
- Cutrona, Carolyn E. 1996. *Social Support in Couples: Marriage as a Resource in Times of Stress*. Thousand Oaks: Sage Publications, vol. 13.
- DeLongis, Anita, Martha Capreol, Susan Holtzman, Tess O'Brien, and Jennifer Campbell. 2004. Social Support and Social Strain among Husbands and Wives: A Multilevel Analysis. *Journal of Family Psychology* 18: 470–79. [CrossRef] [PubMed]
- Dixon, John, and Clyde Tucker. 2010. Survey Nonresponse. In *Handbook of Survey Research*. Edited by Peter. V. Marsden and James D. Wright. Bingley: Emerald Group, pp. 593–63.
- Karen L. Fingerman, ed. 2001. *Aging Mothers and Their Adult Daughters: A Study in Mixed Emotions*. New York: Springer Publishing Company.
- Fingerman, Karen L., and Elizabeth L. Hay. 2002. Searching Under the Streetlight? Age Biases in the Personal and Family Relationships Literature. *Personal Relationships* 9: 415–33. [CrossRef]

Fingerman, Karen L., Elizabeth L. Hay, and Kira S. Birditt. 2004. The Best of Ties, the Worst of Ties: Close, Problematic, and Ambivalent Social Relationships. *Journal of Marriage and Family* 66: 792–808. [CrossRef]

- Fingerman, Karen L., Lindsay Pitzer, Eva S. Lefkowitz, Kira S. Birditt, and Daniel Mroczek. 2008. Ambivalent Relationship Qualities between Adults and Their Parents: Implications for the Well-being of Both Parties. The Journals of Gerontology Series B: Psychological Sciences and Social Sciences 63: 362–71. [CrossRef]
- Fiori, Katherine L., and Nathan S. Consedine. 2013. Positive and Negative Social Exchanges and Mental Health across the Transition to College Loneliness as a Mediator. *Journal of Social and Personal Relationships* 30: 920–41. [CrossRef]
- Gilligan, Carol. 1982. In a Different Voice: Psychological Theory and Women's Development. Cambridge: Harvard University Press.
- Gilligan, Megan, J. Jill Suitor, Seoyoun Kim, and Karl Pillemer. 2013. Differential Effects of Perceptions of Mothers' and Fathers' Favoritism on Sibling Tension in Adulthood. *Journals of Gerontology Series B: Psychological Sciences and Social Sciences* 68: 593–98. [CrossRef] [PubMed]
- Gilligan, Megan, J. Jill Suitor, Scott Feld, and Karl Pillemer. 2015. Do Positive Feelings Hurt? Disaggregating Positive and Negative Components of Intergenerational Ambivalence. *Journal of Marriage and Family* 77: 261–76. [CrossRef] [PubMed]
- Ha, Jung-Hwa. 2010. The Effects of Positive and Negative Support from Children on Widowed Older Adults' Psychological Adjustment: A Longitudinal Analysis. *The Gerontologist* 50: 471–81. [CrossRef] [PubMed]
- Kahn, Robert L., and Toni C. Antonucci. 1980. Convoys over the Life Course: Attachment, Roles, and Social Support. In *Life-Span Development and Behavior*. Edited by Paul B. Baltes and Orville G. Brim Jr. New York: Academic Press, vol. 3, pp. 254–83.
- Kalmijn, Matthijs, and Aart C. Liefbroer. 2011. Nonresponse of Secondary Respondents in Multi-actor Surveys: Determinants, Consequences, and Possible Remedies. *Journal of Family Issues* 32: 735–66. [CrossRef]
- Kamp Dush, Claire M., Miles G. Taylor, and Rhiannon A. Kroeger. 2008. Marital Happiness and Psychological Well-being across the Life Course. *Family Relations* 57: 211–26. [CrossRef] [PubMed]
- Kim, Hyoun K., and Patrick C. McKenry. 2002. The Relationship between Marriage and Psychological Well-being: A Longitudinal Analysis. *Journal of Family Issues* 23: 885–911. [CrossRef]
- Krause, N., and Christopher G. Ellison. 2007. Parental Religious Socialization Practices and Self-Esteem in Later Life. *Review of Religious Research* 49: 109–27.
- Lackner, Jeffrey M., Gregory D. Gudleski, Rebecca Firth, Laurie Keefer, Darren M. Brenner, Katie Guy, Camille Simonetti, Christopher Radziwon, Sarah Quinton, Susan S. Krasner, and et al. 2013. Negative Aspects of Close Relationships Are More Strongly Associated than Supportive Personal Relationships with Illness Burden of Irritable Bowel Syndrome. *Journal of Psychosomatic Research* 74: 493–500. [CrossRef] [PubMed]
- LaSala, Michael C. 2002. Walls and Bridges: How Coupled Gay Men and Lesbians Manage their Intergenerational Relationships. *Journal of Marital and Family Therapy* 28: 327–39. [CrossRef] [PubMed]
- Lee, Hyo Jung, and Maximiliane E. Szinovacz. 2016. Positive, Negative, and Ambivalent Interactions with Family and Friends: Associations with Well-being. *Journal of Marriage and Family* 78: 660–79. [CrossRef]
- Mavandadi, Shahrzad, Dara H. Sorkin, Karen S. Rook, and Jason T. Newsom. 2007. Pain, Positive and Negative Social Exchanges, and Depressive Symptomatology in Later Life. *Journal of Aging and Health* 19: 813–30. [CrossRef] [PubMed]
- McCall, George J., and Jerry Laird Simmons. 1966. The Role-identity Model. In *Identities and Interactions*. New York: Free Press, pp. 63–104.
- Nevill, Dorothy D., and Donald E. Super. 1986. *The Salience Inventory: Theory, Application, and Research: Manual*, Research ed. Palo Alto: Consulting Psychologists Press.
- Newsom, Jason T., Masami Nishishiba, David L. Morgan, and Karen S. Rook. 2003. The Relative Importance of Three Domains of Positive and Negative Social Exchanges: A Longitudinal Model with Comparable Measures. *Psychology and Aging* 18: 746–54. [CrossRef] [PubMed]
- Paul, Elizabeth L. 1997. A Longitudinal Analysis of Midlife Interpersonal Relationships and Well-being. In *Multiple Paths of Midlife Development*. Edited by Margie E. Lachman and Jacquelyn B. James. Chicago: University of Chicago Press, pp. 171–206.

