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Marital Conflict in Older Couples: Positivity, Personality, and Health

The authors examine the implications of health and personality characteristics for late-life marital conflict using data from the 2010–2011 wave of the National Social Life Health and Aging Project, a nationally representative study with data on both partners in 955 marital and cohabitational dyads. Using these data, they relate characteristics of husbands to characteristics of their wives and vice versa. Wives with husbands in fair or poor physical health were more likely to report high levels of marital conflict, but the reverse was not true. Similarly, wives reported more conflict when their husbands were high on Neuroticism, high on Extraversion, and low on a new measure the authors call Positivity. The findings suggest noteworthy gender differences between men and women in the associations between individual characteristics and levels of marital conflict. The authors point to differences between husbands' and wives' marital roles as a contributor to these differences.

Married individuals typically have better physical and emotional health than the unmarried and are at lower risk of mortality (Holt-Lunstad & Birmingham, 2008; Waite & Gallagher, 2000). However, these effects depend on the quality of the marriage, and individuals with poor marital quality tend to experience worse health than the unmarried (Umberson, Williams, Powers, Liu, & Needham, 2006; Williams, 2003). Poor marital quality is also associated with worse physical and mental health, and marital conflict increases the risk of dying (Birditt & Antonucci, 2008). Conversely, a good relationship with one's spouse can mitigate the consequences of poor health and improve overall quality of life (Bookwala, 2011; Warner & Kelley-Moore, 2012). Thus, a high-quality, low-conflict marriage can greatly benefit older adults (Carstensen, Gottman, & Levenson, 1995; Umberson et al., 2006), which makes it important to understand why some late-life marriages show worse conflict than others.

Several processes may affect levels of marital conflict among older couples. First, although both physical and mental health can be diminished by poor marital quality, poor marital quality can also be precipitated by poor health. As a person ages, worsening physical health can become a burden, making marital obligations more difficult to manage

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(Booth & Johnson, 1994; Joung, van de Mheen, Stronks, van Poppel, & Mackenbach, 1998) and, likewise, mental health difficulties can create challenges as partners' emotional states become more volatile (Gagnon, Hersen, Kabacoff, & Van Hasselt, 1999). Second, an older person's personality traits—his or her characteristic patterns of behavior and thought—may also influence marital quality (Botwin, Buss, & Shackelford, 2006; Donnellan, Assad, Robins, & Conger, 2007; Robins, Caspi, & Moffitt, 2000). Negative personality traits generally predict greater conflict between partners (Caughlin, Huston, & Houts, 2000; Heaven, Smith, Prabhakar, Abraham, & Mete, 2006; McNulty, 2008), whereas spouses with positive personality traits tend to have marriages with better functioning (Botwin et al., 2006; Donnellan, Conger, & Bryant, 2004; Gattis, Berns, Simpson, & Christensen, 2004). Both health and traits therefore constitute resources that spouses bring to their relationship and use in the production of good marital quality. However, as we argue below, the effects of good health and positive traits on marital quality may be different for men and women, owing to gender-specific roles in the marital relationship (Bernard, 1972; Kiecolt-Glaser & Newton, 2001).

Taking up this emphasis on gender, in this article we examine the implications of personality and health for marital conflict among older couples. We focus on conflict as an important predictor of marital dissatisfaction (Christensen & Walczynski, 1997) and marital disruption (Gottman, 1994). We develop hypotheses about the sources of marital conflict and test them using data from Wave 2 of the National Social Life, Health and Aging Project (NSHAP), a nationally representative sample of older married and cohabiting couples, fielded in 2010–2011 (Waite et al., 2013). In these data, both husbands and wives were interviewed, which allows us to link characteristics of husbands with the characteristics of their wives and vice versa. In preparation for analyzing these data, we review relevant literature in order to theorize the connection among traits, health, and marital conflict for older adults. Building on previous findings, we put forward an innovative model for measuring personality traits that allows us to measure the common variance across numerous personality subscales to enrich our understanding of relationship between traits and marital conflict. We then use traits estimated by this model, as

well as mental and physical health measures, to examine gender differences in the associations between health, traits, and marital conflict. We close the article with implications for future studies.

BACKGROUND

As American society ages, an increasing number of marriages in the United States are late-life, long-term marriages (Gagnon et al., 1999). Research occasioned by this demographic shift has revealed a generally positive picture of late-life marriage, with low conflict and generally high positive affect compared to younger couples (Carstensen et al., 1995; Gagnon et al., 1999; Smith et al., 2009). Nevertheless, older adulthood is also marked by challenges that are particular to this stage in the life course. The personality traits of older adults are typically more stable than the traits of younger persons (Turiano et al., 2012), which may make it more difficult for older adults to alter any characteristically conflictual patterns of behavior or thought for the sake of marital quality (Booth & Johnson, 1994; Joung et al., 1998). Aging is also accompanied by declines in health and functioning, which may affect long-held marital roles and require one or both of the spouses to take on new responsibilities, such as caregiving (Christakis & Allison, 2008; Pinquart & Sörensen, 2011). In a review of these two currents of research, we now turn to a discussion of the impact of traits and health on marital conflict.

Personality Traits and Marital Conflict

One line of research looks to the traits of both partners to account for differences in marital conflict (Eldridge & Christensen, 2002; Malouff, Thorsteinsson, Schutte, Bhullar, & Rooke, 2010; Vogel, Murphy, Werner-Wilson, Cutrona, & Seeman, 2007). Within this research, the most commonly used framework for measuring personality traits is the Big Five (John, Naumann, & Soto, 2008; Malouff et al., 2010). These dimensions of personality, summarized in the mnemonic *OCEAN*, are (a) Openness to experience, (b) Conscientiousness, (c) Extraversion, (d) Agreeableness, and (e) Neuroticism.

On the basis of previous work, it seems that marital quality depends not on any one of these traits but rather on the co-occurrence of several

positive Big Five traits. Individuals whose partners are low on Neuroticism, high on Agreeableness, high on Conscientiousness, and high on Extraversion tend to report greater satisfaction (Caughlin et al., 2000; Gattis et al., 2004; Malouff et al., 2010; McNulty, 2008). At the same time, positive personality traits are generally associated with one's own relationship satisfaction (Heller, Watson, & Illies, 2004). Gattis and colleagues (2004) found that high Agreeableness and high Conscientiousness were tied to marital satisfaction, as were high levels of a construct called *positive expressivity*: being gentle, helpful, kind, and understanding. Furthermore, older adults who give positive responses across psychometric measures recall their marital history selectively, emphasizing and remembering good times over the bad, thereby facilitating good marital quality (O'Rourke & Cappeliez, 2005). Thus, it may be not any particular scale in OCEAN that matters for preventing marital conflict but a global disposition to display a high level of positive emotionality across Big Five traits. This possibility invites us to develop an innovative model of the Big Five, allowing us to investigate this previously unmeasured, overarching characteristic, which we call *Positivity*. We hypothesize that people high on Positivity will tend to see their relationship in a better light regardless of objective circumstances, and these people will also tend to behave in ways that lead to relatively little conflict. Thus we hypothesized the following:

> *Hypothesis 1A*: Individuals high on Positivity will report lower levels of marital conflict than others.
> *Hypothesis 1B*: Spouses of individuals high on Positivity will report lower levels of conflict than others.

