Support and Strain in Social Relationships: Do They Matter for Health at Different Stages of the Life Course?

Patricia A. Thomas*
Population Research Center
University of Texas at Austin

*Please direct correspondence to Patricia A. Thomas: Population Research Center, 110 Inner Campus Drive, Stop G1800, Austin TX 78712-1699; E-mail: pthomas@prc.utexas.edu

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ABSTRACT

Objectives. This study integrates stress process theory and identity theory into a life course framework to examine how support and strain from particular relationship types influence health trajectories across the life course.

Methods. Data come from the Americans' Changing Lives survey, a nationally representative panel dataset (1986, 1989, 1994, and 2001/2002). Latent growth curve models are used to examine the impact of relationship-specific support and strain on physical and mental health trajectories for young adults, midlife adults, and older adults.

Results. Support from friends was particularly beneficial for the health of young adults. Strain from mothers was related to poorer self-rated health among young adults. Relationships with children, mothers, and spouses significantly affected the mental health of adults in midlife. For older adults, support from a spouse/partner benefited mental health and strain from children negatively affected physical health.

Discussion. This research suggests that certain age groups may be more sensitive in their mental or physical health to support and strain from particular relationship types.

Key Terms: Social support, relationship strain, health, depressive symptoms, life course

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Social relationships are important for health (House, Landis, & Umberson, 1988). The quality of those relationships is particularly salient, with social support often associated with better health (Uchino, 2006) and strain in relationships related to worse health (Sherman, Skrzypek, Bell, Tatum, & Paskett, 2011; Umberson, Williams, Powers, Liu, & Needham, 2006). Some relationship types (e.g., friends, children) may matter more at different points in the life course (Carstensen, 1992). The current literature, however, does not integrate these components, leaving several questions unanswered. First, do support and strain in different types of relationships (for example, with friends, parents, or spouse) impact health differently? And, second, in which relationships do support and strain matter most for physical and mental health at different stages in the life course? The present study seeks to fill this gap by using nationally representative panel data to examine the impact of support and strain in relationships with a spouse/partner, children, mothers, fathers, and friends/relatives on physical and mental health trajectories among three age groups: young adults, midlife adults, and older adults.

Theoretical Framework

Exposure to stressors and social support are core components of stress process theory (Pearlin, 1999), suggesting the importance of relationship strain, as a source of stress, and relationship support, as a resource, for health outcomes. Stress can damage physical (Lin & Ensel, 1989; Thoits, 2010) and mental health (Aneshensel & Stone, 1982), and support can provide social integration, sense of purpose, and resources that can benefit mental and physical health (Cohen & McKay, 1984; Kawachi & Berkman, 2001). Stress and support can impact

health through health behaviors, which in turn can affect biological processes and ultimately health (Uchino, 2006). Stress often influences unhealthy behaviors as coping mechanisms (Umberson, Liu, & Reczek, 2008), and support often influences healthier behaviors through a variety of mechanisms such as providing health-related information and social control (DiMatteo, 2004; Umberson, 1987). Exposure to stress and social support can increase or decrease susceptibility to disease (Cassel, 1976). Social support can influence health through reduced neurocognitive reactivity and neuroendocrine responses to stressors (Eisenberger, Taylor, Gable, Hilmert, & Lieberman, 2007). The quality of social relationships is important for the social buffering of the hypothalamic-pituitary-adrenocortical (HPA) response, which is related to a variety of diseases (Hennessy, Kaiser, & Sachser, 2009). Positive social interactions can decrease HPA reactivity and impact the autonomic nervous system (Carter, 1998).

In identity theory, 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 particular roles, such as parent or spouse, that are especially valued for an individual's identity may have a greater impact on health. Strain in a social relationship that disrupts a salient role-identity may be particularly damaging for health, and experiences that are role-enhancing (such as social support) for a salient role-identity may be particularly beneficial (Thoits, 1991).

This study integrates stress process theory and identity theory into the life course framework. An integral feature of the life course perspective is an emphasis on stability and

change in individuals' lives (Elder, Johnson, & Crosnoe, 2003). At different points in the life course the functions of social contacts may differ in their salience and effectiveness (Carstensen, 1992). If different relationships are especially salient at different stages in the life course, then an individual's susceptibility to strains and support in particular types of social relationships are likely to also vary across the life course. Thus, the impact on health of support and strain in particular types of social relationships is likely to differ across age groups.

