The Association between Employment- and Housing-Related Financial Stressors and Marital Outcomes during the 2007–2009 Recession

Robert C. Stewart, Ph.D.
Brigham Young University - Idaho

Jeffrey P. Dew, Ph.D.
Brigham Young University

Yoon G. Lee, Ph.D.
Utah State University

This study examined the association between recession-related employment problems, recession-related housing problems, and marital quality. It used a national sample of married couples between the ages of 18 and 55. The analyses revealed that housing problems were negatively associated with wives' reports of marital satisfaction and positively associated with wives' and husbands' reports of divorce proneness. Feelings of economic pressure fully mediated the association between housing problems and wives' marital satisfaction and housing problems and husbands' feelings of divorce proneness. Feelings of economic pressure only partially mediated the association between housing problems and wives' reports of divorce proneness. Interestingly, recession-related employment problems were not associated with participants' marital quality.

Keywords: 2007-2009 Recession; housing-related financial stressors; employment-related financial stressors

INTRODUCTION

Though researchers know much about the financial costs of the 2007–2009 Recession, less is known regarding the impact of the recession on family relationships in general, and marriage relationships in particular (Dew & Xiao, 2013). For example, little is known regarding the impact of housing-related financial problems on the marital relationship (Nelson, Delgadillo, & Dew, 2013). While Nelson et al. (2013) examined the relationship between mortgage (or rent) burdens, housing equity, and marital quality, the

impact of recession-related housing stressors on marital quality is still unknown. This study is the first known attempt to analyze the association between housing-related stressors and marital quality. Although research highlighting the impact of employment problems on marital quality exists (Conger et al., 1990; Rook, Dooley, & Catalano, 1991; Vinokur, Price, & Caplan, 1996), less is known regarding contemporary couples. Given the unique unemployment dynamics of the 2007–2009 Recession, as well as the labor market changes that have occurred over the past two decades, this is an important oversight.

This gap in understanding is problematic. Having little information on the association between housing issues and marital quality needs correction considering housing is an important component of family stability, it gives families a place to live, and because housing is often the largest component of families' wealth. Given contemporary labor patterns of unemployment, underemployment, and high levels of career mobility, understanding the association between employment issues and marital quality in a sample of contemporary married couples is important. The purpose of this study is to examine the association between 2007–2009 Recession-related stressors (i.e., housing and employment) and couples' marital quality.

National data from the Survey of Marital Generosity (N=1,630 pairs of married individuals) was used to study these questions. These married adults ranged in age from 18-55. This data set was ideal for this study because it contained relevant questions regarding housing problems and employment difficulties as well as marital quality. The data were also dyadic and were collected shortly after the end of the 2007–2009 Recession.
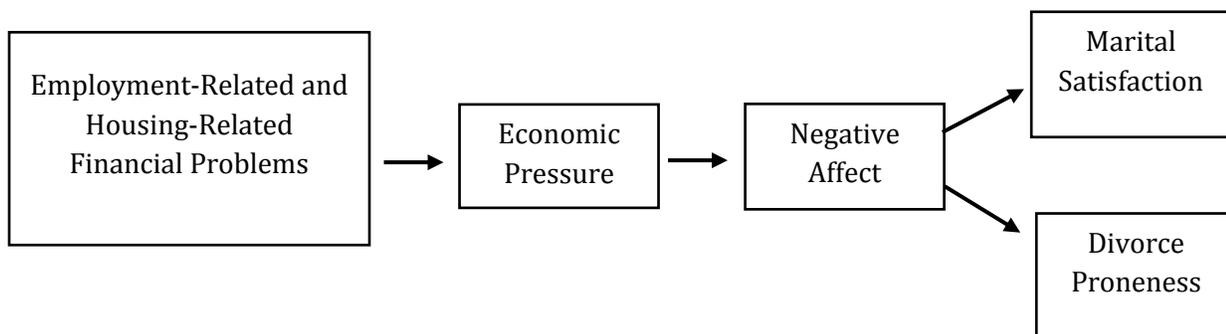
LITERATURE REVIEW

Family Stress Model of Economic Stress and Marital Distress

This study was framed using the family stress model of economic pressure and marital distress (Conger & Elder, 1994). Conger and colleagues (1990) developed this model as they studied Midwest farm families during the 1980's Farm Crisis. These authors posited that certain objective economic conditions (income instability, debt, etc.) would be associated with husbands' interactions with their wives. They found that economic pressure increased husbands' hostility and decreased warmth and supportiveness toward their wives.

