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The Impact of Relationship-Specific Support and Strain on Depressive Symptoms Across the Life Course

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Abstract

Objective: This study integrates stress process theory into a life course framework to examine how support and strain from particular relationship types (spouse/partner, children, mother, and friends/relatives) influence trajectories of depressive symptoms among different age groups, net of support and strain from other relationship types.

Method: Latent growth curve models were used on nationally representative panel data (N = 3,617) from the Americans' Changing Lives survey (1986, 1989, 1994, and 2001/2002).

Results: Net of support and strain from other relationships, support from a spouse was related to fewer depressive symptoms among each age group. Friendships were important for depressive symptoms among younger and older adults, whereas only support/strain from family relationships influenced depressive symptoms among adults in midlife.

Discussion: Findings demonstrate the importance of support and strain in multiple types of network members for the mental health of adults across the life course.

Keywords

social support; relationship strain; mental health; depressive symptoms; life course

Introduction

Although we know that social relationships can affect health (House, Landis, & Umberson, 1988), this influence is a function of not just the presence or absence of a social tie, but the quality of the relationship as well. Relationship quality in terms of social support is typically associated with better health (Cassel, 1976; Uchino, 2006), and strain in relationships is related to worse health (Sherman, Skrzypek, Bell, Tatum, & Paskett, 2011; Umberson, Williams, Powers, Liu, & Needham, 2006). Social relationships are multidimensional, and one may experience both support and strain from the same relationship. In addition, some relationship types (e.g., friends, children) may matter differently at different points in the life course (Carstensen, 1992).

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The current study integrates these ideas, examining in which relationships (e.g., with friends, children, spouse) support and strain matter, net of the others, for mental health at different stages of the life course, extending and improving upon previous literature in several ways. First, many studies often focus on either social support or relationship strain, without examining the impact of one net of the other (Sherman et al., 2006). Although studying each by itself can provide useful information, studying both support and strain within the same relationship type provides a more nuanced approach reflecting that one may experience both positive and negative interactions within the same relationship. Rather than, for instance, only examining a global measure of social support, this study is able to provide a greater context of the impact of social support net of the strain one also experiences in a relationship and the impact of strain net of the support one receives. A social relationship is not uniformly positive or negative at all times, and it is not clear whether support or strain in a particular relationship may have a significant impact on mental health, after adjusting for the other. Second, many studies focus solely on one relationship type (e.g., the spousal relationship), without considering the impact of support/strain in a social relationship net of support/strain in other social relationships (Koropeckyj-Cox, 2002). Social relationships do not occur in a vacuum; rather, they are embedded within one's social network. Some relationships may stand out as particularly important or unimportant, after adjusting for support/strain in other relationships. Third, there is a dearth of research examining how the impact on health of social support and strain in these different relationship types may vary across different stages of the life course. It is possible that support/strain in particular relationships may be significantly related to mental health, for example, in young adulthood but not middle or older adulthood. The present study seeks to fill these gaps by using nationally representative panel data to examine the impact of support and strain in relationships with a spouse/partner, children, mothers, and friends/relatives on trajectories of depressive symptoms among three age groups: young adults, midlife adults, and older adults.

Theory and Evidence

The Impact of Social Support and Strain on Mental Health

Support and strain in social relationships may have important consequences for mental health. Relationship quality is a strong predictor of well-being (Merz, Consedine, Schulze, & Schuengel, 2009). Social support has long been linked to positive health outcomes (Cassel, 1976; Cobb, 1976) and stressors to negative health outcomes (Pearlin, Menaghan, Lieberman, & Mullan, 1981). Empirical evidence suggests that social support is salutary for mental health, strongly influencing fewer initial depressive symptoms as well as moderately influencing fewer depressive symptoms over time (Russell & Cutrona, 1991). Relationship strain, as an important source of stress, has been associated with moderately higher levels of depressive symptoms (Sherman et al., 2011).