Support and Strain on Health, and Salient Roles across the Life Course

Studies show that support and strain in social relationships have important consequences for mental health. Relationship quality is a strong predictor of well-being (Merz, Consedine, Schulze, & Schuengel, 2009), and there is consistent evidence that social support is salutary for mental health (Barnett & Gotlib, 1988). Social support has been found to influence baseline depressive symptoms as well as changes in depressive symptoms over time (Russell & Cutrona, 1991; Sherman et al., 2006). Researchers agree that stress often leads to distress (Pearlin, Menaghan, Morton, & Mullan, 1981). Relationship strain may be an important source of stress, and it has been associated with higher levels of depressive symptoms (Sherman, et al., 2011).

There is evidence to suggest that support and strain in social relationships matter for physical health as well. Low levels of emotional support have been associated with poorer self-rated health (Zunzunegui, Beland, & Otero, 2001). Social support is related to better health through cardiovascular, neuroendocrine, and immune systems (Uchino, 2006). Sherman and colleagues (2006) found that social support was associated with baseline physical functioning, health, and disability. Strain in social relationships is associated with diurnal cortisol rhythm, which is related to HPA reactivity, which in turn is related to a variety of health conditions

(Friedman, Karlamangla, Almeida, & Seeman, 2012). Strain through negative social interactions was found to be more important for physical health than life-event stress or daily hassles (Edwards, Hershberger, Russell, & Markert, 2001).

If particular social relationships are more salient at different points in the life course, this may lead support and strain from those relationships to be especially important for health among different age groups. Partner strain was related to health problems among a sample of adults aged 25-75 (Walen & Lachman, 2000). Umberson and colleagues (2006) found that marital strain was related to decline in self-rated health and that effect was larger at older ages. These studies suggest that partner strain may be important across age but perhaps especially important among older adults. Parent-child relationships may be important across multiple life stages. Parents have an important influence on their children's health behaviors in young adulthood (Lau, Quadrel, & Hartman, 1990), suggesting that strain or support from one's parents 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). Emotional support from children was important for both physical and mental health among older adults in Spain (Zunzunegui, et al., 2001), and children and other family networks were associated with better health among older adults in Canada (Zunzunegui et al., 2004), suggesting the importance of support and strain from children among older adults. Interactions with acquaintances are greater among younger adults and decline with age (Carstensen, 1992), suggesting that support or strain from friends may be more important to younger adults than older life stages. Older adults associate more often with close relatives (van Tilburg, 1998) and decline in contact with friends (Shaw, Krause, Liang, & Bennett, 2007), suggesting that support

and strain in immediate family relationships (such as with spouse and children) might be more important, and friends less important, for health among older adults.

Hypotheses

Based on the available evidence, I hypothesize first that the impact of support and strain in particular relationships will vary across the different age groups studied (i.e., younger, middle-aged, and older adults). I hypothesize that support and strain from friends and from parents will matter most for young adults. I hypothesize that support and strain from one's children will matter most to the middle-aged and older adults, and I hypothesize that support and strain from spouses will influence the health of all age groups, but more so for older adults.

METHODS

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' household population aged 25 and older, with an oversampling of African Americans and adults aged 60 and older. The analytic sample consists of 3,497 white and African American respondents ("other" race respondents were excluded due to low numbers), which includes 1,023 young adults, 832 middle-aged adults, and 1,642 older adults.

Measures

Self-Rated Health is measured at each wave with the same question asking, "How would you rate your health at the present time? Would you say it is excellent, very good, good, fair, or poor?" Response categories range from 1 to 5, with higher values indicating better health. The validity of self-rated health is well-established in the literature, and it is predictive of subsequent disability and mortality (Ferraro, Farmer, & Wybraniec, 1997; Idler & Benyamini, 1997) .

Depressive Symptoms are measured in each wave with the sum of 11 items from the Center for Epidemiologic Studies Depression Scale (CES-D). Response categories for each item were 0=hardly ever, 1=some of the time, and 2=most of the time.

Relationship Support and Strain regarding five types of relationships in adulthood are included: spouse/partner, children, mother, father, and friends/relatives. *Support* from each type of relationship is based on 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* with one's spouse/partner, mother, father, and friends/relatives are each based on 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?" Strain from children is based on satisfaction with being a parent, frequency of feeling upset or bothered as a parent, and degree of happiness with the way children have turned out to this point. Due to the low numbers of surviving fathers among respondents age 60 and older, support and strain from fathers were omitted in analyses among older adults. Flag variables for missing on the support and strain measures were controlled.

