

The Association between Marital Status and Psychological Well-being: Variation across Negative and Positive Dimensions

Journal of Family Issues

2020, Vol. 41(11) 2179–2202

© The Author(s) 2020

Article reuse guidelines:

sagepub.com/journals-permissions

DOI: 10.1177/0192513X20910184

journals.sagepub.com/home/jfi



Tze-Li Hsu¹  and Anne E. Barrett²

Abstract

Marital status is associated with psychological well-being, with the married faring better than the formerly and never-married. However, this conclusion derives from research focusing more on negative than positive well-being. We examine the association between marital status and negative well-being, measured as depressive symptoms, and positive well-being, measured as autonomy, environmental mastery, personal growth, positive relations with others, self-acceptance, and purpose in life. Using Wave 2 of Midlife in the United States (2004–2006; $n = 1,711$), we find that the continuously married fare better on the negative dimension than do the formerly married. The results for some measures of positive well-being also reveal an advantage for the continuously married, compared with the formerly and the never-married. However, results for other positive measures indicate that the unmarried, and the remarried, fare better—not worse—than the continuously married. Further, some results suggest greater benefits for remarried or never-married women than men.

¹Department of Sociology, Sam Houston State University, Huntsville, TX, USA

²Department of Sociology, Florida State University, Tallahassee, FL, USA

Corresponding Author:

Tze-Li Hsu, Department of Sociology, Sam Houston State University, 1901 Avenue I, Suite 270, Huntsville, TX 77341-2446, USA.

Email: thsu@shsu.edu

Keywords

gender, positive psychology, depression, mental health, posttraumatic growth

Introduction

Among the most consistent predictors of psychological well-being is marital status, with the married—particularly those continuously so—reporting higher well-being than the formerly or never-married (e.g., Barrett, 2000; Kim & McKenry, 2002; Waite & Gallagher, 2000). However, this conclusion is drawn primarily from studies focusing on well-being's negative dimension, often indicated by symptoms of depression or other mental illnesses. This focus reflects a limited view of psychological well-being, as well as assumptions about not only marriage's enhancement of well-being but also the stress of marital loss. Although research is clear about marriage's reduction of vulnerability to psychological disorders, its effects on well-being, more broadly defined, may be more mixed, given the strengths and strains of marriage (e.g., Gove et al., 1990; Kim & McKenry, 2002; Slatcher & Selcuk, 2017). Its provision of mutual support and obligation may improve the negative dimension of well-being while limiting aspects of the positive one, particularly those centering on personal freedom and autonomy (e.g., Baumbusch, 2004; Marks & Lambert, 1998). Similarly, some consequences of marital loss may be positive. Becoming divorced or widowed may worsen negative well-being (especially in the short-term) but enhance aspects of positive well-being, given the opportunities for personal growth that stressful life events can present (e.g., Amato, 2010; Updegraff & Taylor, 2000; Waite et al., 2009). To explore these possibilities, our study examines the association between marital status and well-being's negative and positive dimensions.

Our focus on both dimensions derives from a decades-long, evolving theoretical development of the concept of mental health—in particular, the concept's expansion by positive psychology (e.g., Bradburn, 1969; Jahoda, 1958; Keyes, 1998; Maslow, 1968; Ryff, 1989). Rather than defining mental health solely as the absence of mental illness, positive psychological frameworks focus on optimal functioning. Providing an example is Ryff's (1989) six-factor model of psychological well-being that includes such factors as personal growth, purpose in life, and self-acceptance. Another example is Keyes' (1998) five-factor model that focuses more on the social dimensions of positive well-being, such as integration, acceptance, and contribution. Our study draws not only on this literature's general emphasis on positive well-being but also a stream of work within it that highlights the positive outcomes of events often assumed to be exclusively negative, such as marital loss (e.g.,

Aldwin, 1994; Calhoun et al., 2010; Tedeschi & Calhoun, 2004; Updegraff & Taylor, 2000). As Updegraff and Taylor (2000) describe in their overview of this research, stressful life events can lead to psychological growth—for example, through the strengthening of social networks, reordering of life priorities, and improved perceptions of one’s ability to handle challenges.

These expanded conceptualizations raise the possibility that the association between marital status and psychological well-being differs across well-being’s negative and positive dimensions—and our study examines it. The negative dimension is captured using the most frequently examined outcome in the marital status and health literature—depressive symptoms—while positive psychological well-being is measured using Ryff’s (1989) six dimensions—in particular, autonomy, environmental mastery, personal growth, positive relations with others, self-acceptance, and purpose in life. We also examine how the associations between marital status and these dimensions of psychological well-being vary by gender. Our predictions are guided by a gender-relations perspective on health that highlights the role of women’s and men’s interactions with one another, including the enactment of socially prescribed masculinity and femininity (Bottorff et al., 2011; Schofield et al., 2000). Our findings not only contribute to the marital status and health literature by examining both dimensions of well-being but also illuminate the possible positive psychological outcomes of stressful events, like marital loss, as well as some of the limits to marriage’s enhancement of well-being.

Theoretical Framework

Our examination of the association between marital status and psychological well-being draws on a strength and strain model of marriage (Slatcher & Selcuk, 2017). This perspective integrates two models linking marriage and health—one emphasizing marriage’s positive aspects and the other its negative ones. Building on earlier work on the health benefits of support (e.g., Cohen & Wills, 1985; House et al., 1988), this perspective’s emphasis on the strengths of marriage include positive relational processes, such as intimacy, commitment, and partner responsiveness. It also considers the strains of marriage, incorporating the insights of prior work emphasizing negative aspects of some marriages, including hostility, conflict, and criticism (Karney & Bradbury, 1995).

Applied to our study, a strength and strain model of marriage and health is consistent with our prediction that the association between marital status and health varies across positive and negative dimensions of psychological well-being. Marriage may enhance some aspects of well-being but may diminish others. Similarly, marital loss may diminish some aspects of well-being but

potentially enhance others. In particular, the strengths of marriage may protect against negative psychological well-being, while the strains of marriage may limit positive well-being. These predictions are derived not only from a strength and strain perspective on marriage but also prior studies of the association between marital status and psychological well-being, including its variation across negative and positive dimensions.

Literature Review

Marital Status and the Negative Dimension of Psychological Well-being

Consistent with a strength and strain perspective's predictions regarding marriage's health-enhancing properties, an extensive literature documents the beneficial effects of marrying and detrimental effects of marital loss on negative psychological well-being (e.g., Barrett, 2000; Kim & McKenry, 2002; Soulsby & Bennett, 2015). For example, using cross-sectional data collected from an online survey with 510 British adults, Soulsby and Bennett (2015) found that both the widowed and divorced reported more depressive symptoms than did the continuously married—a pattern partially explained by their lower social support. Similarly, a cross-sectional study by Barrett (2000) found that the never- or formerly married reported more depressive symptoms than the married did, net of demographics and psychiatric history. Further, among the married, the remarried reported more symptoms of anxiety and substance use than the continuously married did, suggesting lasting negative effects of marital loss.