Negative personality traits have also been linked to marital conflict. The relationship between Neuroticism and conflict has been particularly well replicated (Caughlin et al., 2000; Gattis et al., 2004; McNulty, 2008); people higher on Neuroticism are more likely to be critical of their partners and to perceive their partners as being hostile or critical, even when observer ratings did not confirm this (McNulty, 2008). They are also more likely to be unhappy with their marriages, possibly because of a lower threshold for negative affect (Donnellan et al., 2004; Gattis et al., 2004;

Lahey, 2009). Thus, we formulated the following hypotheses:

> *Hypothesis 1C*: Individuals high on Neuroticism will report higher levels of conflict than others.
> *Hypothesis 1D*: Spouses of individuals high on Neuroticism will report higher levels of conflict than others.

Health and Marital Conflict

According to a parallel current of research, mental and physical health are also resources that partners bring to the relationship that can help them to carry out marital roles and to care for their partners (Christakis & Allison, 2008). Virtually all of the literature on this topic focuses on the effects of marital quality on health (Donoho, Crimmins, & Seeman, 2013; Holt-Lunstad & Birmingham, 2008; Kiecolt-Glaser et al., 1997) rather than the reverse. However, there seems to be good reason to hypothesize that health may affect marital quality. Poor physical health can create stress within a relationship by making it more difficult for one partner to perform marital roles, to reciprocate kindness, or to contribute to the household (Booth & Johnson, 1994; Joung et al., 1998). The spouse in poor health may require care from the other spouse, sometimes leading to stress, overwork, and resentment on the part of the caregiver (Pinquart & Sörensen, 2011). And poor physical or functional health may contribute to poor mental health (Bookwala & Franks, 2005). Therefore, we put forth the following hypotheses:

> *Hypothesis 2A*: Individuals with worse physical health will report more marital conflict.
> *Hypothesis 2B*: Individuals whose spouses have worse physical health will report more marital conflict.

In addition, poor mental health may affect marital relationships by precipitating conflict and by fostering the perception of conflict. Among both husbands and wives, one's own depressed mood at one time predicts declines in marital quality later (Dehle & Weiss, 1998; Whisman & Uebelacker, 2009). Living with a more depressed partner also pressures the nondepressed partner to alter his or her behavior and inhibit his or her negative responses to the spouse's depression, leading to stress

(McLeod, 1994; Pruchno, Wilson-Genderson, & Cartwright, 2009). Furthermore, individuals with worse mental health may be less able to adjust their behavior to the requirements of married life (Gagnon et al., 1999; McLeod, 1994). In light of these findings, we posited the following:

Hypothesis 2C: Individuals with worse mental health will report more marital conflict.
Hypothesis 2D: Individuals whose spouses have worse mental health will report more marital conflict.

Gender and Marital Conflict

Poor health and negative personality traits may each contribute to marital conflict, but perspectives on gender and marital quality suggest that the effects of poor health and negative traits on conflict may be larger for women than for men (Eldridge & Christensen, 2002; Gottman, 1994). At some point in the relationship, one partner may desire change from the other, but because men are typically advantaged in wealth and power they are better able to resist women's demands and to withdraw from negotiations, thereby precipitating conflict (Carstensen et al., 1995; Gottman, 1994). In terms of health, husbands may therefore resist demands arising from their partner's poor physical or mental health, such as demands for emotional restraint around a person with poor mental health or demands for taking care of an individual with physical health problems (Christakis & Allison, 2008, p. 471).

Similarly, literature on personality and relationship quality suggests that husbands' traits may be more important for marital quality than wives'. Botwin et al. (2006) found that women are more likely than men to prefer socially desirable personality traits in their partners (i.e., Openness, Conscientiousness, Extraversion, and Agreeableness) and that, if their partner was lacking in any of these traits, women were more likely than men to report dissatisfaction with the relationship. Women are also more likely than men to be happy with male partners who have high positive emotionality (DiStephano & Motl, 2009). Furthermore, women show stronger physiological and emotional reactions to marital conflict than do men (Kiecolt-Glaser et al., 1997; Kiecolt-Glaser & Newton, 2001).

Taken together, these findings suggest that wives of more positive husbands will be less likely to report conflict, but men with wives high on Positivity will report no more or less conflict than men with less positive wives. This led us to our final hypothesis:

Hypothesis 3: The association between wives' reports of conflict and their husbands' personality traits and health will be greater than the association between husbands' reports and wives' traits and health.

To restate the objectives of this study, we will use dyadic data to examine the association between traits and marital conflict (Hypotheses 1A–1D), and the association between health and marital conflict (Hypotheses 2A–2D), and to assess whether these associations vary by gender (Hypothesis 3). To test these hypotheses, we require reports of conflict from both husbands and wives in the relationship as well as measures of each partner's health and personality traits. In addition, our analyses will have to control for age, ethnicity, education, time living together, and whether the two partners are married or cohabiting, because each of these factors has implications for marital quality and may act as confounders (Umberson et al., 2006; Waite & Gallagher, 2000). We discuss our data and methods for testing our hypotheses below.

METHOD

Sample and Measures

Our data came from the second wave of the National Social Life, Health and Aging Project (NSHAP; Waite et al., 2013), a nationally representative study of older adults that was designed to collect extensive information on the social and romantic/sexual lives of older respondents as well as a broad array of assessments of health. The first wave of NSHAP, collected in 2005–2006, comprised 3,005 respondents, with a response rate of 75.5%. By Wave 2, fielded in 2010–2011, 318 respondents had died; 115 were in too poor health to be reinterviewed; and an additional 311 were not reinterviewed for various reasons, including refusals. Of those partners who were asked to participate in NSHAP, 84.5% consented and were interviewed, yielding a sample of 955 partners, and thus 955 marital and cohabitational

Table 1. *Descriptive Statistics (*n = 953 *Husbands and* 953 *Wives), Tests of Gender Differences, and Correlation Within Couples*

Variable	Range	Husbands			Wives			t test p	r
		M/freq.	SD/%	% Missing	M/freq.	SD/%	% Missing		
Marital conflict scale	1–4	2.36	0.68	0.10	2.26	0.69	0.10	.000***	.30***
Non-Hispanic White	0 or 1	728	76.47%	0.10	741	78.00%	0.10	.133	.81***
College, BA, or more	0 or 1	542	56.87%	0	561	58.87%	0	.256	.40***
Age	36–99	72.27	7.35	0	68.79	8.06	0	.000***	.70***
Poor or fair physical health	0 or 1	251	26.37%	0.10	228	23.95%	0.10	.188	.15***
Poor or fair mental health	0 or 1	103	10.82%	0.10	130	13.66%	0.10	.050	.08*
Years living together	0–73	39.44	15.73	4.82	39.66	15.46	3.78	.151	.97***
Married (vs. cohabiting)	0 or 1	913	95.80%	0	910	95.49%	0%	.318	.89***

Note: The marital conflict scale was constructed from three items: how often partner (a) gets on respondent's nerves, (b) makes too many demands, or (c) criticizes. Physical and mental health are based on self-reports. Frequency and percentage are presented if the variable is dichotomous.