Control Variables. Age (in years, ranging from 25 to 95 in Wave 1), *race* (1=white, 0=African American), s*ex* (1=female, 0=male), *marital status* (1=currently married, 0=not currently married), *children living in the household* under the age of 18 (1=any, 0=none),

education (continuous measure of highest grade completed), and *family income* from all sources, were included as controls.

Analytic Strategy

This study examines the impact of support and strain by relationship type in Wave 1 on subsequent trajectories of physical and mental health from Waves 2 to 4 (controlling for baseline health). Analyses were conducted using Mplus, Version 6 (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. The following are equations for a linear latent growth curve model:

$$y_{it} = \eta_{0i} + \eta_{1i} x_t + \varepsilon_{it} \quad (1)$$

$$\eta_{0i} = \alpha_0 + \gamma_0 w_i + \zeta_{0i} \quad (2a)$$

$$\eta_{1i} = \alpha_1 + \gamma_1 w_i + \zeta_{1i} \quad (2b)$$

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., physical or mental health), η_0 is the intercept, η_1 is the linear slope, t is the timepoint, 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}, ζ_{1i}, *and* ζ_{2i}. The time scores reflect the number of years since Wave 2.

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 theory-

based approach to missing data that incorporates all respondents in 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).

RESULTS

Table 1 displays the baseline descriptive statistics of the sample. Descriptives are displayed for each age group: young adult (age 25-39), midlife adult (age 40-59), and older adult (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 incomes. The majority of the sample was white, with significantly higher proportions in the older group (70%) compared to the young adult group (64%) and midlife group (64%). 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 to 54% of young people and 51% of older adults. The proportion of respondents with children age 17 or younger living in the household declined with age from 68% among young adults to 18% among older adults.

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 mothers and fathers, and less strain from friends/relatives than the other two age groups.

Young adults experienced slightly higher levels of support from a spouse/partner than both midlife and older adults and less support from friends/relatives than older adults. There are significant differences by age group in self-rated health, with health declining with increasing age. Young adults experienced significantly more depressive symptoms than the other age groups, and midlife and older adults experienced similar levels of depressive symptoms.

Table 2 shows the impact of baseline support and strain by relationship type on subsequent self-rated health trajectories (Waves 2-4) for young adults (age 25-39), midlife adults (age 40-59), and older adults (age 60 and older), controlling for baseline self-rated health, age, gender, race, income, education, marital status, whether children age 17 or younger lived in the same household as the respondent, and flags for missing on the relationship support and strain variables. Experiencing strain from one's mother was related to significantly worse subsequent physical health among young adults. In contrast, support from friends/relatives was related to significantly better health over time among young adults. With baseline health controlled, none of the relationship support or strain variables were related to physical health for adults in midlife. Strain from children was related to worse subsequent physical health for older adults.

Table 3 shows the impact of baseline support and strain by relationship type on subsequent depressive symptom trajectories (Waves 2-4) by age group. Similar to the self-rated health results, support from friends/relatives was related to better mental health among young adults. Among midlife adults, support from children was related to fewer subsequent depressive symptoms, and support from one's mother was related to decreases in depressive symptoms over time. Support from a spouse/partner was marginally significant (p=.05) in its association with fewer subsequent depressive symptoms. Strain from a spouse/partner was significantly related to

decreases in depressive symptoms among midlife adults. Among older adults, support from a spouse/partner was related to fewer subsequent depressive symptoms.

DISCUSSION

This study integrated stress process theory and identity theory into a life course framework to examine how support and strain from particular relationship types influenced physical and mental health trajectories among different age groups. Support from friends mattered most for young adults, benefitting both their physical and mental health. Support from children and mothers benefitted the mental health of adults in midlife. Strain from a spouse/partner also affected midlife adults' mental health, though not in the expected direction. Among older adults, strain from children was related to worse physical health and support from a spouse/partner was related to better mental health. Also of note, generally supportive relationships were more strongly related to mental health whereas strain in relationships played a larger role in affecting physical health.

Identity theory suggests that role expectations and meanings attached to social relationship positions create identities (Stryker & Burke, 2000), and some of those identities may be more salient than others for an individual (Stryker & Serpe, 1982). Moreover, those relationships deemed most salient may vary over the life course. Strain and support in relationships linked to valued identities may threaten or enhance those identities, with implications for stress and health (Thoits, 1991). Further, 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 impact health, 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 particular social relationships may differ in their importance across the life course (Carstensen, 1992), and thus relationship strain and support that serves to threaten or enhance identities linked to particular social relationships may be especially harmful or beneficial to health at different stages in the life course.