Similar conclusions are drawn from panel studies examining transitions into and out of marriage (e.g., Frech & Williams, 2007; Kim & McKenry, 2002; LaPierre, 2009; Williams, 2003). Most studies focus on marital loss, with results consistently revealing worse negative psychological well-being among those experiencing separation, divorce, or widowhood (e.g., Frech & Williams, 2007; Kim & McKenry, 2002; LaPierre, 2009; Waite et al., 2009; Williams, 2003). As an illustration, Mastekaasa's (1995) study following a sample of Norwegians over four years found that those becoming divorced or separated were more likely to experience psychological distress, though the effect was diminished with controls added for prior distress. Similarly, Waite and colleagues' (2009) study using two waves of the National Survey of Families and Households (NSFH) found that, net of demographics and marital duration, transitions out of marriage predicted increases in depression, hostility, and alcohol consumption. Consistent with these studies, research finds that marital

gains—either entering a first or higher-order marriage—predicts improvements in psychological well-being, as measured using indicators tapping its negative dimension (e.g., Frech & Williams, 2007; Kim & McKenry, 2002; Waite et al., 2009). For example, Frech and Williams' (2007) study found that individuals marrying over the five years between NSFH waves reported fewer depressive symptoms than the continuously unmarried, net of demographics and baseline symptoms.

Marital Status and the Positive Dimension of Psychological Well-being

Though fewer studies examine the association between marital status and positive psychological well-being, theoretical rationales exist for doing so, and empirical findings support them. Positive psychology's expanded view of mental health draws into focus the importance of considering not only the presence of undesirable emotional states or self-perceptions (e.g., depression and low self-regard) but also desirable ones (e.g., happiness and self-acceptance). The two are not ends on a single continuum, as evidenced by the observation of only a moderate correlation between them (e.g., Carstensen et al., 2000; Charles et al., 2001). Providing further support for the independence of these dimensions, twin studies find a stronger genetic component for negative than positive psychological well-being (Baker et al., 1992). These observations are consistent with research revealing that situational factors impact negative and positive psychological well-being differently (e.g., Bierman et al., 2006; Marks & Lambert, 1998; Watson, 1988). For example, a daily diary study by Watson (1988) revealed that social activity and perceived stress were more strongly predictive of positive than negative well-being.

Turning to the association between marital status and well-being, research provides mixed evidence of variation across negative and positive dimensions. Some studies suggest that the findings for negative well-being—that is, that the formerly and never-married fare worse than the married—extend to positive well-being (e.g., Diener et al., 1999; Soulsby & Bennett, 2015; Waite et al., 2009). Providing an illustration, Soulsby and Bennett (2015) found that the widowed and divorced report not only more depressive symptoms than do the married but also lower life satisfaction, though the association was diminished when social support was controlled. The study also found lower life satisfaction among the never-married and remarried, compared with the continuously married—again, partially explained by their lower support. However, other research reveals some evidence of variation across negative and positive well-being. For example, Marks and Lambert

(1998) found, using panel data from NSFH, that the married tended to have higher well-being—but not on all measures or compared with all groups of the unmarried. For example, widowhood was associated with greater depressive symptoms, but was unrelated to the positive indicators. In contrast, being separated or divorced was not significantly associated with negative well-being but tended to predict lower positive well-being.

Even more compelling evidence of variation in the association between marital status and negative versus positive psychological well-being is found in studies revealing the potential positive outcomes associated with occupying either a formerly or never-married status (e.g., Aldwin, 1994; Baumbusch, 2004; Calhoun et al., 2010; Marks & Lambert, 1998; Tedeschi & Calhoun, 2004; Updegraff & Taylor, 2000). For example, the Marks and Lambert's (1998) study, though reporting that the married fared better on many measures than the unmarried, also found evidence of a benefit to positive well-being among the never-married, net of education, income, and other demographics: They had higher autonomy and personal growth. Similarly, in her in-depth interviews with eight never-married Canadian women between the ages of 65 years and 77 years, Baumbusch (2004,105) found a liberating aspect of remaining single, with participants focusing on their freedom to decide how they spend their time and money—an experience they felt had strengthened their “ability to be alone” and served them well in later life. Personal strengths also can be cultivated through the experience of stressful—even traumatic—life events, like marital loss (e.g., Aldwin, 1994; Calhoun et al., 2010; Tedeschi & Calhoun, 2004; Updegraff & Taylor, 2000). As Calhoun and colleagues (2010) describe, spousal death can lead to posttraumatic growth, characterized by a heightened sense of inner strength and social connectedness, as well as an awareness of new possibilities and an appreciation of life. Though discussed more often in the bereavement literature, the concept also has applicability to other stressful marital transitions, namely, separation and divorce—raising the possibility that the conclusion regarding the higher well-being of the married may not apply across all aspects of well-being.

Taken together, the literature on the association between marital status and positive psychological well-being resonates with a strength and strain perspective on marriage in its highlighting of the potentially negative aspects of marriage and accompanying positives of singlehood. Of particular note, the literature tends to find that the constraints of marriage and potentially beneficial aspects of singlehood or marital loss center on the positive rather than negative dimension of psychological well-being, as results often relate to the personal growth opportunities generated by challenging life circumstances.

Gender Differences in the Marital Status-Psychological Well-being Association

A frequently examined source of difference in the marital status-psychological well-being association is gender, with findings suggesting that the effect may vary across negative and positive dimensions. Some studies examining indicators of negative well-being find greater benefits of marriage—and greater harm from marital loss—for men than women (e.g., Horwitz et al., 1996; Leach et al., 2013; Marks, 1996; Marks & Lambert, 1998). As an illustration, Leach and colleagues (2013), using a longitudinal community survey in Australia, found that marriage predicted lower depression and anxiety, with effects stronger for men than women. The opposite may be true for positive well-being. Providing support for this prediction, Marks and Lambert's (1998) study found that marital loss had an especially strong effect (and a negative one) on women's self-esteem, self-acceptance, and environmental mastery.

Other studies, however, lead to completely different conclusions. Some find no gender differences in the effect of marital status on either negative or positive well-being (e.g., Bierman et al., 2006; Kim & McKenry, 2002; Williams, 2003). Yet another possibility is suggested by research on posttraumatic growth. A meta-analysis of gender difference in posttraumatic growth following various events (e.g., bereavement and cancer) revealed more growth among women than men (Vishnevsky et al., 2010). Suggesting possible explanations, the authors note that women are more likely than men to engage in deliberate rumination and emotion-focused coping, both of which may increase posttraumatic growth (Calhoun et al., 2000; de Ridder, 2000; Tedeschi & Calhoun, 2004; Treynor et al., 2003).