Polenick, Courtney A., Nicole DePasquale, David J. Eggebeen, Steven H. Zarit, and Karen L. Fingerman. 2016. Relationship Quality between Older Fathers and Middle-aged Children: Associations with Both Parties' Subjective Well-Being. *Journals of Gerontology Series B: Psychological Sciences and Social Sciences*. [CrossRef] [PubMed]

- Proulx, Christine M., Heather M. Helms, and Cheryl Buehler. 2007. Marital Quality and Personal Well-being: A Meta-analysis. *Journal of Marriage and Family* 69: 576–93. [CrossRef]
- Rook, Karen S. 2001. Emotional Health and Positive versus Negative Social Exchanges: A Daily Diary Analysis. *Applied Developmental Science* 5: 86–97. [CrossRef]
- Ross, Catherine E., and John Mirowsky. 1988. Child Care and Emotional Adjustment to Wives' Employment. *Journal of Health and Social Behavior* 29: 127–38. [CrossRef] [PubMed]
- Rossi, Alice S., and Peter H. Rossi. 1990. *Of Human Bonding: Parent-Child Relations Across the Life Course*. Piscataway: Transaction Publishers.
- Schieman, Scott, and Paul Glavin. 2011. Education and Work-Family Conflict: Explanations, Contingencies, and Mental Health Consequences. *Social Forces* 89: 1341–62. [CrossRef]
- Sechrist, Jori, J. Jill Suitor, Catherine Riffin, Kadari Taylor-Watson, and Karl Pillemer. 2011. Race and Older Mothers' Differentiation: A Sequential Quantitative and Qualitative Analysis. *Journal of Family Psychology* 25: 837–46. [CrossRef] [PubMed]
- Silverstein, Merril, Roseann Giarrusso, and Vern L. Bengtson. 1998. Intergenerational Solidarity and the Grandparent Role. In *Handbook on Grandparenthood*. Edited by Maximiliane E. Szinovacz. Westport: Greenwood Publishing Group, pp. 144–58.
- Spitze, Glenna, and Katherine Trent. 2006. Gender Differences in Adult Sibling Relations in Two-Child Families. *Journal of Marriage and Family* 68: 977–92. [CrossRef]
- Spitze, Glenna, and Katherine Trent. 2016. Changes in Individual Sibling Relationships in Response to Life Events. *Journal of Family Issues*. [CrossRef]
- Suitor, J. Jill, and Karl Pillemer. 2006. Choosing Daughters: Exploring Why Mothers Favor Adult Daughters over Sons. *Sociological Perspectives* 49: 139–61. [CrossRef]
- Suitor, J. Jill, Jori Sechrist, Mari Plikuhn, Seth T. Pardo, Megan Gilligan, and Karl Pillemer. 2009. The Role of Perceived Maternal Favoritism in Sibling Relations in Midlife. *Journal of Marriage and Family* 71: 1026–38. [CrossRef] [PubMed]
- Suitor, J. Jill, Megan Gilligan, and Karl Pillemer. 2013. Continuity and Change in Mothers' Favoritism toward Offspring in Adulthood. *Journal of Marriage and Family* 75: 1229–47. [CrossRef]
- Suitor, J. Jill, Megan Gilligan, Kaitlin Johnson, and Karl Pillemer. 2014. Caregiving, Perceptions of Maternal Favoritism, and Tension among Siblings. *The Gerontologist* 5: 580–88. [CrossRef] [PubMed]
- Suitor, J. Jill, Gulcin Con, Kaitlin Johnson, Siyun Peng, and Megan Gilligan. 2015a. Parent-child Relationships. In *Encyclopedia of Adulthood and Aging*. Edited by Susan K. Whitbourne. Hoboken: Wiley-Blackwell, vol. 3, pp. 1011–15.