*p < .05. ***p < .001.

dyads (the proportion cohabiting is given in Table 1). Spouses and coresident partners were interviewed using the same protocol as the focal respondents; note that age was not used as a criterion for whether a *partner* would be interviewed, and so respondents were added to the sample who could be younger than 57. There was one same-sex female couple and one same-sex male couple; because these are too few to make inferences about nonheterosexual pairings, we did not include these couples in the analysis described below, leaving 953 couples. The Wave 2 response rate was 76.9%, including partners.

Marital conflict. Our outcome measure was a scale composed of three items: the respondent's perception of (a) how often their partner makes too many demands, (b) how often the partner criticizes them, and (c) how often the partner gets on their nerves. The response categories for each of these items were "Never," "Hardly ever or rarely," "Some of the time," and "Often." The internal consistency of the scale was acceptable for both genders ($\alpha = .65$ for men, .65 for women).

Personality. The Big Five dimensions of personality were measured using the Midlife Development Inventory (MIDI; Lachman & Weaver, 1997). See Iveniuk, Laumann, McClintock, Tiedt, and Waite (in press) for a description

of the MIDI in NSHAP. The MIDI is highly consistent across time at older ages (Turiano et al., 2012), meaning that our personality measure generally described the person as they have been for some time. Loading of the adjectives on the latent OCEAN factors is described below, along with the method we used to construct the sixth factor, Positivity. We used factor scores as measures of personality, predicted from the structural equation model, also discussed below.

Physical health. Self-rated global physical health is a reliable predictor of mortality and declines in health (Latham & Peek, 2013), and, in general, individuals who report that they are in poor physical health are correct in their assessment, according to objective measures (Idler & Kasi, 1995). Self-rated health was obtained by asking "Would you say your health is excellent, very good, good, fair or poor?" These five categories were dichotomized as "poor or fair" versus "good, very good, or excellent" to identify health poor enough to affect functioning. We included self-ratings of poor or fair physical health for each spouse as key predictors of each spouse's reports of marital conflict.

Mental health. Respondents were asked a question about mental health that was very similar to the question on physical health: "Now

how about your mental health? Is it excellent, very good, good, fair, or poor?" Self-rated global mental health, which provides a summary measure, correlates with other mental health measures (Fleishman & Zuvekas, 2007). As before, we dichotomized the measures into "poor or fair" versus "good, very good, or excellent."

Control variables. In this article, we use the term *husbands* and *wives* to refer to male and female partners, respectively; however, we also included a measure of relationship status coded as "married" versus "cohabiting" (for details, see Kim & Waite, in press). Information on respondents' demographic characteristics and the length of their partnership were obtained from NSHAP as well.

Analytic Strategy

Constructing Positivity. The first stage of our analysis used structural equation modeling to extract the Big Five dimensions of personality as well as the additional Positivity factor. It is not uncommon in structural equation modeling to include an additional factor capturing variance that is due to person-specific patterns of scale use across subscales (Chang, Connelly, & Geeza, 2012; DiStephano & Motl, 2009). These are called *method factors*, and they are sometimes described as measuring traits that are of interest to researchers (Chang et al., 2012). For example Geiser, Eid, and Nussbeck (2008) discussed willingness to rate oneself high on positive-sounding items as possibly representing a kind of trait, and they related it to a highly optimistic self-image and view of life. Once fit to the data, it may be that a method factor is, as its name suggests, only an artifact of method, but we propose that if the additional factor is a survey effect we will not observe any impact of a husband's method factor score on his wife's appraisal of the relationship.

Consider the responses of individual *i* to a set of personality adjectives *j*. An *m*-dimensional factor model for y_{ij} takes the following form:

$$y_{ij} = \boldsymbol{\mu}_j + \wedge'_j \boldsymbol{\gamma}_i + e_{ij} \qquad (1)$$

where $\boldsymbol{\mu}$ denotes the intercept for item *j*, $\wedge$ is the vector of factor loadings for that item, $\boldsymbol{\gamma}$ is the factor score estimated in the structural equation model, and *e* is the error term. Under conventional specifications of the Big Five, *m* is

5, and so $\wedge$ will have five possible entries, each assigned to an item *j*. To model positivity, we fit a sixth factor, which was allowed to predict respondents' scores on all items, meaning the model became:

$$y_{ij} = \boldsymbol{\mu}_j + \wedge'_j \boldsymbol{\gamma}_i + \boldsymbol{\Omega}'_j \boldsymbol{\omega}_i + e_{ij} \qquad (2)$$

where the new terms $\boldsymbol{\Omega}$ and $\boldsymbol{\omega}$ are vectors containing the sixth factor loading and the sixth factor score, respectively. Thus, every Big Five factor score was interpretable as a latent trait, net of the sixth factor. This changed the interpretation of the other five factors, as we point out in the discussion section. Because the response categories are ordinal, we used an ordered probit link for y_{ij}, and so all factor loadings were in standard deviation units on a standard normal distribution, with a mean of 0; as such, factor scores could be negative.

Regression analysis. We used factor scores in our models to predict self-reported conflict with one's partner separately by gender to test the hypotheses presented earlier. Because reports of conflict are very likely to be correlated within couples (which we tested; see discussion below), estimating the regressions separately for men and women could have produced inefficient regression estimates (Zellner, 1963). To address this problem, we used Seemingly Unrelated Regression Equations (SURE):

$$y_{iH} = \boldsymbol{x}'_{iH} \boldsymbol{\beta}_H + \epsilon_{iH} \qquad (3)$$

$$y_{iW} = \boldsymbol{x}'_{iW} \boldsymbol{\beta}_W + \epsilon_{iW} \qquad (4)$$

Equation 3 predicts some outcome for husbands (H), and Equation 4 predicts some outcome for wives (W); $\boldsymbol{x}'_i$ is a vector of independent variables, and $\boldsymbol{\beta}$ is a vector of regression coefficients. These two equations were estimated simultaneously, along with a correlation between the disturbance terms $\epsilon_i H$ and ϵ_{iW}, with the notation ρ. If the estimated correlation was not significantly different from zero, then the two equations for husbands and wives could have been estimated separately.

To assuage problems with missing data, mostly arising from respondents not returning the leave-behind questionnaire (see Table 2), we used full information maximum likelihood (FIML). Unlike imputation, FIML does not

create simulated values but rather makes use of all information that exists for any of the variables included in the model by computing a casewise likelihood function (Enders & Bandalos, 2001). In simulation studies, FIML has been shown to give more consistent and efficient estimates of model parameters than complete case analysis or single value imputation, further recommending it for our use here (Enders & Bandalos, 2001). As long as there are some variables that do not have missing data, FIML allows us to use the entire sample of heterosexual couples (953 couples) as our analytic sample, and so even though some husbands had missing data on their wives' variables, their information can still be used. Note that in the regression analyses, the personality scales, age, and years living together were all standardized to facilitate comparisons between coefficient sizes. Dichotomous variables were not standardized.

