

JEFFREY DEW Utah State University W. BRADFORD WILCOX University of Virginia*

Generosity and the Maintenance of Marital Quality

This study examined whether generosity in marriage was associated with marital quality. The authors conceptualized generosity as a type of relationship maintenance behavior and used data from the new Survey of Marital Generosity (a national survey of married couples, N = 1,365 couples and 2,730 total participants). They found that generosity—defined here as small acts of kindness, displays of respect and affection, and a willingness to forgive one's spouse his or her faults and failings—was positively associated with marital satisfaction and negatively associated with marital conflict and perceived divorce likelihood.

Recent research on marital quality and stability has focused to a large extent on how couples' access to and division of resources—from education and income (e.g., Martin, 2004) to the division of paid and household labor (e.g., Frisco & Williams, 2003)—affect today's relationships and how underresourced or unequal relationships can create negative patterns of relating among contemporary couples (e.g., Conger, Rueter, & Elder, 1999; Papp, Cummings, & Goeke-Morey, 2009). This line of research is

Department of Family, Consumer, and Human

important, especially in today's economic climate, but scholars also need to focus on other factors now influencing marriages, including positive relationship attitudes and behaviors that may be associated with high-quality, stable marriages (Fincham, Stanley, & Beach, 2007).

This study focused on one positive behavior: marital generosity. Here, we define *generosity* as "giving good things to [one's spouse] freely and abundantly" (Science of Generosity Initiative, 2009). Although scholars have theorized that generosity is potentially beneficial to marital quality (Fowers, 2000; Hawkins, Fowers, Carroll, & Yang, 2007), no empirical studies have yet examined the link between generosity and marital quality.

Studying generosity is substantively important insofar as the extension and receipt of generous behaviors in marriage may enhance marital quality and stability. Examining how generosity is associated with marital quality among contemporary couples should also help family scholars and professionals better understand the role that positive behaviors play in today's marriages. Furthermore, because many contemporary marriages still center on the formation and sustenance of solidarity (Amato, Booth, Johnson, & Rogers, 2007), scholars need to understand how positive behaviors like generosity may or may not deepen the marital bond.

This study relied on the Survey of Marital Generosity (SMG) to examine the associations between generosity and marital quality among contemporary couples in the United States. The SMG uses a national sample of married individuals who were surveyed in late 2010 through early 2011. Respondents were between

Development, Utah State University, 670 E. 500 N., Logan, UT 84321 (jeff.dew@usu.edu).

^{*}Department of Sociology, University of Virginia, 542 Cabell Hall, P.O. Box 400766, Charlottesville, VA 22904-4766.

Key Words: generosity, marital quality, relationship maintenance behavior.

18 and 45 years old (N = 2,730 spouses in 1,365 couples). This survey is advantageous for this study because it included items designed to measure marital constructs such as generosity, was a national sample, and included multiple measures of marital quality. It is the first empirical study of the relationship between generosity and marital quality.

THEORETICAL FRAMEWORK

Generous Behavior

Generosity within marriage is a new topic of empirical inquiry, but theoretical work on marital generosity has suggested that giving to one's spouse includes offering service and affection, noticing a spouse's good qualities, and forgiving him or her (Fowers, 2000). In this way, generosity reflects a willingness to focus on a spouse's strengths, work around his or her weaknesses, and serve him or her (Hawkins et al., 2007). We rely on these previous theoretical formulations of marital generosity to operationalize generosity as giving good things to one's spouse by regularly engaging in small acts of kindness, expressing affection, expressing respect, and forgiving one's spouse.

Generosity as a Relationship Maintenance Behavior

Generosity may be understood as "giving" behaviors designed to nurture the good of the marital relationship. Generous behaviors may communicate a desire to invest in and continue the relationship. Generosity may thus function as a relationship maintenance behavior. Scholars have defined *relationship maintenance behaviors* as "strategies and routines that function to maintain relationships" (Stafford & Canary, 1991, p. 218). Indeed, our operationalization of generosity seems to align with the positivity, assurance, and conflict management dimensions of relationship maintenance behavior discussed in earlier research (Stafford, 2003).

Inherent in many studies of relationship maintenance behaviors is the idea of *social exchange*; that is, individuals engage in relationship maintenance behaviors to protect a relationship that benefits them and in which they have invested (Stafford, 2003; Stafford & Canary, 1991). In line with social exchange theory, studies have found that spouses who reported higher quality relationships reported using relationship maintenance behaviors more frequently (Weigel & Ballard-Reisch, 1999). This was particularly the case for wives. Furthermore, when the amount of relationship maintenance behaviors that participants reported receiving exceeded their expectations for those behaviors, participants reported greater relationship satisfaction (Dainton, 2000). These findings support the idea that relationship maintenance behaviors are a form of social exchange in contemporary marriages.