This study integrates stress process theory into a life course framework. The life course perspective draws attention to the importance of linked lives and an emphasis on individuals' trajectories across the life course (Elder, Johnson, & Crosnoe, 2003). The concept of linked lives, or interdependence in shared relationships, is vital to the idea that support

and strain in an individual's relationships with other people can affect his or her health. Moreover, stressors and social support are core components of stress process theory (Pearlin, 1999). Strains from interpersonal relationships, such as conflict with family members, are important sources of stress that can lead to distress, and social support from an individual's relationships can provide critical resources for health (Pearlin et al., 1981; Pearlin & Skaff, 1996). Stressors and resources can have a considerable impact across long spans of time (Pearlin, Schieman, Fazio, & Meersman, 2005); these components of the stress process may shift across age, and these stressors and resources can shape life-course trajectories of mental health (Pearlin & Skaff, 1996).

There are several pathways through which social support may influence mental health. Those who receive social support may be more socially integrated (House, 1987), with a greater sense of meaning and purpose as well as a reservoir of resources that may benefit mental health (Hartwell & Benson, 2007; Kawachi & Berkman, 2001). Social support is associated with better health behaviors as well (Cho, Jae, Choo, & Choo, 2014). Support may come from important social connections that encourage individuals to take better care of themselves and engage in health-promoting behaviors (Bassuk, Glass, & Berkman, 1999). Social support may also promote mental health through increased self-esteem, which involves more positive views of oneself (Fukukawa et al., 2000). Social support is related to higher self-esteem, which may encourage optimism and prompt fewer depressive symptoms (Symister & Friend, 2003).

Extant research clearly shows that stress can harm mental health (Aneshensel & Stone, 1982), and relationship strain is an important source of stress (Rook, 2014). Stress may lead to behaviors that are detrimental to health, such as less exercise, a high fat diet, and smoking, as coping mechanisms to deal with stress (Ng & Jeffery, 2003). Strained relationships can have detrimental physiological consequences such as increased heart rate and impaired immune function that can undermine health (Kiecolt-Glaser & Newton, 2001), and relationship strain as well as the risky health behaviors as strategies to cope with the stress of relationship strain can influence mental health by potentially leading to physiological processes that can produce a greater risk for depression and anxiety (Korte, Koolhaas, Wingfield, & McEwen, 2005).

Support and Strain, Net of the Other and Across Multiple Relationships

Social relationships may not simply provide only support or only strain. Relationships are multidimensional and contain complex and sometimes contradictory elements (Bengtson, Giarrusso, Mabry, & Silverstein, 2002). Individuals may experience an overlap of both support and strain within the same social relationship, so it is important to examine both these aspects simultaneously. Although the bulk of studies examine only support or only strain, the pattern of studies that do simultaneously examine them suggests that support and strain independently affect health and that the impact of relationship strain may be stronger and more consistently related to well-being than social support (Rook, 1998). Rook (1984), for instance, found that among older widowed women supportive and problematic social ties were independent, and problematic interactions with social ties were more consistently related to well-being than support et al. (2011)

found similarly sized effects for the impact of support ($\beta = -.35$) and strain ($\beta = .32$) net of each other on depressive symptoms; however, they did not examine the impact of relationship-specific strain and support net of each other. Durden, Hill, and Angel (2007) found that social support was more strongly associated with psychological distress than social demands among a sample of low-income women. Social support may provide a resource for coping with stressors that dulls their impact on health (Lin & Ensel, 1989), so the effect of stressors on health may be reduced when social support is present (Thoits, 2010). Examining support and strain, net of each other, is important to better understand how both the positive and negative aspects of an individual's social ties may influence his or her mental health. Most studies examining both support and strain focus on only one age group or a specialized sample, analyze cross-sectional data, or do not examine relationship-specific support and strain. The present study moves the literature forward by focusing on the impact of relationship-specific support and strain across multiple age groups with nationally representative longitudinal data.

Support and strain may come from multiple network members; however, there is a dearth of research examining the impact of support and/or strain from multiple relationships, net of each other, on health. Merz and Huxhold (2010) separated kin and non-kin sources, finding that emotional support from kin and relationship quality with both kin and non-kin predicted higher well-being among older adults. Cross-sectional research shows that partner support and strain, family support and strain, and friend support were each related to aspects of higher well-being (Walen & Lachman, 2000). Although other research using global support and strain measures suggests that negative social interactions may be more strongly and consistently related to well-being (Rook, 1998), Okun and Keith (1998) cross-sectionally examined relationship-specific support and strain and found that support more strongly affected depressive symptoms than strain. Again, most of this literature examining relationship-specific support and strain focuses on one age group or is cross-sectional.