The findings in this study support these ideas. Support and strain in particular relationships mattered more or less for health at different stages of the life course. For example, support from friends was particularly important for better physical and mental health among younger adults, but not adults in other life stages. Peers have an important impact on the health behaviors of young adults (Lau, et al., 1990), likely leading to the impact of friend support on their health. Strain from friends was not a significant predictor of health in any of the models, likely because individuals can decide to not associate with friends who cause them stress more easily than not associating with members of stressful family relationships. The relationship with one's mother was important in terms of strain, related to worse physical health for young adults. Because parents have an important influence on their children's health behaviors in young adulthood (Lau, et al., 1990), strain with one's mother may influence young adults to engage in riskier or less healthy behaviors.

In midlife, family relationships have particularly important consequences for mental health. Interactions with others throughout the life course may fluctuate due to childcare 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, along with employment. Experiencing support from one's mother and children during this potentially stressful time of negotiating family roles

and work obligations may be particularly beneficial for the mental health and well-being of adults in midlife, suggested by the results of this study. Support from a spouse/partner was marginally significant, benefitting the mental health of adults in midlife. Strain from a spouse/partner was related to decreases in depressive symptoms over time for adults in midlife, which was not the expected direction. Depressive symptoms decreased over time for those with high or low spouse/partner strain. However, the number of initial depressive symptoms was higher for those with more spouse/partner strain, so they had more room to decrease. Throughout each wave, depressive symptoms were still higher for those with any spouse/partner strain than those with no spouse/partner strain.

Support from a spouse/partner was significantly related to better mental health for older adults. Spousal relationships may be particularly important at this stage of the life course due to shrinking social networks among older adults and associating more with close relatives (van Tilburg, 1998). Strain with children is also related to worse physical health among older adults, possibly due to caregiving for older adults by their children causing strain in their relationships or otherwise poor quality relationships with their children but family obligations that encourage interaction with each other regardless of whether the relationship brings strain or not (Koropeckyj-Cox, 2002).

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 for this age group. Second, the age groups were created at baseline; however, respondents of course aged during the survey as well. Support and strain by each relationship type did not change substantially across the waves for each baseline age group. This suggests that these age groups were meaningful. Further, most of the

effects on health were at the intercept rather than the slope, which suggests that the effects occurred largely at ages similar to baseline (i.e., there were three years between waves 1 and 2, so respondents had only aged three years in this time period where most of the effects were seen). Third, gender and racial differences in how support and strain influence health across the life course were beyond the scope of this article but will be addressed in future research.

Although researchers have established that support and strain are important for health (Sherman, et al., 2006), and that some relationships may matter more at different points in the life course (Carstensen, 1992), past literature has not integrated these components to examine support and strain by relationship type and the impact of these relationships on mental as well as physical health, both longitudinally and across different life stages. The present study does so with a nationally representative sample using latent growth curve modeling of health trajectories. Research using trajectories encapsulates many tenets of the life course perspective (George, 2009), taking into account stability and change and an individual's embeddedness in time by examining within-person changes in phenomena over time. Findings demonstrate that young people's health is especially benefitted by support from friends, middle-aged adults' health by support in family relationships, and older adults' health by support from a spouse. The health of young adults was affected by strain from their mother, and older adults' health was negatively impacted by strain from their children. At different stages of the life course, individuals may be especially sensitive to support or strain from particular relationships, with ramifications for their physical and mental health.

REFERENCES

Aneshensel, C. S., & Stone, J. D. (1982). Stress and Depression: A Test of the Buffering Model of Social Support. *Archives of General Psychiatry, 39*(12), 1392-1396.

Barnett, P. A., & Gotlib, I. H. (1988). Psychosocial Functioning and Depression: Distinguishing Among Antecedents, Concomitants, and Consequences. *Psychological Bulletin, 104*(1), 97-126. doi: 10.1037/0033-2909.104.1.97

Carstensen, L. L. (1992). Social and Emotional Patterns in Adulthood: Support for Socioeomotional Selectivity Theory. *Psychology and Aging, 7*(3), 331-338. doi: 10.1037/0882-7974.7.3.331

Carter, C. S. (1998). Neuroendocrine perspectives on social attachment and love. *Psychoneuroendocrinology, 23*(8), 779-818.

Cassel, J. (1976). The Contribution of the Social Environment to Host Resistance. *American Journal of Epidemiology, 104*, 107-123.

