

A Multifaceted Approach to the Mental Health Advantage of the Married

Assessing How Explanations Vary by Outcome Measure and Unmarried Group

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This study takes a multifaceted approach to examining reasons for the well-noted mental health advantage of the married. The authors examine whether socioeconomic resources and psychosocial resources explain this advantage for three aspects of mental health by comparing the consistently married to different types of unmarried individuals, as well as the remarried. The authors find that even though the consistently married generally fare better than all the other groups, the reasons for this advantage not only varied by category of marital status but also, for any specific group, these reasons are sometimes varied depending on the aspect of mental health being examined. This study demonstrates that not only is it advisable for researchers to use a variety of outcome measures to understand the mental health advantage of the married, they should also consider how different resources may explain this advantage, depending on the outcomes and groups being examined.

Keywords: *marital status; depression; alcohol abuse; well-being; mental health*

During the past several years, a voluminous literature has documented that the married tend to fare better than the unmarried on a number of different mental health outcomes (Gove, Style, & Hughes, 1990; Ross, Mirowsky, & Goldsteen, 1990). Research has also suggested that differences

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between the married and unmarried, including social, psychological, and financial resources, may all help to explain the mental health advantage of the married (Umberson & Williams, 1999).

In this article, our intention is to offer a more intricate and multifaceted view of the explanation for the mental health advantage of the married. Our argument is based on two central points. The first is that an understanding of this mental health advantage must include an appreciation for a variety of aspects of mental health. Frequently, research uses only one measure, such as depression, or examines only one category of symptoms of mental dysfunction, usually measures of internalizing symptoms (e.g., Aseltine & Kessler, 1993; Booth & Amato, 1991; Thoits, 1987). Although research has broadened to include measures of externalizing disorders, such as alcohol abuse (e.g., Mudar, Kearns, & Leonard, 2002; Prescott & Kendler, 2001; Temple et al., 1991), we argue that a full appreciation for the contours of the mental health advantage of the married should include several different types of measures. These include internalizing and externalizing symptoms as well as subjective aspects of well-being, such as an individual's sense of purpose in life. Each of these dimensions taps a different way in which people relate to others or view themselves, and together they describe a wider state of an individual's psychological well-being.

Our second point in this article, which extends from the first, is that an understanding of the mental health advantage of married people must also acknowledge the intricacies of the married advantage. Are the married indeed better off than all unmarried groups? Are they better off being consistently married compared with being remarried? Is the advantage robust across different measures of mental health? Does it extend to men and women? Recent research has begun to explore these questions, examining whether the mental health advantage of the married varies depending on which unmarried group they are compared with, such as the widowed or never married, and whether and how marriage may confer advantages differently for men and women (Simon, 2002; Stack & Eshleman, 1998). Our intention is to add to this movement by suggesting that an understanding of these differences must include a multifaceted approach. Specifically, we suggest that the existence of and explanation for the mental health advantage of the married may not only differ depending on the outcome being examined but also on the type of unmarried group under scrutiny. Furthermore, because, as we argue below, individuals within the same unmarried group often vary in resources depending on gender, reasons for differences between the married and unmarried in mental health may not only vary by outcome and unmarried group but also by gender.

Certainly, previous research has assessed many of the explanations and outcomes we examine in this article, but our study combines these aspects of

mental health and variety of explanations into an overall analysis. It is this attempt to more completely describe the way in which the explanations for the mental health advantage of the married may differ across marital group, outcome, and gender that is our contribution.

Three Outcomes by Which to Assess Mental Health

Mental dysfunction is generally split into two broad categories: internalizing symptoms, which include aspects of psychological and emotional upset, such as depression and anxiety; and externalizing symptoms, such as alcohol and substance abuse. These outcomes are important to consider because women have a tendency toward internalizing symptoms of distress, whereas men have a greater tendency towards externalizing symptoms (Cleary, 1987; Hankin, 1990). Consequently, although differences in internalizing symptoms between the divorced and the married have been found, women tend to exhibit these differences more strongly than men (Aseltine & Kessler, 1993; Horwitz, White, & Howell-White, 1996; Simon, 2002). Conversely, evidence has been found that a variety of types of unmarried men tend to fare worse than unmarried women do when compared to the married on externalizing symptoms of distress, such as alcohol abuse (e.g., Simon, 2002). In this study, then, we examine both internalizing and externalizing aspects of mental dysfunction and address differences by gender between married and unmarried groups for each outcome.

Less often examined is a third aspect of mental health. This is generally thought of as well-being and is characterized in a variety of different ways, including "subjective well-being" (Keyes, 1998), "psychological well-being" (Ryff, 1989; Ryff & Keyes, 1995), and overall "life satisfaction" (Keyes & Magyar-Moe, 2003).¹ All of these approaches are similar, though, in that they examine an individual's subjective evaluation of the quality of his or her life and relationships. A variety of aspects of well-being have been shown to be related to marital status, including satisfaction with life (Diener, Gohm, Suh, & Oishi, 2000; Gove, Hughes, & Style, 1983), judgments of meaninglessness in life (Gove & Shin, 1989), and personal happiness (Lee, Seccombe, & Shehan, 1991; Waite, 2000), as well as several of Ryff's scales of psychological well-being (Marks & Lambert, 1998). In this research, we examine purpose in life, which measures the degree to which people feel that their past and present hold a great deal of meaning and have "goals in life and a sense of directedness" (Ryff & Keyes, 1995, p. 727). This measure, therefore, provides an indication of an individual's belief that his or her life has substance and merit, and we examine it because it is a holistic counterpoint to

the more specific measures of internalizing and externalizing symptoms we also explore.

Even though Umberson and Williams (1999) identify meaning as a key factor that may differentiate the married from different types of unmarried individuals, there have been fewer studies of marital and gender differences regarding this aspect of mental health. Research examining this outcome, though, has found that the married tend to have a stronger sense of purpose in life than the unmarried do (Marks, 1996; Marks & Lambert, 1998; Ryff, 1989). Marks (1996) found that this was consistent for men and women, with the exception of a marginally significant difference for the widowed, in which married women tended to have a stronger advantage than married men over their widowed counterparts.