If generosity is a relationship maintenance behavior embedded within social exchange, then receiving generosity is likely to be associated with reports of relationship quality. Receiving generosity may increase the likelihood that one's expectations for the relationship are met. As relationship expectations are met or exceeded, participants' relationship satisfaction and stability should be higher (Nye, 1982). Consequently, we hypothesized that spouses' reports of generosity toward participants will be positively associated with participants' reports of marital quality.

Studies of relationship maintenance behavior also suggest that equity in these behaviors is an important aspect of relationship quality, though few have tested this proposition. In other words, partners in a relationship will be happiest when they give and receive equal levels of relationship maintenance behaviors from their relationship (Stafford, 2003; Stafford & Canary, 1991). Reciprocity of benefits may also be an important expectation for today's spouses insofar as their marriages are guided by a spirit of social exchange. This suggests that if one partner provides a lot of generosity to his or her spouse, that partner will not report high levels of marital quality unless he or she also receives a high level of generosity. Thus, we hypothesized that participants' reports of generosity toward their spouses will moderate the relationship between spouses' reports of generosity and participants' reports of marital quality.

Generosity as Altruistic Behavior

Alternatively, generosity may be viewed not as a form of social exchange but rather as an altruistic behavior designed to benefit one's spouse. Previous theorizing about marital generosity has framed generosity as an other-centered behavior performed without an expectation of reciprocity (Fowers, 2000; Hawkins et al., 2007). Behavior motivated by a quid pro quo system of exchanges may not seem particularly generous; that is, it is not "given freely." By contrast, if generosity is motivated by a desire to serve one's spouse and not to protect one's relationship investments or maintain a beneficial relationship (Fowers, 2000), then generosity may be a form of relationship maintenance behavior that is motivated by altruism.

Earlier research suggested that altruism is linked to a sense of satisfaction; in other words, giving feels good (Collett & Morrissey, 2007; Nilsson, Sojka, & Sojka, 2003). This may especially be the case for giving to one's spouse (Fowers, 2000; Hawkins et al., 2007). Furthermore, a study on sacrifice suggested that sacrifice for a romantic partner benefited both the giver and the receiver (Kogan et al., 2010). Accordingly, we tested the idea that participants' reports of their generosity toward their spouses will be positively associated with their own reports of marital quality. Moreover, if today's spouses are motivated to engage in generous behavior for altruistic reasons, the positive association of being generous with one's marital quality should exist regardless of the amount of generosity that participants receive from their spouse.

Although the best test of social exchange versus altruism would be to measure participants' motives behind generosity, our survey did not allow us to examine respondents' motives. Instead, we tested two distinct hypotheses: (a) If an interaction between participants' and spouses' generosity is statistically significant, then social exchange is implicated, and (b) if the relationship between generosity given and marital quality does not depend on the level of generosity received—and if the relationship between participants' own generosity and own marital quality is positive—than altruism may be implicated.

METHOD

Data and Sample

The data for this study were drawn from the SMG, a recent survey designed to measure a range of couple experiences. The SMG was conducted by a survey research firm (Knowledge Networks) between December 2010 and February 2011. The sampling was based on a combination of random digit dialing using a stratified random sample and

address-based sampling to reach individuals with no land lines. Participants received points they could redeem for prizes through the survey research firm.

To be included in the SMG, individuals had to be married and between the ages of 18 and 45 (though spouses of the main participant could be up to 55 years old). All couples were heterosexual. The initial sample of the SMG had 1,705 husbands and 1,745 wives. Of these participants, 1,630 wives and husbands were married to each other (75 husbands and 115 wives had spouses who did not participate). Data from participants who had nonmissing sample weights and participating spouses were used for a total of 1,368 couples. (Sample weights were not assigned to those over age 45 because we desired a representative sample of married individuals between the ages of 18 and 45). Depending on the analysis, between 6 and 12 participants (0.2%-0.4% of the sample) had missing data. We deleted these participants in those particular analyses. The effective sample for the analyses had between 2,724 and 2,730 participants.

Measures

Dependent variables. The dependent variables were three measures of marital quality. The first measure was marital satisfaction. We created this variable by taking the mean of four items that asked participants how happy they were with different aspects of their marriage. These items were (a) fairness, (b) communication quality, (c) sexual intimacy, and (d) their overall relationship. Participants could respond that they were 1 (*very unhappy*) to 5 (*very happy*) with each of these domains. The alpha for this scale was .87.