RESULTS

Structural Equation Modeling

Figure 1 shows results from the structural equation model. Previous to fitting this model, we attempted several alternative specifications, comparing models by three measures: the chi-square test of model fit, the confirmatory fit index (CFI), and the root-mean-square error of approximation (RMSEA). Smaller chi-square values, higher CFI values, and lower RMSEA values indicate better model fit (Ullman & Bentler, 2003). First, we fit a model with five latent factors corresponding to OCEAN, estimating all covariances between latent factors ($\chi^2 = 4{,}919.67$, CFI $= .85$, RMSEA $= .10$). Second, we fit a model using the General Factor of Personality (Erdle & Rushton, 2011; Van der Linden, Scholte, Cillessen, te Neijenhuis, & Segers, 2010), which is a common second-order trait in the personality literature ($\chi^2 = 5{,}083.59$, CFI $= .84$, RMSEA $= .10$). Finally, we fit the model as shown in Figure 1, which added a sixth factor and left all factors constrained to have covariances of zero ($\chi^2 = 2{,}078.66$, CFI $= .94$, RMSEA $= .07$); allowing additional paths meant the model was no longer identified. The chi-square test was always significant ($p < .001$), but the chi-square test is rarely insignificant in large surveys because it is sensitive to sample size (Ullman & Bentler, 2003). This final, six-factor model had the best fit. Variances of latent factors were constrained to 1, and

FIGURE 1. POSITIVITY (LEFT) AND THE BIG FIVE (RIGHT) IN A STRUCTURAL EQUATION MODEL.
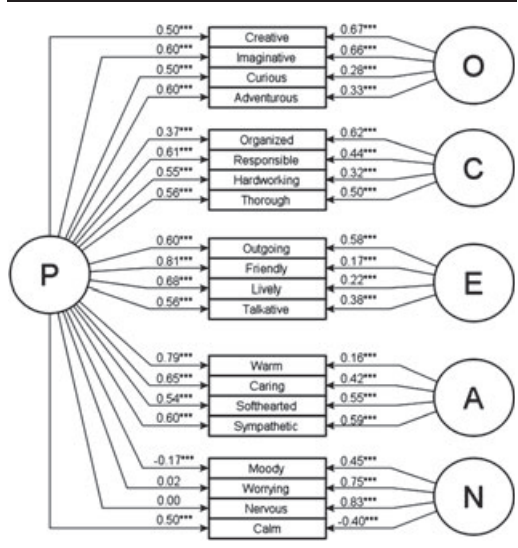
Note: ***$p < .001$.

means set to 0, again to ensure the model was identified.

The sixth factor, on the left side of Figure 1, could be interpreted in several different ways. On the one hand, the sixth factor could be capturing social desirability (Bäckström, Björklund, & Larsson, 2009) but, if so, we would expect positively worded items to load positively on the sixth factor and negative items to load negatively. However, "worrying" and "nervous" do not load onto this factor at all, making that interpretation implausible. We could interpret it as an acquiescence factor (Krosnick, 1999), but this also is contrary to the results, because then we would expect all items to load positively on it, and this is not the case. For the same reasons, this does not seem to be a factor capturing scale use. We label this factor *P* for *Positivity*, because it displays large, positively loading factors for positively worded items but ignores, for the most part, negatively worded items (note that the absolute value of the loading on "moody," though significant, is small). As we stated earlier, at this stage is it not clear whether Positivity is simply a survey artifact or something that is associated with behavior outside the survey context. If we find that one partner's Positivity score affects the other partner's appraisal of

Table 2. *Descriptive Statistics (*n = 953 Husbands; 953 Wives), Tests of Gender Differences, and Correlation Within Couples

		Husbands			Wives				
Variable	Range	M	SD	% Missing	M	SD	% Missing	t test p	r
Openness to experience	−2.5 to 2.4	0.09	0.75	11.75	−0.04	0.78	12.07	.001**	.06
Conscientiousness	−2.6 to 1.9	−0.04	0.70	11.75	0.03	0.70	12.07	.072	−.01
Extraversion	−2.1 to 1.8	−0.02	0.63	11.75	0.05	0.63	12.07	.051	.04
Agreeableness	−2.7 to 1.8	−0.19	0.66	11.75	0.12	0.58	12.07	.000***	.07*
Neuroticism	−1.8 to 2.2	−0.08	0.85	11.75	0.20	0.80	12.07	.000***	.08*
Positivity	−4.0 to 2.2	−0.20	0.88	11.75	0.15	0.79	12.07	.000***	.10**

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

trouble in the relationship, then we can more plausibly argue for the latter.

Descriptive Statistics

Characteristics of the 953 partner dyads are presented in Table 1. Husbands (72) were 3 years older than their wives (69) on average. The couples were predominantly non-Hispanic Whites, had some postsecondary education, and, for the most part, represented their self-rated physical and mental health as better than poor or fair. Respondents also commonly reported having some conflict within their relationship. It is worth mentioning that the gender difference was statistically significant ($p < .01$) and, unexpectedly, men reported slightly more conflict than women. As would be expected, the couple's race (.81), education (.40), and age (.70) were highly correlated. Finally, note that almost none of the variables in this table had any missing data.

Summary statistics on the five personality factors, including Positivity, are provided in Table 2. Here one can see that there were more missing data on the personality variables, largely because the personality battery was administered in the leave-behind questionnaire, and some respondents never returned it (87.3% of respondents returned the questionnaire). Many gender differences were significant, but correlations within couples on personality scores were fairly low. We also found that these correlations were low prior to fitting the structural equation model and that correlations between any two personality scales were low within couples (lower than .10; results not shown).

Regression Results and Tests of Hypotheses

Table 3 provides the results from SURE, predicting marital conflict using personality, health, married or cohabiting, years living together, and demographic controls; we can see at the bottom of the table that ρ was .23 and significant at $p < .001$, pointing to a significant correlation between the error term in the equation for husbands and that in the equation for wives, meaning it was suitable to use SURE in this case. Tests of our hypotheses can be made using the results from Table 3. Hypothesis 1A stated that one's own Positivity would be associated with lower levels of conflict. But neither husband's nor wife's own Positivity was associated with their own reports of marital conflict (husbands' $b = -0.07$, *ns*; wives' $b = -0.01$, *ns*), which does not support Hypothesis 1A. One can see that wives whose husbands show higher levels of Positivity reported less conflict, on average, as hypothesized ($b = -0.11$, $p < .01$), which supports Hypothesis 1B. But wives' Positivity had no association with husbands' reports of conflict. Hypotheses 1C and 1D stated that one's own Neuroticism and partner's Neuroticism would be associated with higher levels of marital conflict. Table 3 shows support for both hypotheses; own Neuroticism was associated with higher levels of reported conflict for both husbands ($b = 0.17$, $p < .001$) and wives ($b = 0.09$, $p < .05$), and spouse's Neuroticism showed the same pattern ($b = 0.07$, $p < .05$, for husbands and $b = 0.12$, $p < .01$, for wives). Surprisingly, a wife with a more extraverted husband, net of his other personality characteristics, was *more* likely to experience conflict ($b = 0.09$, $p < .05$).