Explanations for the Mental Health Advantage of the Married

Socioeconomic Factors

One major explanation for the mental health advantage of the married focuses on advantages that the married may have in socioeconomic resources, such as education, income, and work status. Each of these has been shown to have critical effects on mental health (Dooley, Prause, & Ham-Rowbottom, 2000; Kessler & Zhao, 1999; Linn, Sandifer, & Stein, 1985). However, the advantage of the married is not uniform across resources or across groups. An examination of these differences is therefore necessary because it may reveal how and why socioeconomic resources may relate to the mental health advantage of the married over some groups but not others.

Education. Evidence shows that the better educated are more likely to both enter into and maintain a marriage (Goldstein & Kenney, 2001; Houseknecht & Spanier, 1980; Orbuch, Veroff, Hassan, & Horrocks, 2002; Tzeng & Mare, 1995). Given that those with high education levels tend to fare better in mental health (e.g., Franks, Gold, & Fiscella, 2003), the higher education levels of the married may be part of the reason they enjoy better mental health compared with the divorced or widowed.

Income and financial strain. Income differences have been shown to be the result of marital union and dissolution, although this effect tends to differ by gender. Research has shown that women tend to be more strongly affected economically by divorce than men (Holden & Smock, 1991), possibly because,

in the case of divorce, women more often retain custody of children, and children generally limit a mother's ability to cultivate resources (Duncan & Hoffman, 1985). Furthermore, for widows, a group older and more traditional than the divorced, women may be less likely to become employed following the death of a spouse because of a lack of work experience and preparation to enter the labor force (Morgan, 1989).

In addition to objective measures of financial status, research has also shown that perceptions of whether one's income is sufficient for needs and wants, such as measures of financial strain and financial satisfaction, also have a significant effect on mental health (Aneshensel, Rutter, & Lachenbruch, 1991; Peirce, Frone, Russell, & Cooper, 1994; Mills, Grasmick, Morgan, & Wenk, 1992; Pearlin, Menaghan, Lieberman, & Mullan, 1981; Ross, 1995; Simon, 1998). Apart from income, this is also an important socioeconomic factor because the needs and wants of individuals often differ depending on marital status and do not necessarily mirror objective aspects of finances. Although studies have shown that the divorced have greater financial strain than the married do, the never married actually tend to be more satisfied with their finances than the married (Gorman, 2000; Shapiro, 1996), possibly because the never married have fewer financial responsibilities. Moreover, although research has looked less specifically at widows, some research suggests that financial strain may actually decrease with age (Mirowsky & Ross, 1999), possibly because of governmental assistance programs or because, even if they do not fare better in objective indicators of socioeconomic status, the aged do not necessarily compare themselves to those to whom they suffer financially in comparison (see Goetting, Martin, & Poon, 1996; Schieman, Van Gundy, & Taylor, 2001). Given the strong correlation between older age and likelihood of becoming widowed, this leads to the suggestion that the widowed may not feel financial strain compared to the married. Therefore, in examining socioeconomic explanations for the mental health advantage of married people, it is important to consider both objective and subjective aspects of socioeconomic status.

Employment. A variety of studies have shown that unemployment can lead to decreases in mental health (e.g., Dooley et al., 2000; Kessler, Turner, & House, 1989). Differences between the married and unmarried in terms of employment tend to vary, though, across genders and types of unmarried groups.

Research has shown that employment can play a causative role in marital dissolution, but with contrary effects for men and women, as it has been shown that a husband's lack of full-time paid work contributes to a risk of divorce, whereas a woman's full-time employment increases risk of divorce

(Schoen, Astone, Rothert, Standish, & Kim, 2002; South, 2001), especially if wives work more in comparison to their husbands (Tzeng & Mare, 1995). Although there are several theories for why this occurs (see South, 2001, for a review), a predominant theory is that marriage operates on a specialization and trading model, in which each spouse specializes in a different area of marriage and exchanges the products of their labors. Immersion into the world of employment by the wife therefore disrupts this specialization, destabilizing the marriage and leading to a higher risk of divorce (Oppenheimer, 1997). Arguably, this may also explain why husbands' lack of employment, or employment that is proportionally less than that of their wives, also results in a destabilization of marriage. Regardless of the veracity of this theory, the empirical findings suggest that although being employed may relate to women's likelihood of being divorced, being unemployed relates to divorce for men. Because employment is linked to better mental health, this suggests that employment status will be related to the mental health advantage of married men compared to divorced men, but not for married women compared to divorced women because married women work fewer hours than divorced women do.

For the never married, though, some research suggests that getting married may relate to a decrease in employment for women (Drobnic, Blossfeld, & Rohwer, 1999; Roos, 1983). Possibly, this is due to an increase in family responsibilities (especially children) that follow marriage along with conformity to gender role expectations in marriage that the specialization and trading model suggests (Oppenheimer, 1997; South, 2001). It is possible, then, that the reduction in full-time work for women that may follow marriage may lead to an increase in their distress, although there is little evidence to suggest that work status may explain the mental health advantage of the married over that of never-married men.

There is even less research on differences in employment between the married and widowed, so we have little empirical evidence on which to base our expectations. This dearth of research, however, may be due in part to the fact that becoming a widow or widower usually occurs later in life, after retirement. Given this fact, we also do not expect work status to have a role in explaining the mental health difference between the married and the widowed.

Psychosocial Resources

A large body of research suggests that socioeconomic status alone cannot explain the mental health advantage of the married. Social resources play a key role in affecting mental health, both in terms of actual social connections

and an individual's perception of the adequacy of these social connections in providing social support (Pearlin & Johnson, 1977; Ross, 1995; Williams, Ware, & Donald, 1981). Additionally, psychological resources, such as the self-concept, also have a significant impact on mental health (e.g., Pearlin et al., 1981). We discuss these important factors in relation to the advantage of the married versus other groups below.