The family stress model (see Figure 1) suggests that objective financial stressors, such as instable or insufficient income, leads to feelings of economic pressure. Economic pressure then leads to negative affective states such as depression or hostility. Finally, these negative affective states then increase marital conflict and lower marital satisfaction.

The key construct in the family stress model is economic pressure. Economic pressure is the affective or emotional state of stress brought on by financial stressors. Although economic pressure is associated with the negative economic events that families experience, economic pressure is actually the feelings that accompany the economic events. While job loss or home foreclosure are objective stressors, the feelings of stress and worry about making ends meet, (i.e., economic pressure), are subjective.

Over the last few decades, previous studies have verified the family stress model. Three studies are highlighted. First, Cutrona et al. (2003) utilized the family stress model to study the association between neighborhood traits and marital processes/quality. These authors found a negative association between the economic level of a neighborhood and the warmth of interaction between spouses. Second, Dew and Yorgason (2010) tested the family stress model with retirement-aged couples. For the couples who retired during the study, as well as for the couples who did not retire, Dew and Yorgason noted that economic pressure was associated with increased depression which led to decreased marital satisfaction. Finally, Yeung and Hofferth (1998) noted that more than half of all families with children experienced at least one notable economic stressor during their children's growing up years. Their findings showed that major economic setbacks led to emotional tumult for the entire family, not just the parents. The current study adds to the literature by testing objective financial stressors researchers have not often tested—employment and housing difficulties—in the context of the 2007–2009 Recession.

Figure 1. The Family Stress Model of Economic Pressure and Marital Distress
Note. We could not include negative affect in this study.

Employment-Related Financial Stressors during the 2007–2009 Recession

Every indicator relating to the labor market and unemployment suggested that the 2007-2009 Recession was unique in both its depth and duration (Aaronson, Mazumder, & Schechter, 2010; Elsby, Hobijn, & Sahin, 2010; Fligstein & Goldstein, 2009; Katz, 2010). Job loss during the recession reached levels not seen since the Great Depression (Aaronson et al., 2010; Elsby et al., 2010; Fligstein & Goldstein, 2009; Katz, 2010). Unemployment numbers leapt from 4.8% at the end of 2007 to 9.7% during the last quarter of 2009 (Katz, 2010).

Not only were more individuals directly impacted by job loss, but the average length of time for those unemployed averaged more than 30 weeks. During the last unemployment

spell of 10% or higher, during the early 1980s, only 2.6% of the labor force was unemployed for longer than 26 weeks. The recent recession saw 4% of the labor force unemployed for greater than 26 weeks, comprising 40% of the unemployed (Aaronson et al., 2010).

While jobless rates were high for all groups in the labor market (Elsby et al., 2010), unemployment rates affected certain groups more than others. Katz (2010) reported that the rise in unemployment, resulting from the most recent recession, disproportionately affected men, younger workers, and less-educated workers. Furthermore, the odds of finding a job lessened as unemployment duration increased. Aaronson et al. (2010) also noted that long-term unemployment generally persisted at a high level even after the economy began to recover, because those who had been long-term unemployed were often the last to be considered for hire. It is hypothesized that reports of employment-related financial stressors will be associated with reports of economic pressure.

Housing-Related Financial Stressors during the 2007–2009 Recession

The rapid decade-long increase in housing prices not only fueled the economy between 1997 and 2007, but also set the stage for economic disaster (Fligstein & Goldstein, 2009). Beginning in 2006, home prices began to fall precipitously in some states (e.g., California and Florida) dropping by an average of 25%. Housing prices also decreased throughout the rest of the country, though not as dramatically. Beginning that same year, foreclosure rates began to increase (Fligstein & Goldstein, 2009). Unlike unemployment, which the federal government closely tracks, home foreclosure statistics are not aggregated by any federal agency. The best estimates—based on bank and real estate data—are that banks initiated 8.2 million foreclosures from 2007–2011 and completed at least 4 million foreclosures during that time (Blomquist, 2012).