These contradictory findings may be illuminated by a gender-relations perspective on health (Bottorff et al., 2011; Schofield et al., 2000). This perspective emphasizes interactions between and among women and men, as they are shaped by masculinity and femininity and they operate at the individual and institutional levels. Applied to the effects of marriage and marital loss on psychological well-being, the gender-relations perspective draws into focus the different benefits gained and costs incurred by married women and men. As an institution arising within patriarchal societies, marriage has traditionally benefited men more than women, giving rise to a "his" and "hers" marriage (Bernard, 1972). Among the differences is the centrality of emotional support provided by spouses, with husbands more reliant on it than wives. This difference stems from the construction of the institution of marriage itself, as well as gendered norms regarding friendships that promote close emotional ties among women but not men

(Williams, 1985). In short, a gender-relations perspective raises the possibility that the detrimental effects of marital loss and the benefits of marriage may be stronger for men than women—a prediction that finds support in the literature (e.g., Horwitz et al., 1996; Leach et al., 2013). However, these stronger effects for men may only apply to the negative dimension of psychological well-being. For the positive dimension, the gender difference may be reversed. The constraints of marriage may disproportionately affect women, particularly with regard to positive aspects of their well-being and sense of self—thus, leading marital loss and singlehood to produce benefits to women's positive psychological well-being.

Summary

Prior research on the association between marital status and psychological well-being has led to the general conclusion that the married experience higher well-being than do the formerly or never-married. However, this literature's focus more on the negative dimension of well-being raises the question of whether this conclusion extends to the positive one. While some studies suggest it does—others reveal patterns that vary across these dimensions. Prior studies also are unclear on whether these associations differ for women and men—again, with some research finding variation and others not.

To provide clarity on this literature, our study draws on two theoretical perspectives—the strength and strain of marriage and gender relations perspectives. A strength and strain perspective highlights the importance of considering the negative and positive psychological consequences of marriage and marital loss, while a gender-relations perspective suggests the possibility of their variation by gender. We examine the association between marital status and psychological well-being using a nationally representative dataset not often used to explore these associations: Midlife in the United States (MIDUS). We test four hypotheses:

Hypothesis 1: Being remarried or formerly or never-married is associated with worse negative psychological well-being, compared with being continuously married.

Hypothesis 2: Being remarried or formerly or never-married is associated with better positive psychological well-being, compared with being continuously married.

Hypothesis 3: The association between marital status and negative psychological well-being is stronger for men than women.

Hypothesis 4: The association between marital status and positive psychological well-being is stronger for women than men.

Method

Data

We use data from the second wave of MIDUS (2004–2006). Funded by the John D. and Catherine T. MacArthur Foundation and the National Institute on Aging (P01-AG020166 & U19-AG051426), MIDUS was designed to assess the physical and mental health of adults in middle and later life, with a focus on the role of behavioral, psychological, and social factors. The first wave is a representative sample of the non-institutionalized U.S. population aged 25 years to 74 years, chosen via random-digit dialing. Data were collected using a telephone survey and mailed questionnaire. These components generated 70 percent and 87 percent response rates, respectively, yielding an overall response rate of 61 percent ($n = 3,034$). Of these respondents, 65 percent were re-interviewed at the second wave ($n = 2,257$). The average longitudinal follow-up interval was approximately 9 years, and it ranged from 7.8 years to 10.4 years (Ryff, 2014; Ryff et al., 2007).

Our analytic sample ($n = 1,711$) is limited to respondents who participated in the second wave, including the telephone survey and mailed questionnaire, and had valid responses on all dependent and independent variables. An exception involves missing values on household income, the independent variable with the largest percent missing (i.e., 10%). To avoid excluding these observations, we imputed the mean household income, separately by gender and race group (e.g., female and white, and male and non-white). All measures used in analyses were collected at the second wave, with the exception of “prior psychological well-being,” which was measured at the first wave. Respondents excluded from the analytic sample due to missing values had significantly lower levels of education and household income and were less likely to be married.

Summary statistics are presented in Table 1. Current and prior psychological well-being are relatively high—as indicated, for example, by the average of less than one depressive symptom at both time points. Nearly half are continuously married, 20 percent are remarried, 25 percent are formerly married, and 7 percent are never-married. The sample is composed primarily of white respondents (92%), parents (87%), employed persons (62%), and homeowners (85%). The average age is approximately 57 years. Self-rated health averages more than 7 on an 11-point scale, though the count of chronic conditions exceeds 2, on average. Education exceeds 14 years, on average, and household income more than \$33,523. Perceived support is relatively high, as indicated by a mean of nearly 19 on a 25-point scale.

Table 1. Percent or Mean (Standard Deviation) of Study Variables by Gender.

	Total (N = 1,711)	Men (n = 778)	Women (n = 933)	Range	Gender Differences
Current Psychological Well-being					
Depressive Symptoms	.55 (1.69)	.27 (1.19)	.79 (1.98)	0-7	$t(1,709) = -6.32^{***}$
Autonomy	5.34 (1.00)	5.52 (.92)	5.19 (1.03)	1.86-7	$t(1,709) = 6.90^{***}$
Environmental mastery	5.42 (1.06)	5.54 (1.00)	5.32 (1.10)	1.14-7	$t(1,709) = 4.14^{***}$
Personal growth	5.46 (1.01)	5.42 (.99)	5.50 (1.02)	1.57-7	$t(1,709) = -1.72^{\dagger}$
Positive relations with others	5.73 (1.01)	5.61 (1.02)	5.84 (.99)	2-7	$t(1,709) = -4.77^{***}$
Self-acceptance	5.42 (1.19)	5.51 (1.12)	5.35 (1.24)	1-7	$t(1,709) = 2.79^{***}$
Purpose in life	5.46 (1.01)	5.48 (1.01)	5.44 (1.02)	1.43-7	$t(1,709) = 0.79$
Prior Psychological Well-being					
Depressive Symptoms	.68 (1.87)	.45 (1.53)	.88 (2.09)	0-7	$t(1,709) = -4.82^{***}$
Autonomy	5.47 (1.08)	5.59 (1.00)	5.37 (1.14)	1.33-7	$t(1,709) = 4.39^{***}$
Environmental mastery	5.38 (1.15)	5.51 (1.08)	5.27 (1.18)	1-7	$t(1,709) = 4.39^{***}$
Personal Growth	6.00 (1.02)	6.01 (.97)	6.00 (1.06)	1-7	$t(1,709) = 0.33$
Positive relations with others	5.40 (1.35)	5.26 (1.35)	5.51 (1.33)	1.33-7	$t(1,709) = -3.70^{***}$
Self-acceptance	5.55 (1.14)	5.65 (1.08)	5.46 (1.18)	1-7	$t(1,709) = 3.40^{***}$
Purpose in life	5.53 (1.17)	5.57 (1.17)	5.50 (1.18)	1.33-7	$t(1,709) = 1.33$