Social support. The literature differentiates between objective aspects of social support—social integration—and the subjective aspects of social support, the perception of availability and quality of social support (House, Umberson, & Landis, 1988). Marriage itself can be a significant source of social support in terms of providing another with whom one can have an intimate relationship (Kessler & Essex, 1982), but research also shows that the married tend to be more socially integrated and have more positive perceptions of social support than the unmarried, although this advantage tends to vary between marital group and the type of social support being considered. For instance, it has been demonstrated that the divorced tend to have smaller and less dense social networks (Gerstel, Kohler, & Rosenfield, 1985), but the divorced have also been shown to have a higher degree of informal social integration (Umberson, Chen, House, Hopkins, & Slaten, 1996), possibly because a lack of partner means that the divorced have more time to devote to contacts with friends and relatives. The never married have also been shown to have a lower degree of social integration and are less likely to have a confidante than the married, but the widowed report having more social integration than the married and are more likely to have a confidante (Umberson et al., 1996). Conversely, for perceived social support, some evidence indicates that only the widowed perceive less social support than the married do (Umberson et al., 1996), whereas other evidence indicates that the married tend to have better perceived social support than different types of unmarried individuals (Turner & Marino, 1994). Despite these inconsistencies, it is clear that both objective and subjective aspects of social support may help explain differences in mental health between the married and unmarried.

Perceived control. Another psychological explanation for the mental health advantage of the married involves differences in the level of perceived control between the married and unmarried. Control is an important resource to consider because a wide number of studies have found that lack of perceived control is negatively associated with mental health (Ross & Sastry, 1999). Although several studies have found differences between the married and unmarried in sense of control (e.g., Thoits, 1987; Turner, Lloyd, & Roszell, 1999), Marks and Lambert (1998) have offered a more complex

analysis of this relationship by separately examining respondents whose marital status changed and remained the same through the 5 years of a longitudinal study. The researchers found that the stably divorced were significantly lower in sense of personal control when compared to the married, although the stably widowed and stably never married were not. Furthermore, Marks and Lambert also found evidence that selection was not completely responsible for these differences, as they showed that when compared to the stably married, those who became divorced or widowed experienced a drop in sense of personal control, whereas women (but not men) who became married for the first time experienced an increase in sense of personal control. Men (but not women) who married for the first time and divorced during the 5 years of the study experienced a significant decrease in sense of control when compared to the stably married. Therefore, personal control may explain part of the mental health advantage of the married, especially when the married are compared with the divorced and widowed.

In sum, although there have been suggestions about how psychological and social resources explain mental health differences between the married and unmarried, the intricacies of how well these mechanisms explain differences between the married and different types of unmarries for each gender and for different outcomes remains unclear. Here, through a series of regression models, we examine how these resources may differ in their accounting for the mental health advantage of the married over different groups, for different outcomes, and for men and women separately.

Data and Measures

Data

To explore these questions, we analyzed data from the National Survey of Midlife Development in the United States (MIDUS; Brim et al., 1996). The MIDUS, conducted in 1995, was based on a large ($N = 3,032$) representative sample of noninstitutionalized, English-speaking adults aged 25 to 74 living in the coterminous United States. The MIDUS was intended to produce a wide-ranging portrait of adults at midlife and therefore contained several items and scales that were appropriate to assess how and why mental health varies by marital status.

Data for the MIDUS were gathered at two separate times. Participants were initially contacted by telephone through random-digit dialing and were asked a short series of questions in an interview that lasted an average of 30 minutes. Within a week of the telephone stage of the survey, participants were subsequently mailed a longer and more detailed questionnaire that took an average

of 2 hours to complete. All respondents were given \$20 with the mailed questionnaire as well as a boxed pen. Furthermore, one fourth of households were randomly designated during the telephone stage of sampling for an additional financial incentive (\$100) if they refused the telephone or mail survey. It is estimated that the response rate for the MIDUS was 70% for the telephone interview, 86.8% for the completion of the main questionnaire among the telephone respondents, and 60.8% for the overall response rate.

Measures

Dependent Variables

Distress. The MIDUS included a six-item scale that was used to measure negative affect, a general measure of emotional upset. Respondents indicated on a scale of 1 (*all the time*) to 5 (*none of the time*) how often in the past 30 days they had experienced each of the following: “so sad nothing could cheer you up,” “nervous,” “restless or fidgety,” “hopeless,” “that everything was an effort,” and “worthless.” More information about the construction of this scale is described in Mroczek and Kolarz (1998). All responses were reverse coded so that higher values indicated greater negative affect. Responses were summed to form a scale of negative affect, with nonrespondents to any of the items dropped before the responses were combined. The scale had an alpha coefficient of .87.

Alcohol abuse. Alcohol abuse was measured using a count of five symptoms of alcohol abuse. Respondents were asked, “During the past 12 months, did you have any of the following problems while drinking or because of drinking alcohol?” These symptoms included “under the effects of alcohol or feeling its after-effects in a situation that increased your chances of getting hurt—such as when driving a car or boat, or using knives or guns or machinery,” “have such a strong desire or urge to use alcohol that you could not resist it or could not think of anything else,” “find that you had to use more alcohol than usual to get the same effect or that the same amount had less effect on you than before,” “have a period of a month or more during the past 12 months when you spent a great deal of time using alcohol or getting over its effects,” and “have any emotional or psychological problems from using alcohol—such as feeling depressed, being suspicious of people, or having strange ideas.” The alpha coefficient for this scale was .68. Because this count was highly skewed, this variable was transformed by taking the natural log of the number of symptoms plus 1.

Purpose in life. Purpose in life was measured with 3 Likert-type items: “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,” and “I sometimes feel as if I’ve done all there is to do in life.” Each item was rated from a 1 to 7 scale, with *strongly agree* and *strongly disagree* as endpoints and a midpoint of *don’t know*. Responses were coded so that higher numbers indicated a higher sense of purpose in life. The alpha coefficient for this scale was .37. Although this alpha coefficient is low, this is due to the fact that this 3-item scale is actually a shortened version of a 20-item scale; this scale was shortened to accommodate time and cost restrictions of the MIDUS (Ryff & Keyes, 1995). Items for the 3-item scale were chosen to reflect the multifactorial structure of the original 20-item scale, and the shortened version of the psychological well-being scales have been shown to have a high degree of correlation with the full scales (between .70 and .89; Ryff & Keyes, 1995). The strong correlation between the 3-item and the 20-item parent scale suggests that the low alpha coefficient is mainly an artifact of the few number of items on the scale, and the shortened scales have been successfully used as dependent measures in prior research (e.g., Marks & Lambert, 1998).