Support and Strain in Different Types of Relationships Across the Life Course

As individuals move through the life course, the purpose of and interactions with particular social relationships may change (Pearlin & Skaff, 1996). Particular social relationships may be more or less salient at different points in the life course, which may lead support and strain from those relationships to be especially important for health among different age groups. Identity theory suggests that identities are created through role expectations and meanings attached to positions occupied in an individual's social network of relationships (Stryker & Burke, 2000). Identities are organized into a salience hierarchy where certain role identities are especially important for the self (Stryker & Serpe, 1982). Experiences that threaten or enhance valued identities, of which social roles are an intrinsic part, are relevant for an individual's experiences of stress (Thoits, 1991). This suggests that relationships from particular roles, such as parent or spouse, that are especially valued for an individual's identity may have a greater impact on mental health. Strain in a social relationship that disrupts a salient role identity may be particularly damaging for mental health, and experiences that are role enhancing (such as social support) for a salient role identity may be particularly beneficial (Thoits, 1991). At different points in the life course, the functions of social contacts may differ in their salience and effectiveness (Carstensen, 1992).

Different relationships may be especially salient at different stages in the life course, so an individual's susceptibility to strains and support in particular types of social relationships is likely to also vary across the life course.

Past literature suggests that support and strain from particular social ties may be especially important for health among particular age groups. General social support was related to well-being more strongly in older adults than in young adults (Kafetsios & Sideridis, 2006), which suggests that the impact of support may be heightened among older adults; however, this study did not separate support by different types of relationships. Umberson and colleagues (2006) found that marital strain was related to decline in self-rated health and that effect was larger at older ages, suggesting that strain from one's spouse may be especially important among older adults. Parent-child relationships may be important across multiple life stages in different ways. Parents have an important influence on their children's health behaviors in young adulthood (Lau, Quadrel, & Hartman, 1990), suggesting that strain or support from a parent may be particularly important for young adults. Parents in middle and old age experienced greater depressive symptoms when they had poorer quality relationships with their children (Koropeckyj-Cox, 2002), suggesting that relationships with children may be particularly important for adults in both mid- and late-life. Friendships may be particularly important for the mental health of younger and older adults. Social interactions with acquaintances are greater and potentially very important among younger adults (Carstensen, 1992), and activities with friends have increased positive affect and decreased negative affect among older adults (Huxhold, Miche, & Schüz, 2014). Most studies focus on only one life stage and often on only one type of relationship at a time, which provides clues about the types of relationships that may be especially important but does not provide an overall picture of the impact of each type of relationship net of other types.

Method

Data

Data used in these analyses come from the Americans' Changing Lives (ACL) survey housed at the University of Michigan's Institute for Social Research and funded by the National Institute on Aging (House, 2007). This nationally representative panel study collected data in 1986, 1989, 1994, and 2001/2002. Wave 1 (N= 3,617) used a multistage stratified area probability sample of the continental United States's household population aged 25 and older, with an oversampling of African Americans and adults aged 60 and older, with a response rate of 68%. The analytic sample consists of 1,082 young adults (age 25–39), 865 middle-aged adults (age 40–59), and 1,670 older adults (age 60+).

Measures

Depressive Symptoms are measured in each wave with the sum of 11 items from the Center for Epidemiologic Studies Depression Scale (CES-D). These include how often in the past week respondents felt depressed, that everything was an effort, their sleep was restless, they were happy (reverse coded), lonely, people were unfriendly, they enjoyed life (reverse coded), did not feel like eating, felt sad, people disliked them, and they could not get going.

Response categories for each item were 0 = hardly ever, 1 = some of the time, and 2 = most of the time. Each wave of this variable was logged to reduce skew.