(continued)

Table 1. (continued)

	Total (N = 1,711)	Men (n = 778)	Women (n = 933)	Range	Gender Differences
Marital Status					
Continuously married (%)	48	55	42	0,1	$\chi^2= 30.66^{***}$
Remarried (%)	20	22	19	0,1	$\chi^2= 2.55$
Formerly married (%)	25	15	33	0,1	$\chi^2= 69.61^{***}$
Never-married (%)	7	8	7	0,1	$\chi^2= 0.59$
Controls					
Age	56.84 (12.52)	57.15 (12.53)	56.58 (12.51)	30-84	$t(1,709)= 0.94$
White (%)	92	93	90	0,1	$\chi^2= 5.90^*$
Parent (%)	87	85	89	0,1	$\chi^2= 8.39^{**}$
Employed (%)	62	66	58	0,1	$\chi^2= 12.65^{***}$
Self-rated health	7.30 (1.62)	7.32 (1.52)	7.29 (1.69)	0-10	$t(1,709)= 0.37$
Chronic conditions	2.54 (2.61)	2.26 (2.47)	2.77 (2.70)	0-30	$t(1,709)= -4.03^{***}$
Education (years)	14.42 (2.85)	14.75 (3.06)	14.15 (2.64)	4-22	$t(1,709)= 4.30^{***}$
Homeowner (%)	85	85	84	0,1	$\chi^2= 0.68$
Household income	10.42 (2.57)	10.71 (2.27)	10.19 (2.78)	0-13.5	$t(1,709)= 4.18^{***}$
Perceived support	18.89 (4.46)	18.19 (4.48)	19.48 (4.37)	0-24	$t(1,709)= -6.03^{***}$

Notes: *** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$, † $p < 0.1$.

Measures

Negative psychological well-being. We use a seven-item scale of symptoms of major depression, drawn from the short form of the Composite International Diagnostic Interview (CIDI-SF; Kessler et al., 1998). The CIDI-SF is designed to assess mental disorders in epidemiological samples based on criteria from the DSM-IV. The initial question was as follows: "During the past 12 months, was there ever a time when you felt sad, blue, or depressed for two weeks or more in a row?" Those answering "yes" were then asked whether they experienced each of seven depressive symptoms during that two-week period (see Appendix). Scores on this additive scale range from 0 to 7, with higher scores indicating greater depressive symptoms.

Positive psychological well-being. We examine six dimensions of positive well-being: autonomy, environmental mastery, personal growth, positive relationship with others, self-acceptance, and purpose in life. Dimensions are measured in MIDUS using shortened versions of scales developed by Ryff and colleagues (Ryff, 1989, 2014; Ryff & Keyes, 1995; Ryff et al., 2003). Of the 20 items originally used to measure each dimension, 3 are included in Wave 1, and 7 in Wave 2 (see Appendix). In developing both sets of shortened scales, Ryff and colleagues (2003) decided to retain the multiple factors underlying each dimension rather than selecting items to maximize reliability. As a result, the alpha coefficients for the Wave 1 scales, which included substantially fewer items than the Wave 2 scales, are low, ranging from .36 to .59 in our sample. Although the Wave 1 scales are not ideal, we include them as controls for selection effects that could lead more psychologically healthy individuals into marriage and the less healthy out of it. The decision to use the scales was motivated by the observation that they do correlate highly with the parent scales (Ryff & Keyes, 1995). Further, we argue that the use of scales tapping specific dimensions, rather than a single scale providing a summary measure, is more in line with our research question, centering on potential variation across dimensions of well-being.

Marital status. Measures are created using responses to two items asked at Wave 2: "Are you currently married, separated, divorced, widowed, or never married?" and "How many times have you been married altogether?" We created four dichotomous variables capturing marital status at Wave 2: continuously married (reference group), remarried, formerly married, and never-married.

Control variables. Models control for other factors shaping psychological well-being. Gender is coded 1 for women and 0 for men. Age, as well as

education, is measured in years. Race is measured using a dichotomous variable coded 1 for whites and 0 for non-whites. Parent is a dichotomous variable coded 1 if the respondent reported at least one biological or adopted child. Employed is coded 1 if the respondent reported being employed full- or part-time. Total household income was the combined income in the past 12 months from the following sources: personal income, spouse's income, other household members' income, and Social Security. Income is measured in dollars and is logged to reduce skewness. Homeowner is a dichotomous variable coded 1 if the respondent owns a house or is paying a mortgage and 0 otherwise. Health is measured using two indicators: an item tapping self-rated physical health (ranging from worst = 0 to best = 10) and a count of up to 30 chronic health conditions experienced in the past year. Perceived support is mean scale ($\alpha = .84$) created using eight items asking respondents to assess how well-supported they felt (with each item asked separately for family and friends): (a) "family members or friends care about you"; (b) "family members or friends understand you"; (c) "you rely on family members or friends for help"; and (d) "you open up to family members or friends." Response categories for each ranged from not at all (coded 0) to a lot (coded 6). Higher scores indicate greater perceived support. All but one of the control variables (i.e., prior psychological well-being) are measured at Wave 2. Prior psychological well-being is measured using the mean scales tapping negative and positive well-being at Wave 1.

Analytic Strategy

We use Ordinary Least Squares (OLS) regression to examine the effect of marital status on psychological well-being. For each of the seven well-being measures, a model is run that includes the following predictors: marital status, gender, age, age-squared, race, parent, employed, physical health, SES, perceived support, and prior psychological well-being. These analyses test hypotheses 1 and 2, focusing on possible variation in the association between marital status and negative versus positive psychological well-being. To test hypotheses 3 and 4 regarding gender differences in marital status' association with negative and positive well-being, we run models including marital status by gender interaction terms.

Results

Table 1 notes significant gender differences. For five of the seven well-being measures collected at Wave 2, gender differences are found—with most indicating lower well-being among women. Women report more depressive

symptoms and lower autonomy, environmental mastery, and self-acceptance than men do, but also more positive relations with others. The same gender differences are found for prior psychological well-being measures. Gender differences in marital status reveal that men are more likely than women to be continuously married, while women are more likely than men to be formerly married. Other gender differences reported in Table 1 include women's lower likelihood of being white and employed, higher likelihood of being a parent, greater number of chronic conditions, fewer years of education, lower household income, and greater perceived support.