Cohen, S., & McKay, G. (1984). Social Support, Stress and the Buffering Hypothesis: A Theoretical Analyis. In A. Baum, S. E. Taylor & J. E. Singer (Eds.), *Handbook of Psychology and Health* (pp. 253-267). Hillsdale, NJ.

DiMatteo, M. R. (2004). Social Support and Patient Adherence to Medical Treatment: A Meta-Analysis. *Health Psychology, 23*(2), 207-218. doi: 10.1037/0278-6133.23.2.207

Edwards, K. J., Hershberger, P. J., Russell, R. K., & Markert, R. J. (2001). Stress, Negative Social Exchange, and Health Symptoms in University Students. *Journal of American College Health, 50*(2), 75-79.

Eisenberger, N. I., Taylor, S. E., Gable, S. L., Hilmert, C. J., & Lieberman, M. D. (2007). Neural pathways link social support to attenuated neuroendocrine stress responses. *Neuroimage, 35*(4), 1601-1612. doi: 10.1016/j.neuroimage.2007.01.038

Elder, G. H., Jr., Johnson, M. K., & Crosnoe, R. (2003). The Emergence and Development of Life Course Theory. In J. T. Mortimer & M. J. Shanahan (Eds.), *Handbook of the Life Course* (pp. 3-19). New York: Kluwer Academic/Plenum Publishers.

Ferraro, K. F., Farmer, M. M., & Wybraniec, J. A. (1997). Health Trajectories: Long-term Dynamics among Black and White Adults. *Journal of Health and Social Behavior, 38*(1), 38.

Friedman, E. M., Karlamangla, A. S., Almeida, D. M., & Seeman, T. E. (2012). Social Strain and Cortisol Regulation in Midlife in the US. *Social Science & Medicine, 74*(4), 607-615. doi: 10.1016/j.socscimed.2011.11.003

George, L. K. (2009). Conceptualizing and Measuring Trajectories. In G. H. Elder, Jr. & J. Z. Giele (Eds.), *The Craft of Life Course Research* (pp. 162-186). New York: Guilford Press.

Hennessy, M. B., Kaiser, S., & Sachser, N. (2009). Social Buffering of the Stress Response: Diversity, Mechanisms, and Functions. *Frontiers in Neuroendocrinology, 30*(4), 470-482. doi: 10.1016/j.yfrne.2009.06.001

House, J. S. (2007). AMERICANS' CHANGING LIVES: WAVES I, II, III, AND IV, 1986, 1989, 1994, AND 2002 [Computer file]. ICPSR04690-v3. Ann Arbor, MI: University of Michigan, Institute for Social Research, Survey Research Center [producer], 2006. Ann Arbor, MI: Inter-university Consortium for Political and Social Research [distributor], 2007-10-11.

House, J. S., Landis, K. R., & Umberson, D. (1988). Social Relationships and Health. *Science, 241*(4865), 540.

Idler, E. L., & Benyamini, Y. (1997). Self-Rated Health and Mortality: A Review of Twenty-Seven Community Studies. *Journal of Health and Social Behavior, 38*(1), 21-37.

Kawachi, I., & Berkman, L. F. (2001). Social Ties and Mental Health. *Journal of Urban Health-Bulletin of the New York Academy of Medicine, 78*(3), 458-467.

Koropeckyj-Cox, T. (2002). Beyond parental status: Psychological well-being in middle and old age. *Journal of Marriage and Family, 64*(4), 957-971. doi: 10.1111/j.1741-3737.2002.00957.x

Lau, R. R., Quadrel, M. J., & Hartman, K. A. (1990). Development and Change of Young Adults' Preventive Health Beliefs and Behavior: Influence from Parents and Peers. *Journal of Health and Social Behavior, 31*(3), 240-259.

Lin, N., & Ensel, W. M. (1989). Life Stress and Health: Stressors and Resources. *American Sociological Review, 54*(3), 382-399. doi: 10.2307/2095612

Merz, E.-M., Consedine, N. S., Schulze, H.-J., & Schuengel, C. (2009). Wellbeing of adult children and ageing parents: associations with intergenerational support and relationship quality. *Ageing & Society, 29*, 783-802. doi: 10.1017/s0144686x09008514

Muthén, B. O., & Muthén, L. K. (2000). Integrating Person-Centered and Variable-Centered Analyses: Growth Mixture Modeling with Latent Trajectory Classes. *Alcoholism: Clinical and Experimental Research, 24*(6), 882-891.

Muthén, L. K., & Muthén, B. O. (1998-2010). Mplus User's Guide. Sixth Edition. Los Angeles, CA: Muthén & Muthén.