The second dependent variable was *marital conflict*. We constructed this variable using the mean of three items of conflict frequency: (a) conflict over household tasks, (b) conflict over money, and (c) conflict over parenthood. We used a mean scale because this adjusted for the fact that not everyone in the sample was a parent. The response set ranged from 1 (*never*) to 6 (*almost every day*). The alpha was .74.

The last measure of marital quality was *perceived divorce likelihood*. Participants answered a question that asked about the realistic chances that they would "eventually separate or divorce." Responses ranged from 1 (*very low*) to 11 (*very high*).

Independent variables. The main independent variable was generosity. We operationalized generosity using the mean of four variables. These behaviors were (a) small acts of kindness (e.g., making coffee for one's spouse), (b) expressions of respect, (c) displays of affection, and (d) forgiveness. Each of these four items asked spouses how frequently they engaged in that type of behavior (see Appendix Table A1 on the Journal of Marriage and Family [JMF] website [http://onlinelibrary.wiley.com/journal/10.1111/ (ISSN)1741-3737] for question wording of the items). Participants could indicate the frequency with which they engaged in that behavior on a scale that ranged from 1 (always) to 5 (never). We reverse coded the items so that higher scores meant greater generosity.

Because few measures of generosity exist, we investigated these four items to check whether they formed a coherent scale. We factor analyzed the variables using principalcomponents analysis (results not shown but available on request). One factor explained 67% of the variance, and this factor was the only one to have an eigenvalue greater than 1. The factor loadings ranged between 0.75 and 0.88. Residual correlations for the one-factor solution were low (the highest was 0.15), indicating that one factor accounted for much of the correlation between the items. In addition, the scree plot suggested retaining only one factor. The alpha was .84. These findings all suggested that our measures of generosity were tapping one construct and that they formed a coherent scale.

We also examined whether the generosity items/scale demonstrated discriminant validity; that is, we examined whether it was a construct that differed from marital quality (Campbell & Fiske, 1959). We started with a simple correlation analysis between the scales. The correlation between the generosity scale and the marital satisfaction scale was .52 (p < .001). It was -.32 (p < .001) between the generosity and marital conflict scales, and the correlation between the generosity scale and the subjective divorce likelihood item was -.41 (p < .001). The largest amount of variance that generosity shared with these constructs is 25%. This suggests that generosity, as a scale, may be distinct from other constructs.

We also compared the correlations among the generosity items with their correlations to individual items from the other scales (Campbell & Fiske, 1959). The correlations between the items within the generosity scale ranged from .49 to .73. By way of contrast, the correlations between the generosity items and the marital satisfaction items ranged from .27 to .44. The correlations between the generosity items and the marital conflict items ranged from -.15 to -.29. The correlation between the generosity items and the divorce proneness item ranged between -.28 and -.38. All of these correlations were significant at the p < .001 level. The fact that the interitem generosity correlations with the items from the other scales also suggests discriminant validity.

As a final test of the generosity scale, we reran each of our models with just one of the generosity variables at a time (e.g., daily kindness as a predictor of the marital quality variables, then expressions of respect as a predictor, etc.). The main effect and interaction results were similar to the scale variable results, albeit with lower coefficient magnitudes. Given the lower reliability of a single-item measure, smaller coefficients were expected. We present the findings using the more reliable scale variable of generosity.

We included control covariates in the models. These covariates included participants' age, marital duration, number of minors in the home, education, total household income, and race/ethnicity. Age and marital duration were measured in years. Participants stated the number of minors (infants to 17-year-olds) in the home. Education was measured on a scale that ranged from 1 (no formal education) to 14 (professional or doctorate degree). We recoded the education variable into three dummy variables. Participants were coded as having completed less than high school, having a high school degree, or having completed a bachelor's degree or higher ("some college" was the omitted category). Household income was measured on a 19-point scale that ranged from 1 (less than \$5,000) to 19 (\$175,000 or more). We created categorical variables based on the quartiles in this income scale. The third quartile was the omitted category. Race/ethnicity was self-reported. We included it using three dummy variables—Black, Hispanic, and "other"-with White, non-Hispanic as the omitted category.

Descriptive statistics, weighted using the poststratification weights, are shown in Table 1.