Compounding the impact of this sudden drop in home prices was the number of individuals who had purchased subprime mortgages, which were often accompanied by adjustable interest rates. These adjustable interest rates would reset dramatically every two or three years. Subprime consumers would often utilize the strategy of refinancing in order to avoid these ballooned interest rates (while utilizing the ever appreciating home value as their collateral). Thus, many Americans found themselves in trouble as home prices fell at the same time that their mortgage interest rates adjusted. This left many homeowners facing payments that they could not afford (Fligstein & Goldstein, 2009).

While this crisis largely began within the subprime mortgage community, the nationwide drop in home prices began to impact homeowners with more traditional mortgage interest rates as well (Fligstein & Goldstein, 2009). By the end of 2009, over 15% of all mortgages were either delinquent or in foreclosure. The subprime market was in even worse shape with over 40% of loans being at least three months in arrears. Furthermore, 11.3 million households owed more on their mortgage than their property was valued (Fligstein & Goldstein, 2009). Accordingly, millions of American households were impacted by these foreclosures and the challenges of paying their mortgages.

With regard to housing-related financial stressors, recent research noted that for the majority of U.S. households, the mortgage or rent payment comprised the largest percentage of the household budget (Nelson et al., 2013). Unanticipated increases to this budget line item was likely problematic for couples struggling to make ends meet. Due to the aftermath of the recent recession, a growing percentage of couples contributed more than half of their household income to their housing expenses (Williams, 2012). The necessity of paying more towards housing, especially at a time when household income was fixed, likely created stress as couples were faced with the opportunity cost of being forced to pay a higher proportion of their income to their rent or mortgage. Consequently, it is hypothesized that reports of housing-related financial stressors will be positively associated with reports of economic pressure.

According to the tenets of the family stress model, this economic pressure (stemming from employment and housing-related financial stressors) leads to both a negative affective state (such as depression or hostility) as well as decrease in warmth and supportiveness (Conger et al., 1990). These negative affective states, along with a simultaneous decrease in the shielding behaviors of warmth and supportiveness, are then associated with marital distress, such as increased conflict and lower marital satisfaction. Measures of negative affective state are not available in the data, although the rest of the conceptual model is tested as illustrated in Figure 1.

METHODOLOGY

Data and Sample

Data are from the Survey of Marital Generosity (SMG), an extant data set collected during 2010–2011. Knowledge Networks, a survey research firm, conducted the surveys and collected this data utilizing their Knowledge Panel (a large, nationally representative, pre-existing panel of participants). These panel members were recruited either through stratified random digit dialing or through stratified address-based sampling methodologies. The sampling frame for the SMG consisted of married individuals within those ages who had spouses between the ages of 18–55 years old who resided in the United States and who had been randomly selected to be a part of the Knowledge Networks panel. From this sampling frame individuals were invited to participate in the SMG. Surveys were sent out in three waves with a 69% combined response rate. Over 1,800 individuals participated in the SMG.

In order to be included in the current study, participants had to have a spouse who also completed the SMG (around 89% of these individuals also had their spouse participate). Using this criterion, this study had 1,630 married couples from the SMG. It should be noted that participants whose spouses did not join the SMG may have been different from participants whose spouses completed the SMG.

Measures

Dependent variables. The dependent variables for this study were marital satisfaction and divorce proneness. With regard to marital satisfaction, the SMG asked the

following question: "In every marriage, there are some things that are very good and other things that could use some improvement. Right now, how satisfied would you say you are with each of the following aspects of your marriage?" The domains for marital satisfaction included love and affection, perceived fairness, respect and admiration, quality of communication, and sexual intimacy. The response set provided five options ranging from very unhappy to very happy. The marital satisfaction score was created by taking the mean of the five marital domain questions. Cronbach's alpha for this scale was .91 for wives and .90 for husbands. Divorce proneness was measured using the following question from the SMG: "It is always difficult to predict what will happen in a marriage, but realistically, what do you think the chances are that you and your partner will eventually separate or divorce?" In this case, the response set offered 11 options to respondents ranging from very low to very high.

Independent variables. With regard to recession-related employment problems the SMG asked: "Have you been unemployed, had your pay cut, or had your work hours reduced since the recession began?" The response set was yes or no. Similarly, concerning recession-related housing problems, the SMG asked: "Have you been through a foreclosure or had problems making mortgage payments since the recession began?" Again the response set was yes or no. The dummy codes were as follows: 0 = no problem, 1 = problem.