Nichols, L. S., & Junk, V. W. (1997). The Sandwich Generation: Dependency, Proximity, and Task Assistance Needs of Parents. *Journal of Family and Economic Issues, 18*(3), 299-326. doi: 10.1023/a:1024978930126

Pearlin, L. I. (1999). Stress and Mental Health: A Conceptual Overview. In Horwitz & Scheid (Eds.), *A Handbook for the Study of Mental Health: Social Contexts, Theories, and Systems*. Cambridge: Cambridge University Press.

Pearlin, L. I., Menaghan, E. G., Morton, A. L., & Mullan, J. T. (1981). The Stress Process. *Journal of Health and Social Behavior, 22*(4), 337.

Russell, D. W., & Cutrona, C. E. (1991). Social Support, Stress, and Depressive Symptoms among the Elderly: Test of a Process Model. *Psychology and Aging, 6*(2), 190-201.

Schafer, J. L., & Graham, J. W. (2002). Missing Data: Our View of the State of the Art. *Psychological Methods, 7*(2), 147-177.

Schlomer, G. L., Bauman, S., & Card, N. A. (2010). Best Practices for Missing Data Management in Counseling Psychology. *Journal of Counseling Psychology, 57*(1), 1-10.

Shaw, B. A., Krause, N., Liang, J., & Bennett, J. (2007). Tracking Changes in Social Relations Throughout Late Life. *Journal of Gerontology: Social Sciences, 62*(2), S90-S99.

Sherman, A. M., Shumaker, S. A., Rejeski, W. J., Morgan, T., Applegate, W. B., & Ettinger, W. (2006). Social support, social integration, and health-related quality of life over time: Results from the Fitness and Arthritis in Seniors Trial (FAST). *Psychology & Health, 21*(4), 463-480. doi: 10.1080/14768320500380881

Sherman, A. M., Skrzypek, A., Bell, R., Tatum, C., & Paskett, E. D. (2011). The contribution of social support and social strain to depressive symptoms in African American, Native American, and European American women. *Journal of Social and Personal Relationships, 28*(8), 1104-1129. doi: 10.1177/0265407511406895

Stryker, S., & Burke, P. J. (2000). The Past, Present, and Future of an Identity Theory. *Social Psychology Quarterly, 63*(4), 284-297. doi: 10.2307/2695840

Stryker, S., & Serpe, R. T. (1982). Commitment, Identity Salience, and Role Behavior. In W. Ickes & E. S. Knowles (Eds.), *Personality, Roles, and Social Behavior* (pp. 199-218). New York: Springer-Verlag.

Thoits, P. A. (1991). On Merging Identity Theory and Stress Research. *Social Psychology Quarterly, 54*(2), 101-112. doi: 10.2307/2786929

Thoits, P. A. (2010). Stress and Health: Major Findings and Policy Implications. *Journal of Health and Social Behavior, 51*, S41-S53. doi: 10.1177/0022146510383499

Uchino, B. N. (2006). Social Support and Health: A Review of Physiological Processes Potentially Underlying Links to Disease Outcomes. *Journal of Behavioral Medicine, 29*(4), 377-387. doi: 10.1007/s10865-006-9056-5

Umberson, D. (1987). Family Status and Health Behaviors: Social Control as a Dimension of Social Integration. *Journal of Health and Social Behavior, 28*(3), 306-319.

Umberson, D., Liu, H., & Reczek, C. (2008). Stress and health behaviors. In H. Turner & S. Schieman (Eds.), *Advances in Life Course Research: Stress Processes across the Life Course* (pp. 19-44): Maryland Heights, MO: Elsevier.

Umberson, D., Williams, K., Powers, D. A., Liu, H., & Needham, B. (2006). You Make Me Sick: Marital Quality and Health Over the Life Course. *Journal of Health and Social Behavior, 47*(1), 1-16. doi: 10.1177/002214650604700101

van Tilburg, T. (1998). Losing and Gaining in Old Age: Changes in Personal Network Size and Social Support in a Four-Year Longitudinal Study. *Journal of Gerontology: Social Sciences, 53B*(6), S313-S323.

Walen, H. R., & Lachman, M. E. (2000). Social Support and Strain from Partner, Family, and Friends: Costs and Benefits for Men and Women in Adulthood. *Journal of Social and Personal Relationships, 17*(1), 5-30. doi: 10.1177/0265407500171001

Wothke, W. (2000). Longitudinal and Multi-group Modeling with Missing Data. In T. D. Little, K. U. Schnabel & J. Baumert (Eds.), *Modeling Longitudinal and Multilevel Data: Practical Issues, Applied Approaches, and Specific Examples*. Mahwah, NJ: Lawrence Erlbaum Associates.