Independent Variables

Marital status. Because the data being used were cross-sectional in nature, we could not examine changes in marital status with time. We could, however, separately examine those who were consistently married to their first partner versus those who had been remarried. Marital status was therefore measured as a nominal variable with the categories: consistently married, remarried, divorced or separated, widowed, and never married.² A series of dummy variables were used in regression models, with consistently married as the reference group. Of the respondents in the sample, 1,570 were consistently married, 494 were remarried, 477 were separated or divorced, 140 were widowed, and 349 were never married.³

Gender. Gender was coded as 1 = male, 0 = female.

Education. Education was measured on a scale of 1 (*no school or some grade school [1 to 6]*) to 12 (*Ph.D., Ed.D, MD, DDS, LLB, LLD, JD, or other professional degree*).

Income. Respondents were asked to indicate their income using a scale of 39 categories of income, from less than \$0 (loss) to \$1,000,000 or more. Respondents were asked about six different types of income: personal earn-

ings, spouse's or partner's personal earnings, other family members' earnings, social security retirement benefits, government assistance, and other family income. Responses for each question were assigned the midpoint for the income category, and the responses for the six items were summed. Several people did not respond to one or more of the six income questions, though, and for these cases, we imputed income by using the mean income for their level of education on five of the six questions. The only exception to this was for the item on social security income, for which mean income for age rather than level of education was used. Furthermore, to avoid outliers unduly influencing data analyses, all respondents whose combined income was above the 95th percentile (above \$185,000) were reclassified to have \$185,000 in income. For all analyses, this variable is in units of tens of thousands.

Financial strain. Financial strain was measured by three items. One item asked, "Using a scale from 0 to 10, where 0 means *the worst possible financial situation* and 10 means *the best possible financial situation*, how would you rate your financial situation these days?" Responses were reverse coded so that higher values indicated greater financial strain. A second measure asked, "How difficult is it for you (and your family) to pay your monthly bills?" with possible responses ranging from 1 (*very difficult*) to 4 (*not at all difficult*). Responses to this item were also reverse coded so that higher values indicated greater financial strain. A third item asked, "In general, would you say you (and your family living with you) have more money than you need, just enough for your needs, or not enough to meet your needs?" This item was coded from 1 to 3, with higher values indicating more financial strain. Because these items used different response scales, they could not be summed to create a simple summative scale. Instead, a financial strain index was created using principal components analysis. When the items were analyzed with a principal components analysis, only one factor with an eigenvalue above 1 emerged, and this factor accounted for more than two thirds of the variance in the items. Individuals' scores on this factor were used as the financial strain index.

Employment status. Employment status was measured with three categories by combining the number of hours the respondent worked during an average week at all jobs in which he or she was employed. Respondents who worked 35 or more hours were classified as working full-time, and respondents who were employed but worked less than 35 hours were classified as part-time, whereas respondents who worked no hours were classified as not

employed. For regression models, a series of dummy variables were used to indicate work status, with full-time employment as the reference category.

Social integration. Three measures of social integration were used. Frequency of contact with friends was measured with one item that asked, "How often are you in contact with any of your friends—including visits, phone calls, letters, or electronic mail messages?" Frequency of contact with family was measured with one item which asked, "How often are you in contact with any members of your family—that is, any of your brothers, sisters, parents, or children who do not live with you—including visits, phone calls, letters, or electronic mail messages?" Responses to both items ranged from 1 (*several times a day*) to 8 (*never or hardly ever*), and all responses were reverse coded so that higher values indicated more contact. A third set of items measured formal integration by asking how often the respondent attended several different types of meetings: religious services, meetings of religious groups, meetings of unions or other professional groups, meetings of sports or social groups, and meetings of any other groups (not including any required by a job). Respondents indicated the number of times they attended each type of meeting in a typical month. Responses were summed to form a scale of formal integration, with nonrespondents to any of the items dropped before the responses were combined. The alpha coefficient for the scale of formal integration was .92.

Perceived social support. Perceived social support was measured using two indices. The first measured perceived social support from family and consisted of four items: "Not including your spouse or partner, how much do members of your family really care about you?" "How much do they understand the way you feel about things?" "How much can you rely on them for help if you have a serious problem?" and "How much can you open up to them if you need to talk about your worries?" A second set of items measured perceived social support from friends by asking the same set of questions, this time referring to friends. Responses on both indices ranged from 1 (*a lot*) to 4 (*not at all*); all responses were reverse coded so that higher values indicated greater perceived support. The alpha coefficients for the two scales were .96 for the Family Support scale and .97 for the Friend Support scale.

Perceived control. Perceived control was measured using Pearlin and Schooler's (1978) mastery scale. This scale included seven items: "There is little I can do to change the important things in my life," "I often feel helpless in dealing with the problems of life," "I have little control over the things that happen to me," "There is really no way I can solve the problems I have," "I

sometimes feel I am being pushed around in my life,” “I can do just about anything I really set my mind to,” and “What happens to me in the future mostly depends on me.” Responses ranged from 1 (*strongly agree*) to 7 (*strongly disagree*). Responses on the last two items were reverse coded so that higher values indicated a greater sense of mastery. The alpha coefficient for the scale was .79.

Additionally, three demographic variables were included in all analyses as controls: age, race, and presence of children under age 18 in the household. This is because differences between the married and different unmarried groups in age, race, and the presence of children might contribute to variation in mental health between the married and unmarried (Kessler & Zhao, 1999; Marks, 1996). It was also possible that time in a given status might vary widely between individuals. For this reason, we also included a fourth control variable indicating the number of years the respondent had spent in his or her current marital status. Age was measured in years. Race was measured by one item which asked, “What race do you consider yourself to be?” with possible responses of *White, Black and/or African American, Native American or Aleutian Islander or Eskimo, Asian or Pacific Islander, Other (please specify), or Multiracial (please specify)*. This variable was recoded into a dichotomous variable in which 1 indicated *White* and 0 indicated *Other*. For presence of children in the household, a dichotomous variable was used, for which a value of 1 indicated that children lived in the respondent’s home. Time in status was measured in years; for the never married, this was calculated as number of years since age 18. Means and standard deviations by marital status of all variables used in the analysis are included in the appendix.