Table 2 reports the results of regression analyses predicting psychological well-being as a function of marital status and the control variables, including prior psychological well-being. The results reveal different associations of marital status with the negative compared with the positive dimension of psychological well-being. The results for depressive symptoms reveal that higher levels of symptoms are reported by the formerly married, compared with the continuously married. Depressive symptoms do not differ between continuously married and either the remarried or never-married respondents. Consistent with these results, the findings for one measure of positive psychological well-being—positive relations with others—reveal a disadvantage among the formerly married compared with the continuously married. However, on another positive well-being measure—autonomy—the formerly married fare better than the continuously married. Similarly, inconsistent patterns are found across the positive well-being measures for another marital status group, the never-married. Like the formerly married, they report worse positive relations with others, but higher autonomy, than the continuously married do. However, the never-married also report lower purpose in life, compared with the continuously married. More consistent patterns across the positive measures are found for the remarried—a group that appears particularly advantaged relative to other groups, as indicated by their higher environmental mastery, positive relations with others, personal growth, and autonomy.

Table 2 also reports associations between other factors and psychological well-being—with some findings revealing differences between negative and positive dimensions and others revealing similarities. Across both the negative and positive dimensions, better health—measured as self-rated physical health, chronic conditions, and prior psychological well-being—was associated with better psychological well-being. Similarly, across negative and positive dimensions, higher perceived support predicted better psychological well-being. Across both dimensions of well-being, gender also is significant, with women tending to report lower psychological well-being. However, the associations with two of the six positive indicators do not reach significance—and the association is in the opposite direction for another of these

Table 2. OLS Regression of Psychological Well-being on Marital Status.

	Depressive Symptoms	Self- Accept.	Purpose in Life	Env. Mastery	Positive Relation	Personal Growth	Autonomy
Remarried ^a	.11 (.10)	.10 [†] (.06)	.09 [†] (.05)	.13** (.05)	.13*** (.05)	.13** (.05)	.17*** (.05)
Formerly married ^a	.21** (.10)	-.03 (.06)	-.09 (.05)	-.02 (.05)	-.18*** (.05)	.07 (.05)	.17*** (.06)
Never-married ^a	.07 (.19)	-.17 (.11)	-.23** (.10)	-.01 (.10)	-.21** (.09)	.02 (.10)	.40*** (.10)
Prior well-being	.15*** (.02)	.41*** (.02)	.26*** (.02)	.27*** (.02)	.27*** (.01)	.37*** (.02)	.38*** (.02)
Gender	.33*** (.08)	-.13*** (.05)	-.05 (.04)	-.18*** (.04)	.10*** (.04)	.06 (.04)	-.29*** (.04)
Age	.01 (.03)	.04** (.02)	.05*** (.01)	.04*** (.01)	.03** (.01)	.05*** (.01)	.04*** (.01)
Age ²	-.00 (.00)	-.00 (.00)	-.00*** (.00)	-.00** (.00)	-.00 [†] (.00)	-.00*** (.00)	-.00** (.00)
White	.16 (.14)	-.17** (.08)	-.10 (.07)	-.03 (.07)	-.01 (.07)	.00 (.07)	-.20*** (.08)
Parent	.02 (.14)	-.01 (.08)	-.08 (.07)	-.03 (.07)	-.11 (.07)	-.03 (.07)	.10 (.07)
Employed	-.47*** (.10)	.07 (.06)	.09 [†] (.05)	.00 (.05)	-.01 (.05)	.09 [†] (.05)	-.01 (.05)
Self-rated health	-.05** (.03)	.13*** (.02)	.11*** (.01)	.13*** (.01)	.08*** (.01)	.09*** (.01)	.04** (.01)
Chronic conditions	.11*** (.02)	-.02** (.01)	-.03*** (.01)	-.03*** (.01)	-.01 (.01)	-.03*** (.01)	-.02** (.01)
Education	.00 (.01)	.01 (.01)	.00 (.01)	.02*** (.01)	.00 (.01)	.03*** (.01)	.01 [†] (.01)
Homeowner	-.04 (.11)	.16** (.06)	.16*** (.06)	.11 [†] (.06)	-.02 (.05)	-.01 (.06)	.06 (.06)
Household income	-.00 (.02)	.02 [†] (.01)	.02** (.01)	.02** (.01)	.01 (.01)	.01 (.01)	.02** (.01)
Perceived support	-.03*** (.01)	.07*** (.01)	.06*** (.00)	.07*** (.00)	.09*** (.00)	.05*** (.00)	.04*** (.00)
Constant	1.56 [†] (.81)	-.70 (.47)	.44 (.44)	-.23 (.44)	1.08*** (.39)	-.30 (.43)	.68 (.45)
Adjusted R ²	.15	.43	.33	.38	.46	.36	.28

Notes: Unstandardized coefficient (Standard error):

^aContinuously Married = reference; ***p<0.001, **p<0.01, *p<0.05, †p<0.1; N=1,711.

indicators, revealing that women have more positive relations with others than do men. Comparisons across the well-being measures also reveal inconsistent patterns for other predictors. For example, being employed was

associated with fewer depressive symptoms but unrelated with any positive well-being measures. In contrast, older ages were associated with better positive well-being but unrelated to negative well-being. Inconsistent findings also were found for SES measures. Higher SES, including higher education and income and homeownership, is associated with better positive well-being (for some but not all measures) but was unrelated with negative well-being.

Table 3 reports the results of models testing for gender differences in the association between marital status and psychological well-being. The results reveal significance gender differences in the association between marital status and indicators of positive, but not negative, psychological well-being, though the results are not consistent across all the measures. Remarried women report higher levels of personal growth than their male counterparts do. Similarly, never-married women report higher levels of positive relations with others than never-married men do.

Conclusion

While much of the extensive literature on marital status and psychological well-being points to advantages of the continuously married, compared with all other marital status groups, this conclusion rests more on studies of negative than positive dimensions of well-being (e.g., Kim & McKenry, 2002; LaPierre, 2009; Williams, 2003). Fewer studies have examined the positive dimension, and their findings are mixed (e.g., Marks & Lambert, 1998; Waite et al., 2009). Drawing on a strength and strain perspective on marriage, we argue that the association between marital status and psychological well-being is more complex than general conclusions about marriage's health-enhancing effects would suggest. In short, the complexities are illuminated by considering both the positive and negative sides of marriage and marital loss—and their potentially different effects on positive and negative psychological well-being.

Some of our findings are consistent with prior studies' conclusion regarding the psychological benefits accruing to individuals who marry, and remain so. Consistent with our predictions, more support is found for the negative than positive dimension of well-being. Supporting Hypothesis 1, we find that the formerly married have more depressive symptoms than the continuously married, pointing to the harmful effects of stressful life events. However, we did find, contrary to our prediction in Hypothesis 2, that some groups of the unmarried fare worse on positive psychological well-being than the continuously married. In particular, the formerly and never-married have worse positive relations with others, while the never-married also have lower sense of purpose in life. In short, our findings suggest that the benefits of remaining

Table 3. OLS Regression of Psychological Well-being on Marital Status and Gender*Marital Status.