Relationship Support and Relationship Strain are measured in four types of relationships at baseline: spouse/partner, children, mother, and friends/relatives. Support from each type of relationship is based on the sum of two questions: "How much does your [type of relationship (e.g., spouse)] make you feel loved and cared for?" and "How much is (he/she) willing to listen when you need to talk about your worries or problems?" Strain from each type of relationship is based on the sum of two questions: "How much do you feel (he/she) makes too many demands on you?" and "How much is (he/she) critical of you or what you do?" Response categories for each of these support and strain questions were 0 = not at all, 1 = a little, 2 = some, 3 = quite a bit, and 4 = a great deal. Most of the support and strain measures were only available at Waves 1 and 2 of the ACL. Although it would be ideal to understand the impact of changes in support and strain within each of these relationships across a longer period of time, the availability of these measures in two waves does provide the opportunity to examine how changes in support and strain between baseline and Wave 2 may affect mental health over time. It is possible that an increase or decrease in strain or support may have an important impact on depressive symptoms. Thus, change variables (Wave 1 values subtracted from Wave 2 values) for each of these measures were included in the models. Scores for the change variables ranged from -8 to 8, with positive values indicating an increase in support/strain at Wave 2 compared with Wave 1 and negative values indicating a decrease at Wave 2 from baseline.

Age (in years, ranging from 25 to 95), *race* (1 = White, 0 = non-White [mostly African American]), sex (1 = female, 0 = male), education (continuous measure of highest grade completed),*family income*from all sources,*marital status*(1 =*currently married*, 0 =*not currently married*),*children living in the household*below the age of 18 (1 = any, 0 = none), religious attendance (0 = never to 4 = more than once a week), and activity limitations (i.e., "How much are your daily activities limited in any way by your health or health-related problems," ranging from 0 = not at all to 4 = a great deal) were included as control variables.

Analytic Strategy

This study examines the impact of relationship-specific support and strain on trajectories of mental health across three life stages: young adulthood, middle adulthood, and older adulthood. Analyses were conducted using Mplus, Version 7 (L. K. Muthén & Muthén, 1998–2010).

Latent growth curve modeling examines differences between individuals in intra-individual change and estimates a mean growth curve for the population (B. O. Muthén & Muthén, 2000). The intercept (initial level) and slope (growth rate over time) are latent factors comprising the latent growth curve models and are allowed to vary across individuals. Linear latent growth curve models are typically presented in three equations:

$$y_{it} = \eta_{0i} + \eta_{1i} x_t + \varepsilon_{it} \tag{1}$$

$$\eta_{0i} = \alpha_0 + \gamma_0 w_i + \zeta_{0i} \tag{2a}$$

$$\eta_{1i} = \alpha_1 + \gamma_1 w_i + \zeta_{1i} \,. \tag{2b}$$

Equation 1 represents within-individual change over time. Equations 2a and 2b represent between-individual change over time. The outcome variable is y_{it} (i.e., depressive symptoms of individual *i* at wave *t*), η_0 is the intercept, η_1 is the linear slope, *x* is the time score, and *w* represents covariates. The subscript *i* indicates that the parameter varies across individuals. Residuals are represented by ε_{it} , ζ_{0i} , and ζ_{1i} . The time scores reflect the number of years since Wave 1. The coefficients are interpreted as unstandardized regression coefficients affecting initial levels and change over time in the dependent variable. Quadratic models were also tested, but linear models fit the data best. Pairwise difference tests were conducted to test age group differences in the effects of relationship strain/support on health.

This study uses full information maximum likelihood (FIML) to handle missing data, which includes data missing on particular variables as well as panel attrition. FIML is a theorybased approach to missing data that incorporates all respondents into the data regardless of whether they responded to every item or participated in every wave of the survey. FIML uses all available data, including information about the mean and variance of the missing parts of a variable, given observed portions of other variables (Wothke, 2000). FIML has been shown to be less biased and more efficient than other ways of handling missing data, such as listwise deletion, pairwise deletion, or mean substitution (Schafer & Graham, 2002; Schlomer, Bauman, & Card, 2010; Wothke, 2000). Models also controlled for the number of measurement occasions in which respondents participated to help account for attrition (Warner & Brown, 2011).

Furthermore, because not all respondents had a tie to each social relationship measured, a flag variable for missing relationships was controlled. Thus, the results show the impact of relationship support and relationship strain on health, adjusted for those who lacked those social ties. Results were similar in sensitivity analyses in which those who lacked particular relationships were excluded. Relationships with fathers were not included, due to the very small sample of living fathers among respondents aged 60 and older. Supplementary analyses suggest that neither support nor strain with fathers was significantly related to mental health in any age group, net of other social relationships.