Plan of Analysis

Weights included in the MIDUS corrected for biases in the sample in age, race, marital status, and gender (Keyes, Shmotkin, & Ryff, 2002). Because several of these variables are critical to our analysis, all analyses are weighted. First, we examined interactions between gender and marital status (while controlling for age, race, and the presence of children) to assess whether the advantage of the consistently married tends to be stronger for women in terms of psychological distress and greater for men in terms of alcohol abuse (results not shown). The advantage of the consistently married did not differ for men versus women on those outcomes nor in terms of purpose in life.⁴ Because the mental health advantage of marriage did not differ

significantly for men versus women, we present results for the entire sample, with gender as an independent variable.

In the analyses presented below, we separately examine each outcome measure in a series of steps. In the first step, we examine the differences between the consistently married and each of the other groups while including controls for background demographics. In the second step, we examine whether socioeconomic factors contribute to explain these differences. In the third step, we include psychosocial resources alone, without socioeconomic factors in the model. Finally, both socioeconomic and psychosocial factors are included in Model 4 for each analysis. This allows us to explore the extent to which socioeconomic and psychosocial resources explain the mental health of the married both independently and in combination. At the same time, however, the reader is cautioned against interpreting each socioeconomic or psychosocial variable independently of the others in its group. It is quite possible that the effects of a specific resource may be mediated through another resource. This analysis is still useful, however, in identifying which types of resources make the predominant contribution to the mental health advantage of the married; it remains for future researchers to more fully explore whether these effects occur in part because of causal relationships between these and/or other resources.

Results

Distress

Table 1 shows distress regressed on marital status and controls, socioeconomic factors alone, psychosocial factors alone, and finally, both resources together. As can be seen in Model 1, all but the never married initially exhibit greater signs of distress than the consistently married once controls are included. As suggested above, the ability of the two types of resources to explain these differences varies widely, depending on the comparison being examined. Models 2 and 3 show that psychosocial and socioeconomic resources each reduces the coefficient for widowed to nonsignificance; that is, the advantage of the consistently married is in part because of their superior socioeconomic characteristics and partly because of their better psychosocial resources. Conversely, for the remarried, neither socioeconomic resources nor psychosocial resources independently explains the advantage of the consistently married in terms of distress; furthermore, when the two resources are combined in Model 4, the difference between the consistently married and remarried remains substantial ($p < .01$). The significance of the coefficient for

Table 1
Ordinary Least Squares Regression of Distress on
Marital Status, Socioeconomic, and Psychosocial Resources

	Model 1	Model 2	Model 3	Model 4
Remarried ^a	1.334***	1.034***	0.795***	0.733**
Divorced or separated ^a	1.452***	0.979***	0.759**	0.649**
Widowed ^a	1.461**	0.886	0.483	0.393
Never married ^a	0.532	0.197	0.173	0.056
Gender (1 = male)	-0.632***	-0.442**	-0.336*	-0.262
Age	-0.067***	-0.057***	-0.064***	-0.061***
Race (1 = White)	0.143	0.453*	0.071	0.210
Kids in household (1 = yes)	-0.005	-0.416*	-0.334*	-0.489**
Years in status	0.036**	0.031**	0.012	0.014
Education		-0.073*		-0.018
Income		0.030		0.023
Financial strain		1.217***		0.592***
Not employed ^b		0.447*		0.288
Part-time ^b		0.197		0.129
Frequency of family contact			0.042	0.034
Frequency of friend contact			-0.120**	-0.123**
Frequency of attending meetings			0.003	0.004
Perceived support from family			-0.235***	-0.219***
Perceived support from friends			0.047	0.060*
Mastery			-0.218***	-0.194***
Constant	11.382	11.190	23.546	21.963
Adjusted R^2	.038	.132	.283	.300

Note: Weighted $N = 2,487$.

a. Consistently married is the omitted category.

b. Full-time is the omitted category.

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

the divorced is reduced somewhat on the inclusion of psychosocial resources, but this too remains significant at the $p < .01$ level.

Alcohol Abuse

The results for alcohol abuse are shown in Table 2. As shown in Model 1, it is only the remarried who do not initially report significantly more symptoms of alcohol abuse once we control for age, race, the presence of children, and time in status. Furthermore, the ability of the two types of resources to explain these differences again varies widely. For the divorced, neither type of resource appears to independently explain the advantage of the consis-

Table 2
Ordinary Least Squares Regression of Alcohol Abuse (Logged) on
Marital Status, Socioeconomic, and Psychosocial Resources

	Model 1	Model 2	Model 3	Model 4
Remarried ^a	0.040	0.040	0.031	0.034
Divorced or separated ^a	0.115***	0.119***	0.103***	0.111***
Widowed ^a	0.104*	0.117*	0.087	0.105*
Never married ^a	0.090***	0.090***	0.080**	0.082**
Gender (1 = male)	0.106***	0.106***	0.104***	0.103***
Age	-0.007***	-0.007***	-0.007***	-0.007***
Race (1 = White)	0.036	0.037*	0.031	0.030
Kids in household (1 = yes)	-0.061***	-0.065***	-0.065***	-0.066***
Years in status	0.001	0.001	0.000	0.001
Education		0.003		0.003
Income		0.003*		0.003
Financial strain		0.020**		0.013
Not employed ^b		0.015		0.011
Part-time ^b		-0.015		-0.017
Frequency of family contact			-0.011*	-0.011*
Frequency of friend contact			0.008	0.008
Frequency of attending meetings			0.000	-0.001
Perceived support from family			-0.001	0.000
Perceived support from friends			-0.001	-0.001
Mastery			-0.003**	-0.003**
Constant	0.346	0.300	0.514	0.455
Adjusted R^2	.088	.091	.093	.095

Note: Weighted $N = 2,481$.

a. Consistently married is the omitted category.

b. Full-time is the omitted category.

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

tently married and, even when then these resources are combined in Model 4, there is no change in the significance of the divorced or separated coefficient. The story is more complex for the widowed. Although there is no apparent effect of introducing socioeconomic resources in Model 2, with the addition of psychosocial resources in Model 3, the coefficient is no longer statistically significant. However, as can be seen in Model 4, when these two types of resources are combined in one model, the coefficient for the widowed is statistically significant at $p < .05$. This indicates a small suppression effect because of socioeconomic resources, supporting the idea that because the aged tend not to perceive more financial strain than other groups do, differences in this factor may actually suppress differences in some aspects of mental health

between the consistently married and the widowed. For the never married, psychosocial resources appear to explain a small part of their disadvantage, but this coefficient remains significant at $p < .01$, and the combination of the two types of resources in Model 4 does little more to explain the disadvantage of the never married in terms of alcohol abuse.