Variable		I	Wives	Husbands				
	<i>M</i> or %	SD	Minimum–maximum	<i>M</i> or %	SD	Minimum–maximum		
Marital satisfaction ^a	3.85	0.90	1-5	3.89	0.84	1–5		
Marital conflict ^a	2.30	0.95	1-6	2.26	0.90	1-6		
Perceived divorce likelihood	2.39	2.14	1-11	2.38	2.05	1-11		
Generosity ^a	3.97	0.75	1-5	3.88	0.78	1-5		
Age	34.40	6.22	18-45	35.66	5.89	19–45		
Marital duration ^b	10.06	6.36	0-26	9.74	6.08	0–26		
Number of children in home ^b	1.68	1.36	0-11	1.68	1.33	0-11		
Education level								
<high school<="" td=""><td>8.6</td><td></td><td></td><td>10.8</td><td></td><td></td></high>	8.6			10.8				
High school degree	24.0			27.2				
Some college	28.2			26.7				
College degree+	39.2			35.3				
Total household income								
First quartile	28.3			29.0				
Second quartile	22.0			22.6				
Third quartile	25.7			25.8				
Fourth quartile	24.0			22.6				
Race/ethnicity								
White, non-Hispanic	67.5			65.9				
Black, non-Hispanic	7.0			7.4				
Hispanic	16.9			19.5				
Other	8.6			7.2				

Table 1. Descriptive Statistics (N = 1,365 Wives and 1,365 Husbands)

Note: Values were weighted using poststratification weights.

^aDenotes a multi-item scale variable. ^bWives' and husbands' means and/or standard deviations are not equal due to weighting.

Participants were happy in their marriage, reported little conflict, and did not perceive a very high likelihood that they would divorce. They reported relatively high levels of generosity.

Participants' demographic characteristics are also shown in Table 1. On average, participants were in their mid-30s, with a range between 18 and 45 for wives and 19 and 45 for husbands. The average length of marriage was about 10 years, and the mean number of children in the home was 1.68 (78% of the participants reported a child in the home). The majority of participants were White, non-Hispanic (68% for wives and 66% for husbands). A comparison between the SMG and the General Social Survey (GSS, not shown) showed that although the age and education levels were comparable in the surveys, the SMG had more participants who were members of of racial/ethnic minority groups than the GSS. Furthermore, more participants in the SMG were in the middle and upper middle distributions of income. We compared the SMG to the GSS

rather than to census data because the GSS is nationally representative and it was easier to get a comparison sample (e.g., married individuals between the ages of 18 and 45) from the GSS.

Analysis

The first analysis used partial correlations. Correlation analyses allowed us to probe the relationships between generosity and marital quality without imposing a causal structure on the data. This fit our cross-sectional survey data. The partial correlation analyses produced correlation coefficients that accounted for variance shared with other variables; that is, the correlation coefficients reflected the magnitude of the association between generosity and marital quality that was independent of other variables. We partialed out sex, age, marital duration, number of children, participants' education, household income, and participants' race/ethnicity in the correlational analyses. We also partialed out participants' reports of generosity in the spousal generosity model and spousal reports of generosity in the participants' model. We ran ordinary least squares (OLS) regression analyses to test the hypotheses that involved interactions.

Because the dependent variables did not have Gaussian distributions, they violated the assumption of correlation and OLS regression. We wanted to ensure that our findings were robust to this problem, so we ran the models using two additional specifications: binary logistic regression and ordinal logistic regression.

Each of the three methods has different advantages and disadvantages. The results from OLS regression were easiest to interpret. But the skewed nature of the dependent variables meant that the data might not fit the assumptions of OLS regression. We also dichotomized each of the dependent variables at a 60%/40%split and used binary logistic regression. The problem with logistic regression is that it has lower statistical power. Finally, we ran some ordinal logistic regressions. The ordinal logistic regressions treated the dependent variables as an ordered progression of steps and did not assume that the distances between intervals were equal (Cohen, Cohen, West, & Aiken, 2003). Ordinal logistic regression could also be used with non-Gaussian distributions and allowed for greater statistical power than a binary logistic regression. Unfortunately, none of our ordinal logistic models met a key assumption: the proportional odds assumption. All of the models had significant chi-square results for the score test of this assumption, indicating violation of the assumption.

Overall, the results were similar across regression types. We show the OLS results because they are easiest to interpret and because the data did not meet the assumptions for the ordinal logistic regressions. We do note any differences across the different models, and the binary logistic and ordinal logistic models are available in the Appendix tables on the *JMF* website. We do not mean to impose a causal interpretation on the data by using regression.

We pooled the husbands' and wives' data for both the partial correlation analysis and the regression analyses. We estimated the models with robust standard errors to account for the correlated error structure between the wives and husbands. We tested for gender differences by interacting gender with spouse generosity and gender with participant generosity.