Zunzunegui, M. V., Beland, F., & Otero, A. (2001). Support from children, living arrangements, self-rated health and depressive symptoms of older people in Spain. *International Journal of Epidemiology, 30*(5), 1090-1099. doi: 10.1093/ije/30.5.1090

Zunzunegui, M. V., Kone, A., Johri, M., Béland, F., Wolfson, C., & Bergman, H. (2004). Social Networks and Self-Rated Health in Two French-Speaking Canadian Community Dwelling Populations over 65. *Social Science & Medicine, 58*(10), 2069-2081.

Table 1. Baseline Descriptive Statistics by Age Group

	Age 25-39	Age 40-59	Age 60+
Age	31.8 [a]	49.1 [b]	70.0 [c]
Female	56.9%	61.2% [b]	67.2% [c]
White	63.7%	63.6% [b]	69.5% [c]
Education (years)	13.1 [a]	11.8 [b]	10.3 [c]
Income	$22,500	$22,500 [b]	$17,500 [c]
Married	53.5% [a]	62.1% [b]	51.1%
Children in household	68.3% [a]	54.0% [b]	17.7% [c]
Support from Spouse/Partner (0-8)	6.6 [a]	6.4	6.4 [c]
Strain from Spouse/Partner (0-8)	2.8 [a]	2.4 [b]	2.1 [c]
Support from Children (0-8)	5.6 [a]	6.0 [b]	6.6 [c]
Strain from Children (0-12)	3.2	3.3 [b]	2.3 [c]
Support from Mother (0-8)	6.9	6.8 [b]	7.2 [c]
Strain from Mother (0-8)	2.1 [a]	1.6 [b]	1.0 [c]
Support from Father (0-8)	6.1	6.2 [b]	6.9 [c]
Strain from Father (0-8)	1.8 [a]	1.2 [b]	0.8 [c]
Support from Friends/Relatives (0-8)	5.7	5.8	5.9 [c]
Strain from Friends/Relatives (0-8)	2.1 [a]	1.5 [b]	1.0 [c]
Self-Rated Health (1-5)	4.0 [a]	3.6 [b]	3.2 [c]
Depressive Symptoms (0-22)	5.3 [a]	4.5	4.5 [c]
	N=1,023	N=832	N=1,642

[a] Significant difference ($p<.05$) between young adults (age 25-39) and midlife adults (age 40-59).
[b] Significant difference ($p<.05$) between midlife adults (age 40-59) and older adults (age 60+).
[c] Significant difference ($p<.05$) between young adults (age 25-39) and older adults (age 60+).

Table 2. The Impact of Social Support and Strain by Relationship Type on Self-Rated Health across Age Groups

	Age 25-39		**Age 40-59**		**Age 60+**	
	Intercept	Slope	Intercept	Slope	Intercept	Slope
Baseline Self-Rated Health	0.474*** (0.029)	-0.017*** (0.004)	0.621*** (0.030)	-0.017*** (0.004)	0.530*** (0.024)	-0.017*** (0.004)
Spouse/Partner Support	-0.028 (0.026)	-0.001 (0.003)	0.006 (0.027)	0.001 (0.003)	0.036 (0.024)	0.001 (0.004)
Spouse/Partner Strain	-0.016 (0.022)	0.000 (0.003)	-0.007 (0.025)	-0.003 (0.003)	-0.002 (0.024)	0.002 (0.004)
Support from Children	0.015 (0.033)	-0.002 (0.005)	0.012 (0.024)	0.001 (0.003)	0.005 (0.022)	-0.002 (0.003)
Strain from Children	-0.012 (0.023)	-0.002 (0.003)	-0.028 (0.020)	0.000 (0.002)	-0.042* (0.017)	0.000 (0.003)
Support from Mother	-0.012 (0.023)	0.000 (0.003)	0.038 (0.031)	0.001 (0.004)	-0.060 (0.052)	-0.009 (0.007)
Strain from Mother	-0.034* (0.017)	0.001 (0.002)	0.044 (0.028)	-0.002 (0.003)	0.015 (0.042)	-0.004 (0.006)
Support from Father [b]	-0.008 (0.020)	0.001 (0.003)	0.006 (0.027)	0.001 (0.003)	-----	-----
Strain from Father [b]	-0.024 (0.019)	-0.001 (0.002)	0.015 (0.036)	0.000 (0.004)	-----	-----
Support from Friends/Relatives	0.059*** (0.016)	0.002 (0.002)	-0.029 (0.023)	0.004 (0.003)	0.001 (0.018)	0.003 (0.003)
Strain from Friends/Relatives	0.013 (0.016)	0.001 (0.002)	-0.019 (0.024)	0.004 (0.003)	-0.002 (0.025)	-0.003 (0.004)
Means of Growth Parameters	2.251*** (0.377)	0.021 (0.050)	1.121* (0.499)	-0.060 (0.061)	1.659*** (0.473)	0.093 (0.074)
Variances of Growth Parameters	0.254*** (0.041)	0.004*** (0.001)	0.253*** (0.051)	0.001 (0.001)	0.386*** (0.059)	0.003* (0.001)
	CFI=1.00 RMSEA=0.007		CFI=0.99 RMSEA=0.024		CFI=0.98 RMSEA=0.023	