Purpose in Life

Results for the purpose in life measure are shown in Table 3. For this outcome, the consistently married fare significantly better than all other groups once age, race, the presence of children, and the time in status are controlled. Despite this seeming uniformity, the efficacy of the two types of resources to explain this advantage varies between groups. As can be seen in Models 2 and 3, for the remarried, this advantage is reduced to nonsignificance by controlling for either socioeconomic or psychosocial resources. Conversely, the significance of the divorced or separated coefficient remains largely unchanged with the independent additions of each type of resource and, although reduced in Model 4, remains substantial at $p < .01$. For the never married, a slightly different result is found; although each type of resource reduces the size of the coefficient and statistical significance somewhat ($p < .01$), the combination of the two does little to further explain the advantage of the consistently married. For the widowed, the comparison with the consistently married is reduced to nonsignificance in Model 2 but is reduced to a lesser degree in Model 3. Therefore, although both types of resources help to explain the consistently married's higher sense of purpose in life when compared to the widowed, socioeconomic resources have a considerably greater power in explaining this difference. This is intriguing to note in the context of the suppression effect of socioeconomic resources for alcohol abuse and will be addressed further below.

Discussion

This article demonstrates the importance of considering multiple explanations for the mental health advantage of the married along with multiple indicators of mental health. Our results indicate the complexity of the answer to the question "How is it that the married are better off in terms of mental health?" First, they are not uniformly better off than each of the three unmarried groups and the remarried. When controlling for background characteristics, the divorced and the widowed were the only groups that showed worse mental health across all measures when compared to the consistently married. The advantage of the married differed depending on what outcome was

Table 3
Ordinary Least Squares Regression of Purpose on Marital Status,
Socioeconomic, and Psychosocial Resources

	Model 1	Model 2	Model 3	Model 4
Remarried ^a	-0.799**	-0.291	-0.410	-0.085
Divorced or separated ^a	-1.510***	-0.949***	-0.992***	-0.735**
Widowed ^a	-2.039***	-0.878	-1.243**	-0.505
Never married ^a	-0.947***	-0.816**	-0.690**	-0.723**
Gender (1 = male)	0.134	-0.024	-0.047	-0.092
Age	-0.017	-0.027*	-0.017	-0.021
Race (1 = White)	0.220	-0.079	0.295	0.128
Children in household (1 = yes)	-0.444*	-0.110	-0.156	-0.023
Years in status	-0.038**	-0.019	-0.019	-0.005
Education		0.309***		0.264***
Income		0.023		0.025
Financial strain		-0.598***		-0.050
Not employed ^b		-0.283		-0.121
Part-time ^b		-0.145		-0.052
Frequency of family contact			0.004	0.045
Frequency of friend contact			0.039	0.028
Frequency of attending meetings			0.005	-0.005
Perceived support from family			0.114***	0.114***
Perceived support from friends			0.039	0.033
Mastery			0.188***	0.172***
Constant	18.314	16.341	8.011	6.691
Adjusted R^2	.038	.119	.223	.255

Note: Weighted $N = 2,469$.

a. Consistently married is the omitted category.

b. Full-time is the omitted category.

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

assessed, suggesting that research that focuses only on depression or internalizing symptoms is incomplete. Second, the causes for the marital advantage differed, depending on the outcome and comparison group being examined. Because these results present a somewhat dense array of outcomes and explanations, Table 4 summarizes these results by comparison group and outcome.

The Consistently Married Versus the Remarried

Although we use cross-sectional data and could not specifically examine life course transitions in and out of marital statuses, we acknowledge the different trajectories that individuals in the same marital status may experience

Table 4
Summary of Results

Comparison	Measure of Mental Health		
	Distress	Alcohol Abuse	Purpose in Life
Consistently married versus remarried	Socioeconomic and psychosocial resources combine to make a small contribution to the advantage of the consistently married, but differences largely remain.	No significant differences.	Both socioeconomic and psychosocial factors contribute to the advantage of the consistently married.
Consistently married versus divorced	Psychosocial resources make a small contribution to the advantage of the consistently married, but differences largely remain.	Neither set of resources contributes to the advantage of the consistently married.	Socioeconomic and psychosocial resources combine to make a small contribution to the advantage of the consistently married, but differences largely remain.
Consistently married versus widowed	Both socioeconomic and psychosocial factors contribute to the advantage of the consistently married.	Psychosocial resources contribute to the advantage of the consistently married; evidence of a suppression effect from socioeconomic resources.	Both socioeconomic and psychosocial factors contribute to the advantage of the consistently married, but socioeconomic resources make a stronger contribution.
Consistently married versus never married	No significant differences.	Psychosocial resources make a small contribution to the advantage of the consistently married, but differences largely remain.	Socioeconomic and psychosocial resources each make a small contribution to the advantage of the consistently married, but differences largely remain.

leading up to that status. For this reason, we compared those who were in their first marriage, a group we call “the consistently married,” to those who were remarried. We found that the remarried suffered from both greater distress and less of a sense of purpose in life, but not greater symptoms of alco-

hol abuse. Furthermore, although the two types of resources did little to explain these advantages in terms of psychological distress, each was able to explain the advantage of the consistently married in terms of the sense of purpose in life.

Why both types of resources explained the sense of purpose advantage but not distress is unclear. This may be evidence of the complex relationship between marital status transitions and mental health. Although individuals with greater psychological distress may be more likely to form unstable marital unions, the loss of socioeconomic and psychosocial resources that follow divorce may negatively affect one's sense of purpose in life, and the effects of remarriage perhaps do little to remedy the negative effects. That the remarried did not differ from the consistently married in terms of alcohol abuse may indicate a selection effect, as those who do not have substance abuse problems are more attractive to potential mates and more likely to remarry. This also may indicate an effect of remarriage, though, as the social control function of marriage noted by some (e.g., Umberson, 1987) inhibits behavioral activities that result in self-harm. Although such questions should be studied in future research using longitudinal data, these results are nevertheless important in that they illustrate the value of using a multifaceted approach to the study of the mental health advantage of the married. This is because they demonstrate that the advantage of staying married to one's first spouse, and the explanations for the advantage, may vary across a range of outcomes. This is true even when comparing two currently married groups.