- Suitor, J. Jill, Megan Gilligan, Siyun Peng, Jong Hyun Jung, and Karl Pillemer. 2015b. Role of Perceived Maternal Favoritism and Disfavoritism in Adult Children's Psychological Well-Being. *The Journals of Gerontology Series B: Psychological Sciences and Social Sciences*. [CrossRef] [PubMed]
- Suitor, J. Jill, Megan Gilligan, and Karl Pillemer. 2015c. Stability, Change, and Complexity in Later Life Families. In *Handbook of Aging and the Social Sciences*, 8th ed. Edited by Linda K. George and Kenneth F. Ferraro. New York: Elsevier/Academic, pp. 206–26.
- Suitor, J. Jill, Megan Gilligan, Karl Pillemer, Karen L. Fingerman, Kyungmin Kim, Merril Silverstein, and Vern L. Bengtson. 2017. Applying Within-Family Differences Approaches to Enhance Understanding of the Complexity of Intergenerational Relations. *The Journals of Gerontology Series B: Psychological Sciences and Social Sciences*. [CrossRef] [PubMed]
- Super, Donald E. 1990. A Life-Span, Life-Space Approach to Career Development. In *Career Choice and Development:*Applying Contemporary Theories to Practice. Edited by Duane Brown and Linda Brooks. San Francisco:
 Jossey-Bass, pp. 167–261.
- Umberson, Debra. 1992. Relationships between Adult Children and their Parents: Psychological Consequences for Both Generations. *Journal of Marriage and the Family* 54: 664–74. [CrossRef]
- Umberson, Debra, and Jennifer Karas Montez. 2010. Social Relationships and Health a Flashpoint for Health Policy. *Journal of Health and Social Behavior* 51: S54–S66. [CrossRef] [PubMed]

Umberson, Debra, Meichu D. Chen, James S. House, Kristine Hopkins, and Ellen Slaten. 1996. The Effect of Social Relationships on Psychological Well-being: Are Men and Women Really So Different? *American Sociological Review* 61: 837–57. [CrossRef]

- Umberson, Debra, Kristi Williams, Daniel A. Powers, Hui Liu, and Belinda Needham. 2006. You Make Me Sick: Marital Quality and Health over the Life Course. *Journal of Health and Social Behavior* 47: 1–16. [CrossRef] [PubMed]
- Umberson, Debra, Mieke Beth Thomeer, and Kristi Williams. 2013. Family Status and Mental Health: Recent Advances and Future Directions. In *Handbook of the Sociology of Mental Health*, 2nd ed. Edited by Carol S. Aneshensel, Jo C. Phelan and Alex Bierman. New York: Springer Publishing, pp. 405–31.
- Ward, Russell A. 2008. Multiple Parent-Adult Child Relations and Well-Being in Middle and Later Life. *The Journals of Gerontology: Series B* 63: S239–S247. [CrossRef]
- Ward, Russell A., Glenna Spitze, and Glenn Deane. 2009. The More the Merrier? Multiple Parent-Adult Child Relations. *Journal of Marriage and Family* 71: 161–73. [CrossRef]
- White, Lynn. 2001. Sibling Relationships over the Life Course: A Panel Analysis. *Journal of Marriage and Family* 63: 555–68. [CrossRef]
- White, Lynn K., and Agnes Riedmann. 1992. Ties among Adult Siblings. *Social Forces* 71: 85–102. [CrossRef] Williams, Kristi. 2003. Has the Future of Marriage Arrived? A Contemporary Examination of Gender, Marriage, and Psychological Well-being. *Journal of Health and Social Behavior* 44: 470–87. [CrossRef] [PubMed]



© 2017 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (http://creativecommons.org/licenses/by/4.0/).