Results

Descriptives

Table 1 displays the baseline descriptive statistics of the sample. Descriptives are displayed for each age group: young adults (age 25–39), midlife adults (age 40–59), and older adults (age 60 and older). There were significantly more women than men in the older adult group (67%) than the young adult group (57%) and midlife adult group (61%), and those in the older group had the lowest income. The majority of the sample was White, with a significantly higher proportion in the older group (69%) compared with the young adult

group (60%) and midlife group (61%). Education differences were significant across age groups: Young adults had an average of 13 years, midlife adults 12 years, and older adults 10 years of education. The midlife group had the highest proportion of married people (62%) compared with 54% of young adults and 51% of older adults. The proportion of respondents with children age 17 or younger living in the household declined with age from 69% among young adults to 18% among older adults. Young adults attended religious services less often than midlife adults or older adults. Activity limitations due to health were significantly greater in older age groups.

Older adults experienced significantly lower levels of strain from their spouse/partner, more support and less strain from children, higher levels of support and lower levels of strain from their mother, and more support and less strain from friends/relatives than the other two age groups. Young adults experienced higher levels of support and strain from a spouse/ partner, lower levels of support and higher levels of strain from children, more strain from their mother, and more strain from friends than both midlife and older adults. Young adults experienced a greater negative change from Wave 1 to Wave 2 in support from children than the other age groups and in strain from mothers than the oldest age group. There were no other significant differences by age group in change between Wave 1 and Wave 2 support or strain in the other relationship types. Young adults experienced significantly more baseline depressive symptoms than the other age groups, whereas midlife and older adults experienced significantly more baseline levels of depressive symptoms to each other.

Relationship-Specific Social Support and Strain on Depressive Symptoms

Results from the unconditional model (with no covariates) suggest that depressive symptoms diminish slightly over time for each age group (model not shown). Table 2 displays the impact of baseline relationship support and strain, net of each other, as well as changes in support and strain between Wave 1 and Wave 2 on trajectories of depressive symptoms. Focusing first on the impact of baseline support/strain, experiencing more baseline support from a spouse was significantly related to fewer initial depressive symptoms across each age group. Experiencing more baseline strain from a spouse was significantly related to more initial depressive symptoms for adults in midlife and older adults. Baseline support from children was not related to depressive symptoms in any age group. Higher baseline strain from one's mother was related to fewer initial depressive symptoms for adults in midlife. Baseline support from friends was related to fewer initial depressive symptoms and fewer depressive symptoms over time for older adults, and baseline strain from friends was related to more initial depressive symptoms and fewer depressive symptoms over time for older adults, and baseline strain from friends was related to more initial depressive symptoms for midlife.

None of the relationship support/strain change variables (i.e., change from Wave 1 to Wave 2) were significantly related to change in depressive symptoms for young adults. Increased strain from a spouse and increased strain from one's mother from Wave 1 to Wave 2 were each related to more depressive symptoms over time for adults in midlife. Increased support from friends was related to fewer depressive symptoms over time for older adults.

Difference Tests Between Age Groups

Although particular relationships were significantly related to depressive symptoms within one age group and not in other age groups, pairwise difference tests of coefficients yielded only two significant differences across age groups in the effects of relationship-specific support/strain on depressive symptoms. There were significant differences between adults in midlife and older adults with respect to the impact of change in strain from a spouse on depressive symptoms over time, such that adults in midlife experienced significantly more depressive symptoms as strain from a spouse increased from Wave 1 to Wave 2 than older adults experiencing increases in strain from a spouse. There were also significant differences between young and older adults, such that greater baseline support from friends was related to a greater reduction in depressive symptoms over time for older adults. The lack of significant differences between most relationship-specific support and strain across groups, however, suggests that support and strain in most relationship types may operate similarly across the life course.

Discussion

Social relationships are an integral part of the well-being of individuals across the life course (Merz et al., 2009). This study integrates stress process theory into a life course framework to examine how relationship-specific support and strain, net of each other, influence trajectories of depressive symptoms at different stages of the life course. This work extends and contributes to the literature in several ways. First, the present study examines both support and strain within the same relationship type, net of the other. Relationships are multidimensional, and it is important to better understand whether support or strain from a particular social relationship may have a significant impact on mental health when adjusting for the other. Second, this study examines the impact of support and strain in multiple relationship types (spouse/partner, children, mothers, and friends/relatives) on depressive symptoms taking into consideration the support and strain from other members in one's social network. Individuals often have a complex web of relationships in which they experience both strain and support, so it is important to adjust for the strain and support arising from various network members. Third, this study examines these relationships across three stages of the life course: young adulthood, midlife, and older adulthood. Most studies focus on only one life stage or are cross-sectional, but the present study examined these phenomena across multiple life stages using nationally representative longitudinal data.