The Consistently Married Versus the Divorced or Separated

The divorced suffered in comparison to the consistently married for all three outcomes examined here, and the differences largely proved to be intractable to explanation by either socioeconomic or psychosocial resources, or a combination of the two. Neither set of resources helped to explain the advantage of the consistently married over the divorced for alcohol abuse. When both sets of resources were combined into one model, the advantage of the consistently married in purpose in life was reduced only marginally, and a similar result was found for distress, but here, only psychosocial resources contributed to a marginal reduction in the strength of the comparison between the consistently married and divorced or separated.

Again, this may be evidence of a selection effect, as individuals with worse mental health are more likely to experience marital dissolution. The trauma of divorce itself as a causal factor should also be considered, though, especially because, as Umberson and Williams (1999) point out, central to marriage is

the creation of a shared culture and value system. The loss of this shared culture, along with the loss of a central role in one's life, may be devastating and have diffuse effects across a range of outcomes. One may not only experience an increase in distress from this loss but also less of a sense of purpose and meaning. Clearly, though, these results illustrate the need to consider explanations for the mental health advantage of the married separately for different types of groups, because the causes of this advantage may vary widely depending on the group being examined.

The Consistently Married Versus the Widowed

The widowed fared worse than the married on all three outcomes once background characteristics were controlled but, in each case, at least one of the two types of resources examined here was able to explain these differences. For psychological distress, socioeconomic and psychosocial resources each explained the advantage of the consistently married. For purpose in life, differences were explained by socioeconomic resources, and psychosocial resources explained only a marginal amount of the advantage of the consistently married. For alcohol abuse, these results were somewhat more complex, as psychosocial resources explained these differences, but a small suppression effect was found from socioeconomic resources.

Why socioeconomic resources help to explain differences for distress and purpose in life, but increased the strength of differences for alcohol abuse, is not clear. Work by Goetting and colleagues (1996) suggests that the aged may not perceive their finances as less sufficient than younger groups do. This may indicate that these perceptions help to protect the aged from increased externalization of distress. However, the deficits in the socioeconomic resources of the aged clearly continue to harm them in terms of both psychological distress and especially purpose in life. For purpose in life, this may be in part because of the opportunities that socioeconomic resources provide. People who have more socioeconomic resources may have more opportunities for leisure or learning activities and therefore more sense of purpose in life. In addition, the widowed may also lose important social connections with the loss of a spouse, both of which lead to increases in psychological distress and a loss of a sense of purpose in life.

The Consistently Married Versus the Never Married

For the never married, the importance of considering a variety of mental health outcomes was again strongly demonstrated. Although there were no

significant differences in distress between the consistently married and the never married when background characteristics were controlled, differences for alcohol abuse and purpose in life remained strong even after controlling for the two types of resources. However, psychosocial resources appeared to contribute a marginal amount to the advantage of the married for alcohol abuse, and both types of resources independently contributed a marginal amount to the advantage of the married for purpose in life.

Overall, this may indicate a selection effect of marriage, as those with better mental health are more attractive to potential marital partners, but it may also indicate the power of marriage to affect mental health.⁵ The latter possibility may especially be true given the pattern of outcomes in which significant differences were found: It is fairly difficult to explain why psychological distress would *not* serve as a selection factor for marriage, whereas both alcohol abuse and purpose in life *would* do so. Conversely, alcohol abuse may be affected by the social control function of marriage noted above, and marriage may also have a strong effect on the sense of meaning in life. Establishment of a marital union may provide a tangible sense of accomplishment and progress through the life course—one that helps individuals to feel as if their life has more of a sense of purpose and meaning. Therefore, although the cross-sectional nature of our data does not allow us to make any firm inferences, it seems more likely that the life course and social control functions associated with marriage explain the advantage of the consistently married in mental health over that of the never married. Again, then, although there is a mental health advantage to being married, these results demonstrate that how and why this occurs may differ across outcomes.

What About Gender?

Previous research has shown that the mental health advantage of the married tends to be gendered, with women more likely to show an advantage when internalizing symptoms are considered and men more likely to show benefits when externalizing symptoms are considered (Simon, 2002).⁶ However, as discussed above, our analyses showed only a small number of marginally significant differences between men and women in the mental health advantage of the married. A reanalysis combining the consistently married and remarried into a single married group also showed no significant interactions at the $p < .05$ level. It is possible that the relatively smaller sample size of about 2,400 in multivariate analyses made detecting gender interactions less likely than in a larger sample, such as that used by Simon (2002).

Despite this lack of gender differences, it is still important to note that the way the consistently married tend to fare better than others may still differ

between men and women. In subsequent interaction analyses not shown here, the effect of education, frequency of contact with friends, perceived support from family, and mastery on psychological distress were significantly different between men and women, as were the effects of education and mastery on purpose in life. Therefore, regardless of whether marital status differences in mental health vary between men and women, future research using longitudinal data should more closely examine whether the changes in socioeconomic or psychosocial resources that accompany marital transitions have different effects for men and women on the mental health advantage of the married.

Conclusion

This article adds to research on marital status and mental health by indicating that studies which use just one outcome or do not consider how processes may vary for different unmarried groups may distort the reasons for differences in mental health between the married and unmarried. This is because socioeconomic and psychosocial resources often differed in their ability to explain mental health differences, depending on the mental health outcome and group being examined. Therefore, a full understanding of differences in mental health by marital status must acknowledge that resources may act in different ways, depending on whether one examines internalizing symptoms of mental health, externalizing symptoms of mental health, or more global perceptions of one's life and worth. Similarly, researchers should continue the movement to compare the married to different types of unmarried groups rather than a combined unmarried group, because the nature of the mental health advantage of the married and the resources associated with this advantage often vary, depending on the type of unmarried group being considered. Furthermore, the results showed that those married to their first spouse are often better off than those married to a second (or higher order) spouse. This suggests that the remarried should be considered as a separate group from the consistently married in future research; it is yet another indication that the complexities of research on marital status and mental health should be acknowledged, and where possible, explored.