Table 2. Partial Correlation Coefficients Among
Participant Generosity, Spouse Generosity, and the Marital
<i>Quality Variables</i> ($N = 2,730$)

Variable	Participants' marital satisfaction	Participants' marital conflict	Participants' subjective divorce likelihood
Spouse report of generosity toward participant ^a	.30***	14***	20***
Participant report of generosity toward spouse ^a	.39***	28***	33***

Note: Analyses were weighted using poststratification weights. The following variables were partialed out in all of the analyses: sex, age, marital duration, number of children, participants' education, total household income, and participants' race/ethnicity.

^aIn the correlations for spouse generosity, participants' generosity was partialed out. In the correlations for participant's generosity, spouses' generosity was partialed out.

 $^{***}p < .001.$

RESULTS

Correlations

The partial correlations suggested relationships between spousal reports of generosity toward the participant, participant reports of generosity toward their spouse, and marital quality (see Table 2). Spousal reports of generosity toward the participant were positively related to participants' reports of marital satisfaction (r = .30, p < .001) and negatively related to participants' reports of marital conflict (r = -.14, p < .001) and subjective divorce likelihood (r = -.20, p < .001). Participants' own reports of generosity toward their spouse were also positively related to participants' reports of marital satisfaction (r = .39, p <001) and negatively related to participants' reports of marital conflict (r = -.28, p < .001) and subjective divorce likelihood (r = -.33, p < .001).

Regression Analyses

The results of the tests of the relationships using OLS regression are shown in Table 3. Spouses' reported generosity toward the participant was

	Marital satisfaction $(n = 2,730)$		Marital conflict $(n = 2,724)$		Subjective divorce likelihood ($n = 2,725$)				
Predictor	b	SE	β	b	SE	β	b	SE	β
Intercept	4.08***	0.16		2.42***	0.21		2.80***	0.38	
Spouse report of generosity toward participant	0.35***	0.03	.31	-0.17***	0.04	14	-0.56***	0.07	20
Participant report of generosity toward spouse	0.46***	0.03	.41	-0.34***	0.04	28	-0.93***	0.07	34
Spouse generosity × participant generosity	0.04	0.04	.03	-0.09	0.05	06	0.11	0.13	.04
Participant female ^a	-0.09**	0.03	05	0.08^{*}	0.04	.04	0.09	0.07	.02
Female \times spouse generosity	-0.05	0.07	.06	0.02	0.09	.01	0.13	0.20	.02
Female \times participant generosity	0.14*	0.07	02	-0.13	0.08	05	-0.27	0.21	05
Age	-0.01^{*}	0.005	08	0.01	0.01	.01	-0.01	0.01	01
Marital duration	0.01*	0.004	.08	-0.02^{**}	0.005	11	-0.01	0.01	04
Number of children in home	0.01	0.02	.01	0.01	0.02	.01	-0.10^{*}	0.05	07
Education ^b									
Less than high school	0.11	0.09	.04	0.08	0.14	.03	-0.27	0.24	04
High school	-0.07	0.05	03	0.01	0.07	.01	0.17	0.15	.04
College degree or higher	0.13**	0.05	.07	-0.15^{**}	0.05	08	-0.50^{***}	0.12	11
Total household income ^c									
First quartile	-0.04	0.07	02	0.13	0.08	.06	0.23	0.17	.05
Second quartile	-0.04	0.06	02	0.03	0.07	.01	-0.03	0.16	01
Fourth quartile	0.07	0.06	.03	-0.02	0.07	01	-0.16	0.14	03
Race/ethnicity ^d									
Black	0.03	0.07	.01	0.01	0.15	.01	0.55**	0.20	.07
Hispanic	0.09	0.06	.04	-0.03	0.08	01	-0.02	0.17	01
Other	-0.03	0.09	01	0.05	0.10	.02	-0.09	0.16	01
R^2		.36			.15			.24	

Table 3. Ordinary Least Squares Regression of Generosity as a Predictor of Marital Quality

Note: Analyses were weighted using poststratification weights. Standard errors are adjusted for having wives and husbands in the same analysis.

^aReference category: male. ^bReference category: completed some college. ^cReference category: third quartile. ^dReference category: White, non-Hispanic.

p < .05. p < .01. p < .001.

positively associated with participants' reports of marital quality. Every one-unit increase of spouses' reported generosity was associated with a 0.35-point increase in participants' reported marital quality ($\beta = .31$), a 0.17point decrease in participants' reports of marital conflict ($\beta = -.14$), and a 0.56-point decrease in participants' subjective divorce likelihood ($\beta = -.20$). These regression coefficients were significant at the p < .001 level. The coefficients for spouses' reported generosity were similar in magnitude and significance in the binary logistic and ordinal logistic models (see Appendix on the *JMF* website).