Stress process theory highlights the importance of social strain and social support for health (Pearlin, 1999). Relationship strain is an important source of stress that can negatively affect health (Rook, 2014), and social support is an important resource that can benefit health (Lin & Ensel, 1989; Thoits, 2010). Integrating these theories into the life course perspective (Elder et al., 2003) suggests that these components of the stress process may shift across age, shaping trajectories of mental health across the life course (Pearlin & Skaff, 1996). At different points in the life course, social contacts may differ in their salience (Carstensen, 1992), suggesting that the impact of support/strain from particular relationships that enhance/threaten valued identities (Thoits, 1991) may vary in their impact on mental health across different life stages.

Findings support the stress process model that social support would be beneficial and strain would be detrimental to mental health. Social support may promote health and well-being by enhancing an individual's sense of meaning in life and self-esteem as well as by increasing motivation and social pressure to engage in healthier behaviors (Berkman, Glass, Brissette, & Seeman, 2000; Symister & Friend, 2003). Relationship strain, however, may encourage unhealthy behaviors as coping mechanisms (Umberson, Liu, & Reczek, 2008) and lead to physiological processes that may produce a greater risk for depression and anxiety (Korte et al., 2005).

Social support from a spouse/partner was related to fewer initial depressive symptoms across each age group and strain from a spouse was related to more initial depressive symptoms for midlife and older adults, suggesting the importance of one's spouse across the life course. In midlife, family relationships have particularly important consequences on mental health. Social interactions with others throughout the life course may fluctuate due to child-care and work obligations and may not always reflect preference (Carstensen, 1992), which may explain why relationships with friends do not seem as important in the midlife age group. As part of the "sandwich generation" (Nichols & Junk, 1997), adults in midlife may have the bulk of their time occupied with taking care of children and parents as well as employment. The results of this study suggest that support and strain from one's family during this potentially stressful time of negotiating family roles and work obligations may be particularly important for the mental health of adults in midlife.

Family relationships are often quite important for older adults (van Tilburg, 1998), but support and strain from friends are important for older adults' mental health as well. Older adults often experience shrinking social networks at this stage of the life course (van Tilburg, 1998), suggesting that the friends who do remain in an older adult's social network may be particularly important, such that the older adult is more sensitive to support and strain from those friends. Strain from friends was related to worse mental health among younger adults as well. Young adults often place a great emphasis on their peer relationships, and peers may have important influences on their health behaviors (Carstensen, 1992; Lau et al., 1990), with implications for their mental health.

Although support and strain in particular relationships were significantly related to depressive symptoms in some age groups but not in others, there were only two significant differences across age groups in the effects of relationship support/strain on depressive symptoms. Baseline support from friends had a larger impact on fewer depressive symptoms over time for older adults compared with young adults. Socioemotional selectivity theory suggests that as individuals age, they often narrow their social partners and increase in emotional closeness (Carstensen, 1992), so support from particularly close friends may be especially important for the mental health of older adults. The other significant difference across age groups was such that increases in strain from a spouse had a greater impact on increasing depressive symptoms over time for adults in midlife compared with older adults. Perhaps adults in midlife dealing with the stresses of being in the "sandwich generation" (Nichols & Junk, 1997) may experience more difficulty when strain with a spouse is added to that. It may also be that older adults who are still married to their spouses may have better coping mechanisms for dealing with strains from a spouse or reconstruct the meaning

of these strains (Thoits, 1995), so perhaps older adults' mental health is less affected by increased strain with a spouse for these reasons.

The mostly nonsignificant pairwise difference tests of coefficients between age groups, however, suggest that the impact of support and strain in most of these relationships may operate similarly across life stages. Although some suggest that social ties may differ in their salience across the life course (Carstensen, 1992), which could potentially have implications for the effects of support and strain from particular relationships at different life stages, these null findings show that much relationship-specific support and strain does not vary in its impact on depressive symptoms across life stages. The life course perspective investigates both stability and change in phenomena across the life course (George, 2009), and it emphasizes the importance of linked lives (Elder & Johnson, 2002), which are still present in these findings. Although support and strain from most relationships did not affect the mental health of individuals differently for different age groups, the relationships followed what would be expected in the stress process, that support would generally be beneficial for mental health and strain would be detrimental to mental health (Pearlin, 1999). The null findings of most of the difference tests across age groups suggest that support and strain in these relationships are important for mental health across the life course rather than in just one particular age group.