	N=1023	N=832	N=1642

Note: Models controlled for age, sex, race, income, education, marital status, children living in the household, and flag variables for missing on the support and strain measures.

[a] Standard errors in parentheses

[b] Support and strain from father are not included in the age 60+ group due to few surviving fathers of respondents at that age.

* p<.05, **p<.01, ***p<.001

Table 3. The Impact of Social Support and Strain by Relationship Type on Depressive Symptoms across Age Groups

	Age 25-39		**Age 40-59**		**Age 60+**	
	Intercept	Slope	Intercept	Slope	Intercept	Slope
Baseline CES-D	0.319***	-0.003	0.456***	-0.010*	0.399***	0.000
	(0.032)	(0.004)	(0.034)	(0.004)	(0.028)	(0.005)
Spouse/Partner Support	-0.184	0.022	-0.193+	0.001	-0.288**	0.018
	(0.105)	(0.013)	(0.099)	(0.011)	(0.092)	(0.012)
Spouse/Partner Strain	0.117	0.008	0.146	-0.023*	-0.103	-0.009
	(0.085)	(0.010)	(0.090)	(0.010)	(0.088)	(0.012)
Support from Children	0.141	-0.009	-0.179*	0.007	0.066	0.000
	(0.140)	(0.021)	(0.088)	(0.010)	(0.077)	(0.011)
Strain from Children	0.083	-0.007	0.069	-0.002	0.108	0.007
	(0.099)	(0.013)	(0.071)	(0.008)	(0.062)	(0.010)
Support from Mother	-0.126	0.009	0.027	-0.032**	0.210	0.004
	(0.101)	(0.012)	(0.113)	(0.012)	(0.197)	(0.024)
Strain from Mother	0.078	0.008	0.123	-0.008	0.069	0.007
	(0.073)	(0.009)	(0.099)	(0.010)	(0.162)	(0.024)
Support from Father [b]	-0.009	-0.007	-0.116	-0.008	-----	-----
	(0.088)	(0.010)	(0.095)	(0.010)		
Strain from Father [b]	-0.040	0.006	-0.144	0.024	-----	-----
	(0.081)	(0.009)	(0.132)	(0.014)		
Support from Friends/Relatives	-0.150*	0.011	0.143	-0.002	-0.073	-0.012
	(0.072)	(0.009)	(0.083)	(0.009)	(0.068)	(0.011)
Strain from Friends/Relatives	0.026	-0.002	-0.019	0.000	0.151	0.005
	(0.073)	(0.009)	(0.088)	(0.010)	(0.091)	(0.013)
Means of Growth Parameters	7.765***	-0.253	5.365**	0. 419*	0.741	-0.010
	(1.601)	(0.191)	(1.844)	(0.207)	(1.698)	(0.253)
Variances of Growth Parameters	3.313***	0.031*	3.450***	0.015	3.316***	0.022
	(0.723)	(0.014)	(0.697)	(0.011)	(0.675)	(0.016)
	CFI=0.98 RMSEA=0.025		CFI=0.98 RMSEA=0.035		CFI=0.99 RMSEA=0.019	

	N=1023	N=832	N=1642

Note: Models controlled for age, sex, race, income, education, marital status, children living in the household, and flag variables for missing on the support and strain measures.

[a] Standard errors in parentheses

[b] Support and strain from father are not included in the age 60+ group due to few surviving fathers of respondents at that age.

+p=.05; * p<.05, **p<.01, ***p<.001