Participants' reports of their own generosity were also associated with higher levels of their own reported marital quality (see Table 3). Every one-unit increase in participants' reports of generosity toward their spouse was associated with a 0.46-point increase in the participants' reported marital satisfaction ($\beta = .41$), a 0.34-point decline in participants' reported marital conflict ($\beta = -.2\overline{8}$), and a 0.93-point decline in participants' subjective divorce likelihood $(\beta = -.34)$. These coefficients were significant at the p < .001 level, and they were similar in magnitude and significance in the binary logistic and ordinal logistic regressions (see online Appendix). Thus, participants' reports of generosity toward their spouse and spouses' reports of generosity toward the participants were significant even when they were in the same model.

These main effects were similar whether the interaction terms were in the model or not (results not shown).

Some of the control covariates were also associated with marital quality. Completing a college degree was the only variable that was consistently associated with marital quality, although marital duration was associated with marital quality in two of the three analyses. Women reported lower levels of marital quality in two of the three analyses. The results for the control covariates were similar in the ordinal logistic models (see online Appendix). Some of the control covariates that were significant in the OLS and ordinal logistic models were not significant in the binary logistic models (see online Appendix). Marital duration and completing a college degree were not associated with marital satisfaction. Furthermore, gender was not associated with reports of marital conflict, and the number of children in the home was not associated with subjective divorce likelihood. These differences in significance may have resulted from the lower statistical power inherent in the binary logistic regressions.

We tested three interaction terms in each model: (a) the interaction between participant and spousal reports of generosity, (b) the interaction between participants' gender and spousal report of generosity, and (c) the interaction between participants' gender and their own reports of generosity. The results are shown in Table 3. Only one interaction term was significant in the OLS models. The Gender × Participant-Reported Generosity interaction was associated with marital satisfaction (b = 0.14, p < .05). Graphing the interaction (graph not shown) suggested that at high levels of participants' generosity, wives and husbands reported about the same level of marital satisfaction. When wives reported lower levels of generosity toward their spouse, however, their reports of marital satisfaction were about 0.5 points lower than husbands' reports. In the binary logistic regression models, none of the interaction terms were significant (see online Appendix). Again, this may be due to lower statistical power in these models.

In addition to the Gender \times Participant Generosity interaction effect for marital satisfaction, three additional interaction effects emerged in the ordinal logistic regression models (see online Appendix). All of the Spouse Generosity \times Participant Reports of Generosity interactions were

significant in the ordinal logistic regression models (b = 0.24, p < .05 for marital satisfaction, b = -0.27, p < .01 for marital conflict, and b = -0.34, p < .05 for subjective divorce likelihood). Graphs of the interactions (not shown) suggested that marital quality was highest when both the participant and the spouse reported high levels of generosity toward each other. Low levels of both spouse-reported generosity and participant-reported generosity were associated with low levels of marital quality. But another problematic combination emerged: When participants reported low levels of generosity toward their spouse but the spouse reported high levels of generosity toward the participant, marital quality was low (i.e., marital satisfaction was lower and marital conflict and subjective divorce likelihood were higher).

We examined whether the Gender \times Generosity interaction terms influenced the significance of the Spouse Generosity \times Participant Generosity interaction terms in the OLS and binary logistic models. Removing the Gender \times Generosity interaction terms did not make the Spouse Generosity \times Participant Generosity interaction terms significant in these models.

DISCUSSION

We examined the association between generosity and marital quality using a national sample of contemporary married adults between the ages of 18 and 45. As hypothesized, spouses' reports of generosity toward the participants were associated with participants' reports of marital quality. Specifically, spouses' generosity was positively associated with participants' reports of marital satisfaction and negatively associated with participants' reports of conflict and subjective divorce likelihood. We found these associations in both partial correlation models as well as in the OLS regression, binary logistic regression, and ordinal logistic models. We did not find gender differences for these associations.

We also found that participants' reports of behaving in a generous fashion toward their spouse were linked to their own reports of marital quality. The extension of generosity toward the spouse was positively related to their own reports of marital satisfaction and negatively associated with their own reports of conflict and subjective divorce likelihood. Relative to husbands, wives reported lower levels of marital satisfaction when they also reported low levels of generosity toward their spouse. These findings were robust to the inclusion of spousal reports of generosity in the same model, and they were present in all four types of analyses. The gender interactions were found in both OLS and ordinal logistic regression.

Given the limitations of our data (see below), we cannot say that generosity enhances marital quality. This may be the true direction of the relationship, but it may also be that marital quality brings about more generosity, or they could be reciprocally causal. If it is the case that generosity leads to higher marital quality, it may be that spouses may expect certain levels of generous behavior from their spouse. The more frequently their spouse is generous, the more likely they will feel like these relationship expectations are being met. At least one study has suggested that spouses expect certain levels of relationship maintenance behaviors (Dainton, 2000). Alternatively, generous behaviors, such as performing small acts of kindness, likely imbue the marital context with positive affect. Generosity may boost the receiving spouse's feelings of self-worth and love toward the generous spouse, or it may boost feelings of gratitude.