Hypotheses 2A to 2D stated that worse physical and mental health, either in one's self or

Table 3. *Predicting Relationship Troubles (Seemingly Unrelated Regression Using Full Information Maximum Likelihood;* n = 953 Couples, 1,906 Persons)

Variable	Husbands			Wives	
	b	*SE*		*b*	*SE*
Self					
Married (vs. cohabiting)	−0.34*	0.15		−0.39*	0.16
Years living together	0.07*	0.03		0.05	0.04
Non-Hispanic White	−0.06	0.08		−0.09	0.08
College, BA, or more	0.16*	0.07		0.12	0.07
Age	−0.01	0.03		−0.02	0.04
Poor or fair physical health	0.05	0.07		−0.10	0.08
Poor or fair mental health	0.30**	0.11		0.26**	0.10
Openness	−0.02	0.04		0.04	0.04
Conscientiousness	−0.04	0.04		−0.05	0.04
Extraversion	0.00	0.04		−0.05	0.04
Agreeableness	−0.10*	0.04		−0.02	0.04
Neuroticism	0.17***	0.04		0.09*	0.03
Positivity	−0.07	0.04		−0.01	0.04
Spouse					
Poor or fair physical health	−0.06	0.08	‡‡	0.27***	0.08
Poor or fair mental health	0.01	0.10		−0.01	0.11
Openness	0.04	0.04		0.03	0.03
Conscientiousness	0.04	0.03		0.03	0.04
Extraversion	0.08	0.04		0.09*	0.04
Agreeableness	−0.01	0.04		−0.07	0.04
Neuroticism	0.07*	0.03		0.12**	0.04
Positivity	−0.02	0.03	‡	−0.11**	0.04
Constant	0.24	0.16		0.28	0.17

Note: $\rho = .23$, $p < .001$. Outcome, personality scores, age, and years living together are standardized within gender. All other variables are dichotomous and are therefore not standardized. The coefficient ρ is the correlation between the residual error terms from the husbands' and wives' equations. The results of a one-sided Wald test are marked as follows: A double dagger (‡) represents a coefficient in the wives' equation that is larger at $p < .05$; two double daggers (‡‡) represent a coefficient in the wives' equation that is larger at $p < .01$.

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

in one's spouse, would be associated with worse marital conflict. The results provided in Table 3 show that one's own physical health was not associated with increased marital conflict, for husbands ($b = 0.05$, *ns*) or wives ($b = −0.10$, *ns*), in contrast to the expectations of Hypothesis 2A. However, in support of Hypothesis 2B, wives of husbands in poor or fair physical health reported higher conflict ($b = 0.27$, $p < .001$), even though husbands married to wives in poor or fair health did not report higher conflict ($b = −0.06$, *ns*). In support of Hypothesis 2C, one's own poor or fair mental health was associated with reports of greater marital conflict (husbands' $b = 0.30$, $p < .01$; wives' $b = 0.26$, $p < .01$) but that partner's mental health was not, for husbands ($b = 0.01$, *ns*) or wives ($b = −0.01$, *ns*). Thus, there was no support for Hypothesis 2D. To summarize, husbands' physical health mattered to their wives, but not to them, and wives' physical health did not matter to either spouse. Each spouse's own mental health was associated with more conflict, whereas spouses' mental health never mattered.

We tested Hypothesis 3, that the association between husbands' characteristics and wives' reports of conflict will be greater than the association between wives' characteristics and husbands' reports, using statistical comparisons of coefficient sizes. We carried out a one-tailed test of whether the associations between husbands' characteristics and wives' reports were greater than the associations between wives' characteristics and husbands' reports, and we marked this in Table 3 with a double dagger symbol ("‡"). Note that for the test of spouse's Positivity and spouse's Agreeableness, we reversed the direction of the test because the coefficients are negative. One-tailed tests indicated that the association between husbands' poor physical health and wives' reports of conflict was greater than the association between wives' poor health and husbands' reports ($p < .01$). One-tailed tests also indicated that the association between husbands' Positivity and wives' reports of conflict was significantly larger than the association between wives' Positivity and their husbands' reports ($p < .05$). It seems, in terms of personality and physical health, that husbands' characteristics were more consequential for wives' reports of conflict than the reverse.

Robustness Checks to Findings

Because Positivity has not been used before in analyses of marital conflict, we wanted to ensure that the findings discussed above are not artifacts of method. Therefore, we checked the bivariate associations between Positivity and conflict for both partners. Husbands' own Positivity was negatively associated with their own reports of conflict ($r = -.13$, $p < .001$), but wives' own Positivity was not associated with their own reports of conflict ($r = -.05$, *ns*). Also, as in the regression results just discussed, husbands' Positivity was negatively associated with wives' reports of conflict ($r = -.14$, $p < .001$), but wives' Positivity had no association with their husbands' reports of conflict ($r = -.01$, *ns*). Therefore, the gender differences that we observed in the association between spouse's Positivity and reports of conflict do not appear to be the result of our modeling strategy.

We were also interested in the associations between conflict and OCEAN scores without Positivity; accordingly, we reproduced the regressions presented in Table 3, this time using factor scores produced by a structural equation model that did not include the Positivity factor. We found that results were very similar: Husbands' own Neuroticism was associated with higher martial conflict, according to their own reports ($b = 0.20$, $p < .001$), and their Agreeableness protected against higher marital conflict, by their own reports ($b = -0.13$, $p < .05$). According to wives' reports, husbands' Neuroticism was also associated with more conflict ($b = 0.14$, $p < .01$), and their Agreeableness was associated with less conflict ($b = -0.20$, $p < .001$). Husbands with wives higher on Agreeableness were less likely to report conflict ($b = -0.12$, $p = .04$), and wives' own Neuroticism was associated with increased conflict ($b = 0.11$, $p < .01$). Thus there was one exception to the hypothesized pattern that wives' traits would not affect husbands' reports of conflict: Wives' Agreeableness was associated with less conflict, although this coefficient was of only borderline significance at $p < .05$. In contrast, the effect of husbands' traits on wives' reports were both significant at $p < .01$. In sum, with or without Positivity, there was a similar pattern of husbands' traits affecting wives reports, but not wives' traits affecting husbands' reports.

DISCUSSION

Both health and traits are relatively understudied in the literature on late-life marital quality, despite calls for more research on these topics (Booth & Johnson, 1994; Joung et al., 1998; Whisman & Uebelacker, 2009). When health and traits are examined, they tend to be studied separately from each other (Gattis et al., 2004; Joung et al., 1998; McNulty, 2008; Whisman & Uebelacker, 2009). This has limited the conclusions of previous work, because personality traits can be a resource for maintaining good health, and so traits may confound the relationship between health and marital quality (Whisman & Uebelacker, 2009, p. 187): Healthy persons may have higher quality marriages because individuals who make an effort to stay healthy also make an effort to maintain their relationship quality. However, in this article we have demonstrated independent associations among health, personality, and marital quality. Therefore, it seems that both health and personality traits operate on separate, gendered pathways in the production of good marital quality.