	Depressive Symptoms	Self-Accept.	Purpose in Life	Env. Mastery	Positive Relation	Personal Growth	Autonomy
Remarried ^a	.20 (.14)	.03 (.08)	.05 (.08)	.13 [†] (.08)	.08 (.07)	-.03 (.07)	.27*** (.08)
Formerly married ^a	.10 (.16)	-.14 (.09)	-.20** (.09)	-.07 (.09)	-.22*** (.08)	-.01 (.09)	.14 (.09)
Never-married ^a	-.12 (.25)	-.29** (.14)	-.32** (.13)	-.18 (.13)	-.36*** (.12)	-.09 (.13)	.39*** (.13)
Gender*Remarried	-.17 (.20)	.16 (.12)	.09 (.11)	.00 (.11)	.11 (.10)	.33*** (.10)	-.19 [†] (.11)
Gender*Formerly married	.17 (.20)	.19 [†] (.12)	.18 [†] (.11)	.08 (.11)	.07 (.10)	.15 (.10)	.03 (.11)
Gender*Never-married	.35 (.30)	.23 (.18)	.16 (.16)	.31 [†] (.16)	.29** (.15)	.23 (.16)	.01 (.17)
Prior well-being	.15*** (.02)	.41*** (.02)	.26*** (.02)	0.27*** (.02)	.27*** (.01)	.37*** (.02)	0.38*** (.02)
Gender	.31*** (.11)	-.22*** (.06)	-.12** (.06)	-.22*** (.06)	.04 (.05)	-.06 (.06)	-.26*** (.06)
Age	.01 (.03)	.04** (.02)	.05*** (.01)	.04*** (.01)	.03** (.01)	.05*** (.01)	.04*** (.01)
Age ²	-.00 (.00)	-.00 (.00)	-.00*** (.00)	-.00** (.00)	-.00 [†] (.00)	-.00*** (.00)	-.00** (.00)
White	.18 (.14)	-.17** (.08)	-.10 (.07)	-.02 (.07)	.00 (.07)	.00 (.07)	-.20*** (.08)
Parent	-.01 (.14)	-.02 (.08)	-.08 (.07)	-.04 (.07)	-.12 [†] (.07)	-.03 (.07)	.09 (.08)
Employed	-.47*** (.10)	.07 (.06)	.09 [†] (.05)	-.00 (.05)	-.01 (.05)	.08 (.05)	-.01 (.05)
Self-rated health	-.05** (.03)	.13*** (.02)	.11*** (.01)	.13*** (.01)	.08*** (.01)	.09*** (.01)	.04** (.01)
Chronic conditions	.11*** (.02)	-.02** (.01)	-.03*** (.01)	-.03*** (.01)	-.01 (.01)	-.03*** (.01)	-.02** (.01)
Education	.00 (.01)	.01 (.01)	.00 (.01)	.02** (.01)	-.00 (.01)	.03*** (.01)	.01 [†] (.01)
Homeowner	-.03 (.11)	.16** (.06)	.16*** (.06)	.11 [†] (.06)	-.01 (.05)	-.00 (.06)	.06 (.06)
Household income	-.00 (.02)	.02 [†] (.01)	.02** (.01)	.02** (.01)	.01 (.01)	.01 (.01)	.02** (.01)
Perceived support	-.03*** (.01)	.07*** (.01)	.06*** (.00)	.07*** (.00)	.09*** (.00)	.05*** (.00)	.04*** (.00)
Constant	1.62** (.81)	-.64 (.47)	.48 (.44)	-.19 (.45)	1.10*** (.39)	-.26 (.43)	.69 (.45)
Adjusted R ²	.15	.43	.33	.38	.46	.36	.29

Notes: Unstandardized coefficient (Standard error); ^aContinuously Married = reference; ***p<0.001, **p<0.01, *p<0.05, [†]p<0.1; N=1,711.

married may apply more to the negative than positive dimension of well-being—and may center more on the harmful effects of marital loss than the protection against negative well-being provided by continuous marriage.

Consistent with Hypothesis 2, results for some of the positive indicators reveal no advantage for the continuously married—instead, they point to disadvantages. Of particular note, individuals in all other marital statuses report greater autonomy than the continuously married do. Especially striking are the results for the remarried—a group reporting better well-being across most of the positive measures examined. In addition to having higher autonomy, the remarried report higher environmental mastery, positive relations with others, and personal growth. In short, these findings reveal costs sometimes incurred by the continuously married—which are masked in studies examining only the negative dimension of psychological well-being. While marriage may protect against negative well-being, it simultaneously may constrain some aspects of positive well-being. Unpacking explanations for these findings require analyses that focus on the context of current and prior marital statuses and transitions (e.g., the extent to which they were desired or initiated) that may enhance some aspects of well-being while limiting others. They also require examination of dynamics evolving within married couples over their years together that may shape dimensions of individual well-being. Such examinations may reveal an alternative explanation not only for continuously married individuals' lower autonomy, compared with all other marital status groups, but also for their lower positive well-being, observed across several dimensions of it, compared with the remarried. Such an explanation would center less on the constraints of marriage or the lingering negative effects of marital loss than on the shared understandings and communal goals that may emerge within marriages over time.

Our study also reveals that the sometimes-countervailing effects of marital status on positive versus negative well-being vary for women and men. Our results for negative well-being indicated no gender difference, contrary to Hypothesis 3, predicting a stronger association among men. However, we do find support for Hypothesis 4, predicting a stronger relationship between marital status and positive psychological well-being among women than men, suggesting that some of the benefits accruing to the remarried and never-married are greater for women. We find that remarried women report higher levels of personal growth than do remarried men, while never-married women report higher levels of positive relations with others than never-married men do. Drawing on a strength and strain of marriage perspective, as well as the gendered relations perspective, we argue that these findings are likely to reflect not only some of the benefits of these marital statuses for women but also the costs of other statuses. As examples, the higher personal

growth of remarried women may derive from their greater psychological growth following traumatic events (Vishnevsky et al., 2010), while never-married women’s more positive relations with others may partly reflect marriage’s constraints on women’s time and personal investments (Parker & Wang, 2013).

This study was framed around the social causation hypothesis—that is, focusing on the potential effect of marital status on psychological well-being. However, other explanations are possible for the observed associations and their variation by gender. They may reflect social selection—a possibility reduced, though not eliminated, by our inclusion of controls for prior well-being. In particular, our findings may reflect, to some degree, the fact that individuals varying in psychological health face different likelihoods of some marital statuses and transitions, with lower well-being increasing the odds of separation or divorce and decreasing those of (re)marriage. Assessing the extent to which our observations reflect selection versus causation processes will require further analyses using data surveying individuals at more frequent intervals than in MIDUS and including measures designed to capture detailed marital histories. Such data would also address another limitation of our study—sample attrition between the two MIDUS waves, which yields a less representative sample and leaves unresolved the question of whether the results generalize to individuals with lower SES and worse health.