It is equally likely that the relationship between these two variables goes in the other direction; that is, higher marital quality may yield greater generosity. Individuals have to give of themselves to engage in generosity. Such giving may be easier if they really care about the recipient. Alternatively, social exchange theory might suggest that the more individuals have to lose (i.e., because they have high relationship quality) the more they will act to maintain the relationship by engaging in generous behavior (Stafford & Canary, 1991).

Finally, it is possible that the relationship between these two variables is reciprocally causal in some sort of virtuous cycle or that they are spurious. That is, marital quality might lead to increased generosity in one spouse. Receiving this generosity might then lead the second spouse to experience higher marital quality. The second spouse might then in turn be more generous, and the cycle would continue. Alternatively, generosity may simply reflect some level of general positivity in the relationship that is associated with multiple measures of marital quality. Unfortunately, we were unable to directly test these hypotheses because variables assessing possible mechanisms were not measured in the data. Future research should examine the reasons that generosity and marital quality are related.

In this study we also examined whether marital generosity was situated within the framework of social exchange theory or within an altruistic framework. The results were not conclusive. Under OLS and binary logistic specifications, none of the interactions between participants' and spouses' reported generosity were related to the marital quality variables. Under the ordinal logistic specification, however, the Participant \times Spouse Generosity interaction terms were significant predictors for each of the three dependent variables.

If, on the one hand, the OLS or binary logistic regression specifications were most correct, this would suggest that wives and husbands could be generous without worrying about reciprocity and still be happy in their relationships. Moreover, the fact that participants' reports of their own generosity-independent of the generosity they received-was predictive of their own marital quality suggests that generosity does not have to be part of an exchange relationship. These findings are consistent with at least one study on relationship sacrifice that found benefits for both partners of such sacrifice (Kogan et al., 2010). Of course, these findings would also indicate that the happiest couples were those in which both spouses reported high levels of generosity, insofar as the generosity effects were additive.

On the other hand, if the ordinal logistic regression specifications were correct, this would suggest that generosity might indeed be situated within a social exchange framework. When both wives and husbands engage in high levels of generosity, they would be expected to have the highest levels of marital quality. Marital quality would be expected to be lowest when neither spouse exhibits high levels of generosity or when one spouse reports high levels of generosity and the other reports low levels. This latter situation suggests that feeling that one is not giving enough relative to how much one's spouse is giving may be associated with lower levels of marital quality. This is similar to other studies that have suggested that equality of giving is important to relationship quality (e.g., Stafford, 2003). Future research, with measures of spousal motives for generous behavior, will have to tease out the extent to which spouses are motivated by self-interest or altruism.

This study had limitations that future research may be able to correct. First, the SMG is a crosssectional sample. Consequently, we cannot make any claims about the directionality of effects. We tested whether marital quality would predict generosity, for example, and found that marital satisfaction positively predicted it, whereas conflict and perceived divorce likelihood negatively predicted it (analysis not shown). Thus, it may be that individuals who are in higher quality marriages are more likely to engage in generous behavior (Weigel & Ballard-Reisch, 1999), or the relationship may be reciprocal. Future research would need longitudinal data to examine questions of directionality and reciprocity.

We also were unable to measure the motives behind generosity, because the SMG did not use these types of questions. Knowing these motives could have more easily answered the question of whether generosity was based on social exchange, altruism, or both.

Finally, we measured only participants' and spouses' reports of the generosity they gave, not their perceptions of the generosity they received. Most maintenance behavior studies have analyzed participants' perceptions of relationship maintenance behavior received (Dainton, 2000; Stafford, 2003). These perceptions of what they receive from their spouse may be important—especially in testing questions regarding social exchange.

In spite of these limitations, this study adds to the literature. It is the first study to test the relationship between generosity and marital quality, finding that both the receipt of marital generosity from one's spouse and the extension of marital generosity to one's spouse are associated with higher quality marriages among married couples age 18 to 45 in the United States. This study also suggests that, for contemporary couples, it may be better both to give and receive high levels of marital generosity.

NOTE

We would like to acknowledge a grant from the Science of Generosity Initiative at the University of Notre Dame that enabled us to collect the data used in this study. All statements in this study are the authors'.