This central finding was in line with our hypotheses and builds on work from previous studies that have examined late-life marriage. Numerous previous studies have demonstrated a negative impact of poor health (Booth & Johnson, 1994; Joung et al., 1998; Pinquart & Sörensen, 2011; Whisman & Uebelacker, 2009) and negative traits (Caughlin et al., 2000; McNulty, 2008) on marital quality, and our findings confirm that these factors do seem to be deleterious to marital quality, insofar as they were associated with worse conflict. It was also not surprising that gender differences emerged in the associations among health, traits, and conflict; as we argued above, this is commensurate with existing theory (Kiecolt-Glaser & Newton, 2001; Sanderson & Kurdek, 1993). Furthermore, older couples in America today may also have more conventional gender roles than couples formed from younger cohorts, making it all the more plausible that we would see gender differences in the associations among traits, health, and conflict in our sample (Brooks & Bolzendahl, 2004). But this also makes it difficult for any present work on late-life marriage to disentangle the effects of age and cohort. Therefore, even though our findings generally conform to existing theory about late-life marriage in America, researchers should

remain open to revising marital theory as new cohorts enter into later life.

In addition to confirming existing theory on the relationship between personality traits and marital conflict at older ages, in this article we estimated a novel, overarching dimension of personality that we labeled *Positivity*. Although it seemed possible that this sixth factor captured differences only in scale-use or social desirability bias, two of our findings made this interpretation implausible. First, husbands' Positivity and physical health were associated with their wives' reports of marital quality, but the reverse was not the case. Second, neither husbands' nor wives' own Positivity was associated with differences in marital conflict. Therefore, it seems plausible that Positivity reflects some set of behaviors and attitudes that exist outside of the survey situation, which husbands carried with them into marital interaction. We speculate that men in American marital relationships are generally more given to demonstrating their frustration, whereas women tend to reserve their negative feelings for the sake of preserving harmonious interactions (Larson & Richards, 1994; Sabatelli & Bartle-Haring, 2003; Sanderson & Kurdek, 1993). It could be that men who are higher in Positivity are better able to avoid or regulate negative affect for the sake of positive marital interactions. We encourage more empirical work on Positivity in order to test these speculations.

Two other noteworthy findings emerged in the course of our analysis that may inform testable hypotheses in future studies. First, wives of more extraverted husbands were more likely to report conflict than others. Although this seems counterintuitive, removing the common Positivity factor from Extraversion left the remaining E-scale with the asocial (though not necessarily antisocial) components of Extraversion: impulsivity, low self-control, and high levels of energy and vitality, or what is sometimes called *surgency* (John et al., 2008). In light of this, it is not surprising that husbands with high levels of Extraversion, net of Positivity, were more likely to create conflict, because these individuals may be less receptive to interpersonal controls. It is also revealing that husbands' Agreeableness protected against self-reports of marital conflict even after extracting the Positivity factor; thus, it would be problematic to say that the effects of Positivity were reducible to the effects of Agreeableness, or any Big Five trait. Our

analysis therefore suggests that personality characteristics not only beyond the Big Five but also within them could significantly contribute to social and behavioral outcomes.

Second, women reported less conflict than men, which, although the difference is small (2.26 vs. 2.36 on a 4-point scale), is at odds with previous work (Whisman & Uebelacker, 2009). However, this difference is consistent with other analyses of the NSHAP data (Kim & Waite, in press) and accords with recent observer evaluations of disagreements between spouses. Smith et al. (2009) found that in discussions of topics on which the spouses disagree older husbands displayed more warmth and less belittling and blaming but more withdrawal than did older women. Husbands in NSHAP more often say that their wife makes too many demands and criticizes them than wives in the study report the same issues (Kim & Waite, in press). In NSHAP, husbands also report more supportive interactions than do wives, which is consistent with the literature (Kim & Waite, in press).

Limitations

Because older adults are more likely to suffer from poor health than are young people, older couples provide some insight into the impact of health on marital functioning. Unfortunately, the long average marital duration of the couples considered here limits the generalizability of the findings and may have produced selection bias. Levels of negative affect tend to be higher in younger couples (Carstensen et al., 1995), and those with the highest levels of conflict are more likely to dissolve, leaving a selected sample of marital survivors that may well differ from a sample of younger dyads in regard to personality and health. Longitudinal data that would enable one to examine transitions between relationships and the transition into older adulthood could be informative.

Finally, because in this research we were simultaneously interested in personality and health, we did not include measures of specific health conditions but instead provided a general picture of the relationship between overall physical/mental well-being and marital quality at older ages. It may be that not all ailments are equal in terms of their tendency to promote marital conflict. Husbands who have diseases that leave them physically infirm but mentally

stable may stay amicable in the face of their disability. Chronic diseases that precipitate depression, such as diabetes (Trief, Wade, Britton, & Weinstock, 2002), may have more negative consequences for marital quality than those that are not linked to mental health (Bookwala, 2011; Warner & Kelley-Moore, 2012).

Conclusions

This article began with the question of whether there were meaningful differences between genders in the relationship between each partner's health, personality traits, and the conflict each reports; it is therefore appropriate to close with implications of this study for understanding the roles that men and women take up in long-term partnerships. Women are sometimes spoken of as the "relationship expert" in marriages (Sabatelli & Bartle-Haring, 2003; Sanderson & Kurdek, 1993, p. 264), that is, more likely to be equipped with skills for socioemotional work and maintaining the satisfaction of both partners. They are also more likely to manage the interactions of family members with the medical system (Kiecolt-Glaser & Newton, 2001). The burden of caring for a sick spouse, as well as being more attentive to a spouse's traits, would therefore be more burdensome to wives than to husbands, on average, because the less skilled partner would delegate to the "specialized" individual. The more difficult question is whether low levels of conflict in marriages would require not only the absence of frustrating individual factors, such as poor health and negative traits, but also a more equal distribution of responsibility for emotional labor between husbands and wives in a dyad. This study does not provide an answer, but it may be useful for subsequent studies that aim to address this question.

NOTE

REFERENCES

Bäckström, M., Björklund, F., & Larsson, M. R. (2009). Five-factor inventories have a major general factor related to social desirability which can be reduced by framing items neutrally. *Journal of Research in Personality*, *43*, 335–344. doi:10.1016/j.jrp.2008.12.013

Bernard, J. (1972). *The future of marriage*. New York: Bantam Books.

Birditt, K., & Antonucci, T. C. (2008). Life sustaining irritations? Relationship quality and mortality in the context of chronic illness. *Social Science and Medicine*, *67*, 1291–1299. doi:10.1016/j.socscimed.2008.06.029

Bookwala, J. (2011). Marital quality as a moderator of the effects of poor vision on quality of life among older adults. *Journals of Gerontology: Series B: Psychological Sciences and Social Sciences*, *66*, 605–616. doi:10.1093/geronb/gbr091

Bookwala, J., & Franks, M. M. (2005). Moderating role of marital quality in older adults' depressed affect: Beyond the main-effects model. *Journals of Gerontology: Series B: Psychological Sciences and Social Sciences*, *60*, P338–P341.