A mediating variable, economic pressure, was used for this study. The SMG question for this construct was: "How often do you worry that your total family income will not be enough to meet your family's expenses and bills?" The response set was on a five-point scale with higher scores representing greater worry.

Existing debt load, race/ethnicity, and socioeconomic status were control covariates. The SMG asked a question regarding participants' amount of consumer debt (e.g., credit cards, installment loans). The response set included twelve different options. Dummy coded responses from the demographic questions were created for three race/ethnic variables: black, Hispanic, and other race/ethnic group. White, non-Hispanic was the fourth race/ethnic category and served as the comparison group. The socioeconomic status variable was created by taking the mean of the three questions regarding income, savings, and education. Variables were standardized using Z-scores and averaged to create a new SES variable. The SES variable had a good reliability with a Cronbach's alpha score of .71 for the wives and .70 for the husbands.

Analysis

Ordinary least squares regression was conducted to allow for the examination of the association between each predictor of marital satisfaction and divorce proneness while controlling for the other independent variables. Furthermore, it allowed tests of mediation using the process outlined by Baron and Kenny (1986). That is, the purported mediator variable was first regressed on the main independent and control variables. The marital quality dependent variables were then regressed on the main independent and control variables. Finally, the mediator variable was added to the second model.

It is important to note that separate models were conducted for wives and husbands. The data were dyadic; husbands and wives from the same couple completed the SMG. Thus, the wives' and husbands' data likely had correlated error structures. Using data with correlated error structure in the same model would likely have resulted in biased standard errors and a greater likelihood of committing Type I errors.

Because divorce proneness was skewed, it was analyzed using both OLS and logistic regression as a robustness check. To run logistic regression, the divorce proneness variables (for both wives and husbands) were transformed into dichotomous variables. To create the dichotomous variables, any response that suggested there was a perceived chance of future divorce were coded with a 1, while those who perceived no chance of future divorce were coded with a 0. Thus, a divorce proneness response of 1 was given a 0 and those who responded with a score of 2 or above were coded a 1. This decision was made because a split between "1" and above "2" left approximately half of the respondents in each category with roughly half considering divorce as a future option on at least some level. Although the marital satisfaction variable was slightly skewed, it was not skewed as much as the divorce proneness variable, and therefore, was suitable for OLS regression.

Approximately half of the variables had no missing data. The variables with missing data were often missing just a few cases (ranging from .1% to a maximum of 2.0%). There were 63 unique cases that contained missing data. As such, only 3.74% of the cases ended up being deleted through listwise deletion. Had there been larger percentages of missing data in this study, multiple imputation techniques would have been a logical option to reduce bias. The number of participants are noted in each analysis.

RESULTS

Descriptive Statistics

Table 1 displays the variables utilized during this present study with the means, standard deviations, minimums, and maximums calculated for each variable. The dependent variable of marital satisfaction variables had a mean or 3.86 for wives and 3.85 for husbands on a five-point scale. This suggested that couples were reasonably happy. Likewise, the dependent variable of divorce proneness had a mean of 2.29 for wives and 2.28 for husbands. These scores were based on an 11-point scale signifying that most couples were not anticipating a future separation or divorce.

The main independent variables of recession-related employment problems and housing problems are also included. In this sample, 26% of the wives reported employment problems and 10% of the wives reported housing problems. Similarly, 36% of the husbands reported employment problems and 10% of the husbands reported housing problems.

The descriptive statistics for the mediating variable of economic pressure are also included in Table 1. On a 5-point scale, wives reported a mean of 3.01. The husbands reported a 2.93 on this same 5-point scale. These scores suggest that, on average, there is a

moderate amount of economic pressure experienced by these sampled individuals.

Finally, the control covariates are also included in Table 1. Debt was reported on a 12-point scale with a mean of 3.65 for the women and 3.62 for the men. These scores suggested that, on average, the couples in this study had approximately $1,500 to $5,000 in consumer debt. Likewise, for race/ethnicity, 3% of the wives stated that they were black, 8% stated Hispanic, and 8% stated other race/ethnicity. For the husbands 5% chose black, 8% chose Hispanic and 7% chose other race/ethnicity. The remaining 81% of wives and 80% of husbands were non-Hispanic whites.