SUPPORTING INFORMATION

Additional supporting information may be found in the online version of this article:

Table A1: Generosity Scale Item and Response Wording

 Table A2: Binary Logistic Regression of Generosity as

 a Predictor of Marital Quality

 Table A3: Ordinal Logistic Regression of Generosity as

 a Predictor of Marital Quality

REFERENCES

- Amato, P. R., Booth, A., Johnson, D. R., & Rogers, S. J. (2007). Alone together: How marriage in America is changing. Cambridge, MA: Harvard University Press.
- Campbell, D. T., & Fiske, D. W. (1959). Convergent and discriminant validation by the multitrait–multimethod matrix. *Psychological Bulletin*, 56, 81–105. doi:10.1037/h0046016
- Cohen, J., Cohen, P, West, S. G., & Aiken, L. S. (2003). *Applied multiple regression/correlation analysis for the behavioral sciences* (3rd ed.). Mahwah, NJ: Erlbaum.
- Collett, J. L., & Morrissey, C. A. (2007). *The* social psychology of generosity: *The state of* current interdisciplinary research. Retrieved from http://www.nd.edu/~jcollet1/collett-morrisseygenerosity.pdf
- Conger, R. D., Rueter, M. A., & Elder, G. H., Jr. (1999). Couple resilience to economic pressure. *Journal of Personality and Social Psychology*, 76, 54–71. doi:10.1037/0022-3514.76.1.54
- Dainton, M. (2000). Maintenance behaviors, expectations, and satisfaction: Linking the comparison level to relational maintenance. *Journal of Social and Personal Relationships*, 17, 827–842. doi:10.1177/0265407500176007
- Fincham, F. D., Stanley, S. M., & Beach, S. R. H. (2007). Transformative processes in marriage: An analysis of emerging trends. *Journal of Marriage* and Family, 69, 275–292. doi:10.1111/j.1741-3737.2007.00362.x
- Fowers, B. J. (2000). Beyond the myth of marital happiness. San Francisco: Jossey-Bass.
- Frisco, M. L., & Williams, K. (2003). Perceived housework equity, marital happiness, and divorce in dual-earner households. *Journal of Family Issues*, 24, 51–73. doi:10.1177/ 0192513X02238520
- Hawkins, A. J., Fowers, B. J., Carroll, J. S., & Yang, C. (2007). Conceptualizing and measuring marital virtues. In S. L. Hofferth & L. M. Casper (Eds.), *Handbook of measurement in family research* (pp. 67–84). Mahwah, NJ: Erlbaum.
- Kogan, A., Impett, E. A., Oveis, C., Hui, B., Gordon, A. M., & Keltner, D. (2010). When giving feels good: The intrinsic benefits of sacrifice in romantic relationships for the communally motivated. *Psychological Science*, 21, 1918–1924. doi:10.1177/0956797610388815

- Martin, S (2004). Growing evidence for a "divorce divide?" Education and marital dissolution rates in the U.S. since the 1970s. Russell Sage Foundation Working Paper. Retrieved from https:// www.russellsage.org/sites/all/files/u4/Martin_ Growing%20Evidence%20for%20a%20Divorce %20Divide.pdf
- Nilsson, S., Sojka, B., & Sojka, P. (2003). The blood donation experience: Perceived physical, psychological, and social impact of blood donation on the donor. *Vox Sanguinis*, 84, 120–128. doi:10.1046/j.1423-0410.2003.00271.x
- Nye, F. I. (1982). The basic theory. In F. I. Nye (Ed.), *Family relationships: Rewards and costs* (pp. 13–31). Beverly Hills, CA: Sage.
- Papp, L. M., Cummings, E. M., & Goeke-Morey, M. C. (2009). For richer, for poorer: Money as a topic of marital conflict in the home. *Family Relations*, 58, 91–103. doi:10.1111/j.1741-3729.2008. 00537.x

- Science of Generosity Initiative. (2009). *What is generosity*? Retrieved from http://generosityresearch.nd.edu/more-about-the-initiative/what-is-generosity/
- Stafford, L. (2003). Maintaining romantic relationships: A summary and analysis of one research program. In D. J. Canary & M. Dainton (Eds.), *Maintaining relationships through communication: Relational, contextual, and cultural variations* (pp. 51–77). Mahwah, NJ: Erlbaum.
- Stafford, L., & Canary, D. J. (1991). Maintenance strategies and romantic relationship type, gender, and relational characteristics. *Journal of Social and Personal Relationships*, 8, 217–242. doi:10.1177/0265407591082004
- Weigel, D. J., & Ballard-Reisch, D. S. (1999). How couples maintain marriages: A closer look at self and spouse influences upon the use of maintenance behaviors in marriages. *Family Relations*, 48, 263–269.