Our study points to research directions that would add nuance to our understanding of the association between marital status and psychological well-being. In particular, it underscores the importance of considering the negative and positive sides of not only psychological well-being but also marriage and marital loss. Achieving optimal psychological functioning for individuals of all marital statuses will require further clarification of marriage’s protective qualities and its constraining ones—as well as marital loss’ stresses and opportunities for growth.

Appendix

Measures of Psychological Well-being (Wave 1 & Wave 2).

Negative Psychological Well-being

Depressive Symptoms (Wave 1, $\alpha = .95$; Wave 2, $\alpha = .99$)

During two weeks in past 12 months, when you felt sad, blue, or depressed, did you. . .

“Lose interest in most things?”

(continued)

Appendix (continued)

"Feel more tired out or low on energy than is usual for you?"

"Lose your appetite?"

"Have more trouble falling asleep than usual?"

"Have a lot more trouble concentrating than usual?"

"Feel down on yourself, no good, or worthless?"

"Think a lot about death?"

Positive Psychological Well-being

Autonomy (Wave 1, $\alpha = .48$)

"I tend to be influenced by people with strong opinions." *

"I have confidence in my own opinions, even if they are different from the way most other people think."

"I judge myself by what I think is important, not by the values of what others think is important."

Wave 2 added the following four items ($\alpha = .71$):

"I am not afraid to voice my opinions, even when they are in opposition to the opinions of most people."

"My decisions are not usually influenced by what everyone else is doing."

"It's difficult for me to voice my own opinions on controversial matters." *

"I tend to worry about what other people think of me." *

Environmental Mastery (Wave 1, $\alpha = .52$)

"In general, I feel I am in charge of the situation in which I live."

"The demands of everyday life often get me down." *

"I am quite good at managing the many responsibilities of my daily life."

Wave 2 added the following four items ($\alpha = .78$):

"I do not fit very well with the people and the community around me." *

"I often feel overwhelmed by my responsibilities." *

"I have difficulty arranging my life in a way that is satisfying to me." *

"I have been able to build a living environment and a lifestyle for myself that is much to my liking."

Personal Growth (Wave 1, $\alpha = .57$)

"I think it is important to have new experiences that challenge how you think about yourself and the world."

"For me, life has been a continuous process of learning, changing, and growth."

"I gave up trying to make big improvements or changes in my life a long time ago." *

Wave 2 added the following four items ($\alpha = .75$):

"I am not interested in activities that will expand my horizons." *

"When I think about it, I haven't really improved much as a person over the years." *

"I have the sense that I have developed a lot as a person over time."

(continued)

Appendix (continued)

“I do not enjoy being in new situations that require me to change my old familiar ways of doing things.” *

Positive Relations with Others (Wave 1, $\alpha = .58$)

“Maintaining close relationships has been difficult and frustrating for me.” *

“People would describe me as a giving person, willing to share my time with others.”

“I have not experienced many warm and trusting relationships with others.” *

Wave 2 added the following four items ($\alpha = .77$):

“Most people see me as loving and affectionate.”

“I know that I can trust my friends, and they know they can trust me.”

“I enjoy personal and mutual conversations with family members and friends.”

“I often feel lonely because I have few close friends with whom to share my concerns.” *

Purpose in Life (Wave 1, $\alpha = .36$)

“I live life one day at a time and don’t really think about the future.” *

“Some people wander aimlessly through life, but I am not one of them.”

“I sometimes feel as if I’ve done all there is to do in life.” *

Wave 2 added the following four items ($\alpha = .71$):

“I have a sense of direction and purpose in life.”

“I don’t have a good sense of what it is I’m trying to accomplish in life.”

“My daily activities often seem trivial and unimportant to me.”

“I enjoy making plans for the future and working to make them a reality.”

Self-acceptance (Wave 1, $\alpha = .59$)

“I am pleased with my life.”

“I like most parts of my personality.”

“I am disappointed about my achievements in life.” *

Wave 2 added the following four items ($\alpha = .84$):

“My attitude about myself is probably not as positive as most people feel about themselves.”

“In general, I feel confident and positive about myself.”

“I feel like many of the people I know have gotten more out of life than I have.”

“When I compare myself to friends and acquaintances, it makes me feel good about who I am.”

Notes: For all items, response categories ranged from disagree strongly (coded 1) to agree strongly (coded 7); *reverse-coded prior to scale construction.

Declaration of Conflicting Interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

The author(s) received no financial support for the research, authorship, and/or publication of this article.

ORCID iD

Tze-Li Hsu  <https://orcid.org/0000-0002-4371-9678>

References

- Aldwin, C. M. (1994). *Stress, coping, and development*. Guilford Press.
- Amato, P. R. (2010). Research on divorce: Continuing trends and new developments. *Journal of Marriage and Family, 72*(3), 650–666.
- Baker, L. A., Cesa, I. L., Gatz, M., & Mellins, C. (1992). Genetic and environmental influences on positive and negative affect: Support for a two-factor theory. *Psychology and Aging, 7*(1), 158–163.
- Barrett, A. E. (2000). Marital trajectories and mental health. *Journal of Health and Social Behavior, 41*(4), 451–464.
- Bernard, J. (1972). *The future of marriage*. Yale University Press.
- Bierman, A., Fazio, E. M., & Milkie, M. A. (2006). A multifaceted approach to the mental health advantage of the married: Assessing how explanations vary by outcome measure and unmarried group. *Journal of Family Issues, 27*(4), 554–582.
- Bottomoff, J. L., Oliffe, J. L., Robinson, C. A., & Carey, J. (2011). Gender relations and health research: a review of current practices. *International Journal for Equity in Health, 10*(1), 60–68.
- Bradburn, N. M. (1969). *The structure of psychological well-being*. Aldine.
- Calhoun, L. G., Cann, A., Tedeschi, R. G., & McMillan, J. (2000). A correlational test of the relationship between posttraumatic growth, religion, and cognitive processing. *Journal of Traumatic Stress, 13*(3), 521–527.
- Calhoun, L. G., Tedeschi, R. G., Cann, A., & Hanks, E. A. (2010). Positive outcomes following bereavement: Paths to posttraumatic growth. *Psychologica Belgica, 50*(1–2), 125–143.
- Carstensen, L. L., Pasupathi, M., Mayr, U., & Nesselroade, J. R. (2000). Emotional experience in everyday life across the adult life span. *Journal of Personality and Social Psychology, 79*(4), 644–655.
- Charles, S. T., Reynolds, C. A., & Gatz, M. (2001). Age-related differences and change in positive and negative affect over 23 years. *Journal of Personality and Social Psychology, 80*(1), 136–151.
- Cohen, S., & Wills, T. A. (1985). Stress, social support, and the buffering hypothesis. *Psychological Bulletin, 98*(2), 310–357.
- de Ridder, D. (2000). Gender, stress and coping: Do women handle stressful situation differently from men? In L. Sherr & J. St. Lawrence (Eds.) *Women, health and the mind* (pp. 115–135). Wiley.
- Diener, E., Suh, E. M., Lucas, R. E., & Smith, H. L. (1999). Subjective well-being: Three decades of progress. *Psychological Bulletin, 125*(2), 276–302.