Booth, A., & Johnson, D. R. (1994). Declining health and marital quality. *Journal of Marriage and the Family*, *56*, 218–223. doi:10.2307/352716

Botwin, M. D., Buss, D. M., & Shackelford, T. K. (2006). Personality and mate preferences: Five factors in mate selection and marital satisfaction. *Journal of Personality*, *65*, 107–136. doi:10.1111/j.1467-6494.1997.tb00531.x

Brooks, C., & Bolzendahl, C. (2004). The transformation of US gender role attitudes: Cohort replacement, social-structural change, and ideological learning. *Social Science Research*, *33*, 106–133. doi:10.1016/S0049-089X(03)00041-3

Carstensen, L. L., Gottman, J. M., & Levenson, R. W. (1995). Emotional behavior in long-term marriage. *Psychology and Aging*, *10*, 140–149. doi:10.1037/0882-7974.10.1.140.

Caughlin, J. P., Huston, T. L., & Houts, R. M. (2000). How does personality matter in marriage? An examination of trait anxiety, interpersonal negativity and marital satisfaction. *Journal of Personality and Social Psychology*, *78*, 326–336. doi:10.1037/0022-3514.78.2.326

Chang, L., Connelly, B., & Geeza, A. (2012). Separating method factors and higher-order traits of the Big Five: A meta-analytic multitrait–multimethod approach. *Journal of Personality and Social Psychology*, *102*, 408–426. doi:10.1037/a0025559

Christakis, N. A., & Allison, P. D. (2008). Interspousal mortality effects: Caregiver burden across the spectrum of disabling diseases. In D. Culter, D. A. Wise, & R. G. Woodbury (Eds.), *Health at older ages: The causes and consequences of declining disability among the elderly* (pp. 455–478). Chicago: University of Chicago Press.

Christensen, A., & Walczynski, P. T. (1997). Conflict and satisfaction in couples. In R. J. Sternberg & M. Hojjat (Eds.), *Satisfaction in close relationships* (pp. 249–274). New York: Guilford Press.

Dehle, C., & Weiss, R. L. (1998). Sex differences in prospective associations between marital quality and depressed mood. *Journal of Marriage and the Family*, *60*, 1002–1011. doi:10.2307/353641

DiStephano, C., & Motl, R. W. (2009). Personality correlates of method effects due to negatively worded items on the Rosenberg Self-Esteem Scale. *Personality and Individual Differences*, *46*, 309–313. doi:10.1016/j.paid.2008.10.020

Donnellan, M. B., Assad, K. K., Robins, R. W., & Conger, R. D. (2007). Do negative interactions mediate the effects of negative emotionality, communal positive emotionality and constraint on relationship satisfaction? *Journal of Social and Personal Relationships*, *24*, 557–573. doi:10.1177/0265407507079249

Donnellan, M. B., Conger, R. D., & Bryant, C. M. (2004). The Big Five and enduring marriages. *Journal of Research in Personality*, *38*, 481–504. doi:10.1016/j.jrp.2004.01.001

Donoho, C. J., Crimmins, E. M., & Seeman, T. E. (2013). Marital quality, gender and markers of inflammation in the MIDUS cohort. *Journal of Marriage and Family*, *75*, 127–141. doi:10.1111/j.1741-3737.2012.01023.x

Eldridge, K. A., & Christensen, A. (2002). Demand–withdraw communication during couple conflict: A review and analysis. In P. Noller (Ed.), *Understanding marriage: Developments in the study of couple interaction* (pp. 289–322). Cambridge, UK: Cambridge University Press.

Enders, C. K., & Bandalos, D. L. (2001). The relative performance of full information maximum likelihood estimation for missing data in structural equation models. *Structural Equation Modeling*, *8*, 430–457. doi:10.1207/S15328007SEM0803_5

Erdle, S., & Rushton, J. P. (2011). Does self-esteem or social desirability account for a general factor of personality (GFP) in the Big Five? *Personality and Individual Differences*, *50*, 1152–1154. doi:10.1016/j.paid.2010.12.038

Fleishman, J. A., & Zuvekas, S. H. (2007). Global self-rated mental health: Associations with other mental health measures and with role functioning. *Medical Care*, *45*, 602–609. doi:10.1097/MLR.0b013e31803bb4b0

Gagnon, M. D., Hersen, M., Kabacoff, R. I., & Van Hasselt, V. B. (1999). Interpersonal and psychological correlates of marital dissatisfaction in late life: A review. *Clinical Psychology Review*, *19*, 359–378. doi:10.1016/S0272-7358(97)00048-2

Gattis, K. S., Berns, S., Simpson, L. E., & Christensen, A. (2004). Birds of a feather or strange birds? Ties among personality dimensions, similarity and marital quality. *Journal of Family Psychology*, *18*, 564–574. doi:10.1037/0893-3200.18.4.564

Geiser, C., Eid, M., & Nussbeck, F. W. (2008). On the meaning of the latent variables in the CT-C(M-1) Model: A comment on Maydeu-Olivares and Coffman. *Psychological Methods*, *13*, 49–57. doi:10.1037/1082-989X.13.1.49

Gottman, J. M. (1994). *What predicts divorce? The relationship between marital processes and marital outcomes*. Hillsdale, NJ: Erlbaum.

Heaven, P. C. L., Smith, L., Prabhakar, S. M., Abraham, J., & Mete, M. E. (2006). Personality and conflict communication patterns in cohabiting couples. *Journal of Research in Personality*, *40*, 829–840. doi:10.1016/j.jrp.2005.09.012

Heller, D., Watson, D., & Illies, R. (2004). The role of person versus situation in life satisfaction: A critical examination. *Psychological Bulletin*, *130*, 574–600. doi:10.1037/0033-2909.130.4.574

Holt-Lunstad, J., & Birmingham, W. (2008). Is there something unique about marriage? The relative impact of marital status, relationship quality and network social support on ambulatory blood pressure and mental health. *Annals of Behavioral Medicine*, *35*, 239–244. doi:10.1007/s12160-008-9018-y

Idler, E., & Kasi, S. (1995). Self-ratings of health: Do they also predict change in functional ability? *Journals of Gerontology: Series B: Psychological Sciences and Social Sciences*, *50B*, S344–S353. doi:10.1093/geronb/50B.6.S344

Iveniuk, J., Laumann, E. O., McClintock, M. K., Tiedt, A., & Waite, L. J. (in press). Personality measures in the National Social Life, Health and Aging Project. *Journals of Gerontology: Series B: Psychological and Social Sciences*.

John, O. P., Naumann, L. P., & Soto, C. J. (2008). Paradigm shift to the integrative Big Five trait taxonomy: History, measurement and conceptual issues. In O. P. John, R. W. Robins, & L. A. Pervin (Eds.), *Handbook of personality: Theory and research* (pp. 114–158). New York: Guilford Press.

Joung, I. M. A., van de Mheen, H. D., Stronks, K., van Poppel, F. W. A., & Mackenbach, J. P. (1998). A longitudinal study of health selection in marital transitions. *Social Science & Medicine*, *46*, 425–435. doi:10.1016/S0277-9536(97)00186-X

Kiecolt-Glaser, J. K., Glaser, R., Cacioppo, J. T., MacCallum, R. C., Snydersmith, M., Kim, C., & Malarkey, W. B. (1997). Marital conflict in older adults: Endocrinological and immunological correlates. *Psychosomatic Medicine*, *59*, 339–349.