Appendix Weighted Means (and SDs) or Percentages for Variables Used in Analyses

Continuous Variables	Consistently Married (N = 1,570)		Remarried (N = 494)		Divorced or Separated (N = 477)		Widowed (N = 140)		Never Married (N = 349)		All Groups (N = 3,030)	
	M	SD	M	SD	M	SD	M	SD	M	SD	M	SD
Outcome measures												
Distress (6 to 30)	9.114	3.622	9.725 ^a	3.999	10.231 ^a	4.350	9.031	3.691	10.156 ^a	4.112	9.503**	3.893
Alcohol abuse (0 to 5)	0.160	0.541	0.192	0.622	0.326 ^a	0.883	0.086	0.482	0.468 ^a	0.926	0.224**	0.678
Purpose in life (3 to 21)	16.638	3.552	16.326	3.629	15.508 ^a	3.841	15.152 ^a	4.038	16.164	3.459	16.285**	3.652
Socioeconomic resources												
Education (1 to 12)	6.363	2.389	5.742 ^a	2.344	6.018	2.361	5.071 ^a	2.008	6.830 ^a	2.514	6.201**	2.407
Income (0 to 19.35)	7.119	4.706	7.516	5.137	4.400 ^a	4.114	2.966 ^a	2.439	4.389 ^a	3.927	6.250**	4.750
Financial strain (-2.00 to 2.264)	-0.139	0.954	-0.048	0.993	0.333 ^a	0.987	0.016	1.031	0.243 ^a	1.070	0.000**	1.000
Psychosocial resources												
Frequency of family contact (1 to 8)	5.937	1.469	5.793	1.648	5.896	1.638	6.132	1.685	5.711	1.756	5.890*	1.573
Frequency of friend contact (1 to 8)	5.476	1.713	5.531	1.776	5.689	1.791	5.981 ^a	1.755	5.962 ^a	1.707	5.597**	1.745
Frequency of attending meetings (0 to 91)	6.123	7.191	4.860 ^a	6.139	4.231 ^a	6.147	5.941	7.486	5.647	8.598	5.555***	7.105
Perceived support from family (4 to 16)	13.882	2.303	13.298 ^a	2.703	13.277 ^a	2.638	14.022	2.722	13.326 ^a	2.743	13.634**	2.514
Perceived support from friends (4 to 16)	12.794	2.695	12.745	2.863	12.810	2.732	13.384	2.618	13.031	2.863	12.843	2.747
Mastery (7 to 49)	39.342	7.585	38.841	8.124	37.787 ^a	8.637	36.314 ^a	8.560	39.319	7.385	38.879**	7.903

(continued)

Appendix (continued)

Continuous Variables	Consistently Married (N = 1,570)		Remarried (N = 494)		Divorced or Separated (N = 477)		Widowed (N = 140)		Never Married (N = 349)		All Groups (N = 3,030)	
	M	SD	M	SD	M	SD	M	SD	M	SD	M	SD
Control variables												
Age (25 to 74)	45.274	13.588	47.442 ^a	11.662	44.658	11.146	63.499 ^a	9.103	35.536 ^a	10.946	45.244 ^{**}	13.489
Years in status (0 to 58)	22.957	14.690	11.645 ^a	9.461	9.040 ^a	7.906	8.429 ^a	7.530	17.536 ^a	10.946	17.689 ^{**}	13.747
Dichotomous variables												
Gender (1 = male)	46.688		48.178		33.962		14.286		46.571		43.418 ^{**}	
Race (1 = White)	86.649		88.797		79.437		86.029		68.222		83.715 ^{**}	
Children in household (1 = yes)	49.554		51.215		49.895		5.000		21.203		44.554 ^{**}	
Full-time	56.387		58.163		67.679		22.388		68.249		58.244 ^{**}	
Part-time	10.065		8.980		7.391		14.925		6.231		9.256 [*]	
Not employed	33.656		32.857		25.000		62.687		25.519		32.525 ^{**}	

Note: Sample size varies depending on item response rates. Means and standard deviations are listed for continuous variables—percentages for dichotomous variables. Differences in means are tested using one-way ANOVA with Tamhane's T2 used to compare individual group means to the consistently married. Dichotomous variables are tested using chi-square.

a. For ANOVAs, group's mean is significantly different from the consistently married at $p < .05$.

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

Notes

1. Some researchers do not include life satisfaction with well-being, arguing that satisfaction is an indication of “a convergence of aspiration and achievement that reflects resignation as much as it does accomplishment” (Ross, Mirowsky, & Goldsteen, 1990, p. 1060), but several others have included it under various classifications of well-being (e.g., Keyes & Magyar-Moe, 2003; Marks & Lambert, 1998).

2. Because of a small sample of separated individuals ($N = 87$), for all analyses, separated and divorced were combined into one category. We also explored examining individuals who had been divorced once separately from those who had been divorced more than once, but there were almost no differences between these groups. In the interests of maintaining strong cell sizes for each group, we chose not to separate these two groups in the analyses presented here.

3. Two respondents did not indicate whether they had been married previously and were therefore dropped from the analysis.

4. Specifically, no interaction coefficient was statistically significant at the $p < .05$ level. This was somewhat surprising given previous research indicating that the mental health advantage of the married may be stronger for women for internalizing symptoms of distress and for men for externalizing symptoms of distress (Simon, 2002). However, two Gender \times Marital Status interaction terms were statistically significant at the $p < .10$ level. For alcohol abuse, the advantage of the consistently married over the never married was marginally greater for men than for women. For purpose in life, the advantage of the consistently married over the widowed was also marginally stronger for men.

5. Although recent research suggests that mental health does not affect probability of marital formation (Lamb, Lee, & DeMaris, 2003), it is important to realize that the only aspect of mental health examined in Lamb et al. (2003) was depression, which does not necessarily pertain to these results, because the never married differed on outcomes other than negative affect. Again, then, for a variety of questions involving mental health and marriage, it is important to consider multiple aspects of mental health.

6. Note, though, that Simon (2002) found that interactions between marital status and gender for alcohol abuse but not depression were significant in a cross-sectional analysis, whereas significant interactions for depression and alcohol abuse were found in a longitudinal analysis of transitions; regardless, this is still an important contrast, given our lack of interactions effects.

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