Several limitations of this study should be noted. First, there were few surviving fathers among respondents age 60 and older, which limited the ability to obtain reliable estimates of the impact of support and strain from fathers on health, so support/strain with fathers were excluded from the analysis. Second, the survey questions asking about support and strain from friends/relatives combined friends and relatives into one question, such that they could not be separated. Third, the age groups were created at baseline, but respondents of course aged during the survey. Fourth, most of the support and strain measures were only available in the first two waves of the survey, limiting the amount of change in support and strain over time that could be studied.

Despite these limitations, the present study adds to the growing literature on social relationships, health, and aging, with several implications. This study demonstrates the importance of examining support and strain while adjusting for the other. In studies only examining support or only examining strain, there may be an incomplete picture of the impact of these relationships on health, which may skew the results by not taking into account both the positive and negative aspects of social relationships. The findings of this study also show that even though support/strain from particular relationships stood out within each age group, the impact of support and strain from these relationships was largely similar across age groups. Family and friendships are important relationships that may be meaningful to health and well-being at all ages. Findings from this study demonstrate the importance of support and strain from multiple types of network members for the mental health of adults across the life course. Future research should examine other variations, such as gender and racial differences, in how support and strain influence health across the life course.

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Table 1.

Baseline Descriptive Statistics by Age Group.

	Age 25-39	Age 40-59	Age 60+
Age (25–95)	31.8 ^a	49.1 ^b	70.0 ^C
Female (%)	56.7	60.7 ^b	67.1 ^C
White (%)	60.1	61.2 ^b	68.5 ^C
Education (0-17 years)	13.1 ^{<i>a</i>}	11.8 ^b	10.3 ^c
Income (<us\$5,000-us\$80,000+)< td=""><td>US\$22,500</td><td>US\$22,500^b</td><td>US\$17,500</td></us\$5,000-us\$80,000+)<>	US\$22,500	US\$22,500 ^b	US\$17,500
Married (%)	54.0 ^{<i>a</i>}	62.3 ^b	51.1
Children in household (%)	68.6 ^a	54.7 ^b	18.3 ^C
Religious attendance (0-5)	2.2 ^{<i>a</i>}	2.6	2.7 ^c
Activity limitations (0–4)	0.3 ^{<i>a</i>}	0.7 ^b	1.2 ^C
W1: Support from spouse/partner (0-8)	6.6 ^{<i>a</i>}	6.4	6.4 ^C
W1: Strain from spouse/partner (0-8)	2.8 ^{<i>a</i>}	2.4 ^b	2.1 ^c
W2 – W1: Support from spouse/partner (-8-8)	-0.16	-0.16	-0.17
W2 – W1: Strain from spouse/partner (–8–8)	0.15	0.18	0.23
W1: Support from children (0–8)	5.6 ^a	6.0 ^b	6.6 ^C
W1: Strain from children (0–8)	2.9 ^{<i>a</i>}	2.1 ^b	1.2 ^C
W2 – W1: Support from children (–8–8)	-0.50 ^a	-0.13	-0.13 ^C
W2 – W1: Strain from children (–8–8)	0.14	-0.06	0.07
W1: Support from mother (0-8)	6.9	6.8 ^b	7.2 ^c
W1: Strain from mother (0–8)	2.1 ^{<i>a</i>}	1.6 ^b	1.0 ^C
W2 – W1: Support from mother (–8–8)	-0.04	0.03	-0.22
W2 – W1: Strain from mother (–8–8)	-0.14	-0.08	0.22 ^C
W1: Support from friends/relatives (0-8)	5.7	5.8 ^b	6.0 ^C
W1: Strain from friends/relatives (0-8)	2.1 ^{<i>a</i>}	1.5 ^b	1.0 ^C
W2 – W1: Support from friends/relatives (-8-8)	0.05	-0.02	-0.08
W2 – W1: Strain from friends/relatives (–8–8)	0.01	0.11	0.09
W1: Depressive symptoms (0–22)	5.3 ^{<i>a</i>}	4.6	4.5 ^c
W2: Depressive symptoms (0–22)	4.6	4.3	4.3
W3: Depressive symptoms (0–22)	3.9	3.8	3.6
W4: Depressive symptoms (0–22)	3.8 ^{<i>a</i>}	3.3	3.6
	n = 1,082	<i>n</i> = 865	<i>n</i> = 1,670

Note. Ranges in parentheses. W1 = Wave 1, W2 - W1 = Change in variable (Wave 2 - Wave 1).