Kiecolt-Glaser, J. K., & Newton, T. (2001). Marriage and health: His and hers. *Psychological Bulletin*, *127*, 472–503. doi:10.1037/0033-2909.127.4.472

Kim, J., & Waite, L. J. (in press). Relationship quality and shared activity in the National Social Life, Health and Aging Project. *Journals of Gerontology: Series B: Psychological Sciences and Social Sciences*.

Krosnick, J. A. (1999). Survey research. *Annual Review of Psychology*, *50*, 537–567. doi:10.1146/annurev.psych.50.1.537

Lachman, M. E., & Weaver, S. L. (1997). The Midlife Development Inventory (MIDI) personality scales: Scale construction and scoring. Technical Report, Brandeis University. Retrieved from http://www.brandeis.edu/departments/psych/lachman/pdfs/midi-personality-scales.pdf

Lahey, B. B. (2009). Public health significance of neuroticism. *American Psychologist*, *64*, 241–256. doi:10.1037/a0015309

Larson, R. E., & Richards, M. H. (1994). *Divergent realities: The emotional lives of mothers, fathers and adolescents*. New York: Basic Books.

Latham, K., & Peek, C. W. (2013). Self-rated health and morbidity onset among late midlife U.S. adults. *Journals of Gerontology: Series B: Psychological Sciences and Social Sciences*, *68*, 107–116. doi:10.1093/geronb/gbs104

Malouff, J. M., Thorsteinsson, E. B., Schutte, N. S., Bhullar, N., & Rooke, S. E. (2010). The five-factor model of personality and relationship satisfaction of intimate partners: A meta-analysis. *Journal of Research in Personality*, *44*, 124–127. doi:10.1016/j.jrp.2009.09.004

McLeod, J. D. (1994). Anxiety disorders and marital quality. *Journal of Abnormal Psychology*, *103*, 767–776. doi:10.1037/0021-843X.103.4.767

McNulty, J. K. (2008). Neuroticism and interpersonal negativity: The independent contributions of perceptions and behaviors. *Personality and Social Psychology Bulletin*, *34*, 1439–1451. doi:10.1177/0146167208322558

O'Rourke, N., & Cappeliez, P. (2005). Marital satisfaction and self-deception: Reconstruction of relationship histories among older adults. *Social Behavior and Personality*, *33*, 273–282. doi:10.2224/sbp.2005.33.3.273

Pinquart, M., & Sörensen, S. (2011). Spouses, adult children, and children-in-law as caregivers of older adults: A meta-analytic comparison. *Psychology and Aging*, *26*, 1–14. doi:10.1037/a0021863

Pruchno, R., Wilson-Genderson, M., & Cartwright, F. P. (2009). Depressive symptoms and marital satisfaction in the context of chronic disease: A longitudinal dyadic analysis. *Journal of Family Psychology*, *23*, 573–584. doi:10.1037/a0015878

Robins, R. W., Caspi, A., & Moffitt, T. E. (2000). Two personalities, one relationship: Both parties' personality traits shape the quality of their relationship. *Journal of Personality and Social Psychology*, *79*, 251–259. doi:10.1037/0022-3514.79.2.251

Sabatelli, R. M., & Bartle-Haring, S. (2003). Family-of-origin experiences and adjustment in married couples. *Journal of Marriage and Family*, *65*, 159–169. doi:10.1111/j.1741-3737.2003.00159.x

Sanderson, B., & Kurdek, L. A. (1993). Race and gender as moderator variables in predicting relationship satisfaction and relationship commitment in a sample of dating heterosexual couples. *Family Relations*, *42*, 263–267.

Smith, T. W., Berg, C. A., Florsheim, P., Uchino, B. N., Pearce, G., Hawkins, M., Henry, N. J., Beveridge, R. M., Skinner, M. A., & Olsen-Cerny, C. (2009). Conflict and collaboration in middle-aged and older couples: I. Age differences in agency and communion during marital interaction. *Psychology and Aging*, *24*, 259–273. doi:10.1037/a0015609

Trief, P. M., Wade, M. J., Britton, K. D., & Weinstock, R. S. (2002). A prospective analysis of marital relationship factors and quality of life in diabetes. *Diabetes Care*, *25*, 1154–1158. doi:10.2337/diacare.25.7.1154

Turiano, N. A., Pitzer, L., Armour, C., Karlamangala, A., Ryff, C. D., & Mroczek, D. K. (2012). Personality trait level and change as predictors of health outcomes: Findings from a national study of Americans (MIDUS). *Journals of Gerontology: Series B: Psychological Sciences and Social Sciences*, *67B*, 4–12. doi:10.1093/geronb/gbr072

Ullman, J. B., & Bentler, P. M. (2003). Structural equation modeling. In I. B. Weiner, J. A. Schinka, & W. F. Velicer (Eds.), *Handbook of psychology*: *Vol*. *2*. *Research methods in psychology* (pp. 607–634). Hoboken, NJ: Wiley.

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*, 1–16. doi:10.1177/002214650604700101

Van der Linden, D., Scholte, R. H. J., Cillessen, A. H. N., te Nijenhuis, J., & Segers, E. (2010). Classroom ratings of likeability and popularity are related to the Big Five and the general factor of personality. *Journal of Research in Personality*, *44*, 669–672. doi:10.1016/j.jrp.2010.08.007

Vogel, D. L., Murphy, M. J., Werner-Wilson, R. J., Cutrona, C. E., & Seeman, J. (2007). Sex differences in the use of demand and withdraw behavior in marriage: Examining the social structure hypothesis. *Journal of Counseling Psychology*, *54*, 165–177. doi:10.1037/0022-0167.54.2.165

Waite, L. J., Cagney, K. A., Cornwell, B., Dale, W., Huang, E., Laumann, E. O., McClintock, M. K., O'Muircheartaigh C. A., & Schumm, L. P. (2013). The National Social Life, Health and Aging Project (NSHAP): Wave 2 and partner data collection. Data accessible through the Inter-University Consortium for Political and Social Research, Ann Arbor, MI.

Waite, L. J., & Gallagher, M. (2000). *The case for marriage*. New York: Broadway Books.

Warner, D. H., & Kelley-Moore, J. (2012). The social context of disablement among older adults:

Does marital quality matter for loneliness? *Journal of Health and Social Behavior*, *53*, 50–66. doi:10.1177/0022146512439540

Whisman, M. A., & Uebelacker, L. A. (2009). Prospective associations between marital discord and depressive symptoms in middle-aged and older adults. *Psychology and Aging*, *24*, 184–189. doi:10.1037/a0014759

Williams, K. (2003). Has the future of marriage arrived? A contemporary examination of gender, marriage and psychological well-being. *Journal of Health and Social Behavior*, *44*, 470–487. doi:10.2307/1519794

Zellner, A. (1963). Estimators for seemingly unrelated regression equations: Some exact finite sample results. *Journal of the American Statistical Association*, *58*, 977–992. doi:10.1080/01621459.1963.10480681