- Frech, A., & Williams, K. (2007). Depression and the psychological benefits of entering marriage. *Journal of Health and Social Behavior, 48*(2), 149–163.
- Gove, W. R., Style, C. B., & Hughes, M. (1990). The effect of marriage on the well-being of adults: A theoretical analysis. *Journal of Family Issues, 11*(1), 4–35.
- Horwitz, A. V., White, H. R., & Howell-White, S. (1996). Becoming married and mental health: A longitudinal study of a cohort of young adults. *Journal of Marriage and the Family, 58*(4), 895–907.
- House, J. S., Landis, K. R., & Umberson, D. (1988). Social relationships and health. *Science, 241*(4865), 540–545.
- Jahoda, M. (1958). *Current concepts of positive mental health*. Basic Books.
- Karney, B. R., & Bradbury, T. N. (1995). The longitudinal course of marital quality and stability: A review of theory, method, and research. *Psychological Bulletin, 118*(1), 3–34.
- Kessler, R. C., Andrews, G., Mroczek, D., Ustun, B., & Wittchen, H.-U. (1998). The World Health Organization Composite International Diagnostic Interview Short Form (CIDI-SF). *International Journal of Methods in Psychiatric Research, 7*(4), 171–185.
- Keys, C. L. M. (1998). Social well-being. *Social Psychology Quarterly, 61*(2), 121–140.
- Kim, H. K., & McKenry, P. C. (2002). The relationship between marriage and psychological wellbeing: A longitudinal analysis. *Journal of Family Issues, 23*(8), 885–911.
- LaPierre, T. A. (2009). Marital status and depressive symptoms over time: Age and gender variation. *Family Relations, 58*(4), 404–416.
- Leach, L.S., Butterworth, P., Olesen, S.C., & Mackinnon, A. (2013). Relationship quality and levels of depression and anxiety in a large population-based survey. *Social Psychiatry and Psychiatric Epidemiology, 48*(3), 417–425.
- Marks, N. F. (1996). Flying solo at midlife: Gender, marital status, and psychological well-being. *Journal of Marriage and the Family, 58*(4), 917–932.
- Marks, N. F., & Lambert, J. D. (1998). Marital status continuity and change among young and midlife adults. *Journal of Family Issues, 19*(6), 652–686.
- Maslow, A. H. (1968). *Toward a psychology of being* (2nd ed.). Van Nostrand.
- Mastekaasa, A. (1995). Marital dissolution and subjective distress: Panel evidence. *European Sociological Review, 11*(2), 173–185.
- Parker, K., & Wang, W. (2013). Chapter 5: Americans' time at paid work, housework, childcare, 1965 to 2011. Pew Research Center. <http://www.pewsocialtrends.org/2013/03/14/chapter-5-americans-time-at-paid-work-housework-child-care-1965-to-2011/>
- Ryff, C. D. (1989). Happiness is everything, or is it? Explorations on the meaning of psychological well-being. *Journal of Personality and Social Psychology, 57*(6), 1069–1081.
- Ryff, C. D. (2014). Psychological well-being revisited: Advances in the science and practice of eudaimonia. *Psychotherapy and Psychosomatics, 83*(1), 10–28.

- Ryff, C. D., Almeida, D. M., Ayanian, J., Carr, D. S., Cleary, P. D., Coe, C., Davidson, R., Krueger, R. F., Lachman, M. E., Marks, N. F., Mroczek, D. K., Seeman, T., Seltzer, M. M., Singer, B. H., Sloan, R. P., Tun, P. A., Weinstein, M., & Williams, D. (2007). Midlife in the United States (MIDUS 2), 2004–2006. Inter-university Consortium for Political and Social Research [distributor], 2017-11-20. <https://doi.org/10.3886/ICPSR04652.v7>
- Ryff, C. D., & Keyes, C. L. M. (1995). The structure of psychological well-being revisited. *Journal of Personality and Social Psychology*, 69(4), 719–727.
- Ryff, C. D., Keyes, C. L. M., & Hughes, D. L. (2003). Status inequalities, perceived discrimination, and eudaimonic well-being: Do the challenges of minority life hone purpose and growth? *Journal of Health and Social Behavior*, 44(3), 275–291.
- Schofield, T., Connell, R. W., Walker, L., Wood, J. F., & Butland, D. L. (2000). Understanding men's health and illness: A gender-relations approach to policy, research, and practice. *Journal of American College Health*, 48(6), 247–256.
- Slatcher, R. B., & Selcuk, E. (2017). A social psychological perspective on the links between close relationships and health. *Current Directions in Psychological Sciences*, 26(1), 16–21.
- Soulsby, L. K., & Bennett, K. M. (2015). Marriage and psychological wellbeing: The role of social support. *Psychology*, 6(11), 1349–1359.
- Tedeschi, R. G., & Calhoun, L. G. (2004). Posttraumatic growth: Conceptual foundations and empirical evidence. *Psychological Inquiry*, 15(1), 1–18.
- Treynor, W., Gonzalez, R., & Nolen-Hoeksema, S. (2003). Rumination reconsidered: A psychometric analysis. *Cognitive Therapy and Research*, 27(3), 247–259.
- Updegraff, J. A., & Taylor, S. E. (2000). From vulnerability to growth: Positive and negative effects of stressful life events. In H. Harvey & E. D. Miller (Eds.) *Loss and trauma: General and close relationship perspectives* (pp. 3–28). Brunner-Routledge.
- Vishnevsky, T., Cann, A., Calhoun, L. G., Tedeschi, R. G., & Demakis, G. J. (2010). Gender differences in self-reported posttraumatic growth: A meta-analysis. *Psychology of Women Quarterly*, 34(1), 110–120.
- Waite, L. J., & Gallagher, M. (2000). *The case for marriage: Why married people are happier, healthier, and better off financially*. Doubleday.
- Waite, L. J., Luo, Y., & Lewin, A. C. (2009). Marital happiness and marital stability: Consequences for psychological well-being. *Social Science Research*, 38(1), 201–212.
- Watson, D. (1988). Intraindividual and interindividual analyses of positive and negative affect: Their relation to health complaints, perceived stress, and daily activities. *Journal of Personality and Social Psychology*, 54(6), 1020–1030.
- Williams, D. (1985). Gender, masculinity-femininity, and emotional intimacy in same-sex friendship. *Sex Roles*, 12(5–6), 587–600.
- 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(4), 470–487.