^{*a*}Significant difference (p < .05) between young adults (age 25–39) and midlife adults (age 40–59).

 $b_{\mbox{Significant}}$ difference (p<.05) between midlife adults (age 40–59) and older adults (age 60+).

^cSignificant difference (p < .05) between young adults (age 25–39) and older adults (age 60+).

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Table 2.

The Impact of Baseline and Change in Social Support and Strain by Relationship Type on Depressive Symptoms (Logged) Across Age Groups.

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	Age 25–39	-39	Age 40–59	-59	Age 60+	0+
	Intercept	Slope	Intercept	Slope	Intercept	Slope
Support from spouse/partner	$-0.075^{***}(0.020)$	0.002 (0.003)	$-0.077^{***}(0.019)$	0.003 (0.002)	$-0.055^{***}(0.015)$	0.002 (0.002)
Support from spouse/partner	I	-0.003 (0.002)	I	-0.002 (0.002)		-0.001 (0.002)
Strain from spouse/partner	0.006 (0.021)	0.006 (0.003)	$0.036 \ ^{*}(0.018)$	-0.002 (0.002)	$0.044 \ ^{**}(0.017)$	-0.005 (0.003)
Strain from spouse/partner	I	0.004 (0.003)	I	$0.005^{**}(0.002)$		-0.001 (0.002)
Support from children	-0.034 (0.036)	0.001 (0.004)	-0.034 $^{*}(0.016)$	-0.001 (0.002)	-0.035 [*] (0.014)	0.001 (0.002)
Support from children	I	-0.002 (0.004)	I	-0.001(0.001)	I	-0.001 (0.002)
Strain from children	0.065 (0.034)	-0.007 (0.006)	0.020 (0.017)	-0.001 (0.002)	0.000 (0.014)	0.003 (0.003)
Strain from children		-0.001 (0.005)		-0.003 (0.002)		0.004~(0.003)
Support from mother	-0.028 (0.024)	0.003 (0.003)	0.002 (0.021)	-0.003 (0.002)	0.048~(0.039)	0.005 (0.005)
Support from mother	I	0.002 (0.003)	I	0.002 (0.002)		0.007 (0.007)
Strain from mother	0.022 (0.014)	0.003 (0.002)	0.037 $^{*}(0.018)$	0.001 (0.002)	0.007 (0.028)	0.003 (0.005)
Strain from mother	Ι	0.002 (0.002)	I	0.005 * (0.002)		0.003 (0.005)
Support from friends/relatives	-0.025 (0.015)	0.001 (0.002)	-0.011 (0.016)	0.000 (0.002)	-0.037 ^{**} (0.012)	-0.005 $^{*}(0.002)$
Support from friends/relatives		0.001 (0.002)		-0.002 (0.001)		$-0.006^{**}(0.002)$
Strain from friends/relatives	0.039 * (0.017)	0.001 (0.002)	0.009 (0.018)	0.002 (0.002)	$0.047 \frac{**}{(0.016)}$	0.000 (0.003)
Strain from friends/relatives	I	0.002 (0.002)	I	0.002 (0.002)		0.001 (0.002)
			CFI = 0.94	.94		
			RMSEA = 0.031	= 0.031		
	n = 1,082	82	n = 865	55	n = 1,670	570

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Note. = Change in variable, Wave 2 – Wave 1. All models controlled for age, sex, race, income, education, marital status, children living in the household, religious attendance, activity limitations due to health, the number of measurement occasions in which a respondent participated, and a flag variable for lacking social relationships. Coefficients are unstandardized. Standard errors are in parentheses. CFI = comparative fit index; RMSEA = root mean square error of approximation.

 $_{P < .05.}^{*}$

**

p < .001.p < .01.