Table 1

Descriptive Statistics (N = 1,630 couples)

	Wives			Husbands		
	M	*sd*	Min - Max	*M*	*sd*	Min - Max
Marital satisfaction	3.86	.89	1–5	3.85	0.86	1–5
Divorce Proneness	2.29	2.08	1–11	2.28	2.04	1–11
Economic Pressure	3.01	1.19	1–5	2.93	1.19	1–5
Employment Problems	26%	.44	0–1	36%	.47	0–1
Housing Problems	10%	.30	0–1	10%	.30	0–1
Debt	3.65	2.44	1–12	3.62	2.40	1–12
Black	3%	.17	0–1	5%	.21	0–1
Hispanic	8%	.28	0–1	8%	.27	0–1
Other race/ethnicity	8%	.28	0–1	7%	.26	0–1
Socioeconomic Status	.00	.79	-2.86–1.88	.00	.79	-3.02–1.84

OLS Regression Models

As noted above, Baron and Kenny's (1986) method was used to test for mediators. The first step was to regress the purported mediator (i.e., economic pressure) onto employment problems, housing problems, and the control covariates (see Table 2). For the wives' model, both employment problems ($b = .29$, $p < .001$) and housing problems ($b = .67$, $p < .001$) were significantly related to economic pressure. There was a similar outcome for the husbands. Employment problems ($b = .34$, $p < .001$) and housing problems ($b = .51$, $p < .001$) were significantly related to economic pressure. In addition, consumer debt was

positively associated with both wives' (b = .14, p < .001) and husbands' (b = .11, p < .001) reports of economic pressure. Socioeconomic status was negatively associated with wives' (b = -.46, p < .001) and husbands' (b = -.42, p < .001) reports of economic pressure. The regression models explained 28% of the variance in wives' reports of economic pressure and 24% of the variance in husbands' reports. These results satisfied the first criteria for establishing a mediator effect.

The next regressions tested whether the main independent and dependent variables were related (Baron & Kenny, 1986) as shown in Table 3. Housing problems (b = -.19, p < .05), consumer debt (b = -.03, p < .01), and socioeconomic status (b = .06, p < .05) were associated with wives' marital satisfaction. R^2 for the model was .02. The low R^2 for this and the next models may relate to the imprecision with which the recession-related stressors were measured (see the limitations section below).

The same pattern existed for wives' divorce proneness. Housing problems (b = .53, p < .01), consumer debt (b = .04, p < .05), and socioeconomic status (b = -.25, p < .001) were found to be significantly associated with wives' divorce proneness (see Table 2). R^2 for the model was .03.

Table 2

Ordinary Least Squares Predictors of Feelings of Economic Pressure

	Wives			Husbands		
	b	SEb	β	b	SEb	β
Intercept	2.37***	.05		2.34***	.05	
Employment Problems	.29***	.06	.11	.34***	.06	.16
Housing Problems	.67***	.09	.17	.51***	.09	.13
Debt	.14***	.01	.28	.11***	.01	.22
Black[a]	.20	.15	-.03	.12	.13	.02
Hispanic[a]	-.08	.09	-.02	-.15	.10	-.04
Other race/ethnicity[a]	.16	.09	.04	.09	.10	.02
Socioeconomic Status	-.46***	.03	-.31	-.42***	.04	-.28
R^2		.28			.24	

[a] Omitted category is White, Non-Hispanic
***p < .001

The next column in Table 3 shows the predictors of husbands' marital satisfaction. For this regression, only debt (b = -.03, p < .001) was found to have a statistically significant correlation with husbands' marital satisfaction. Surprisingly, housing problem and employment problems failed to predict marital satisfaction. R^2 for the model was .02. Thus, the mediation model failed for husbands' marital satisfaction.

The final column in Table 3 shows the regression analysis that examined husbands' perceived likelihood of divorce. In this case, housing problems (b = .37, p < .05), amount of existing debt (b = .06, p < .01), race/ethnicity – black (b = .84, p < .01), and socioeconomic status (b = -.19, p < .01) were associated with husbands' divorce proneness (see Table 2). R^2 for the model was .02.

In the final group of regression models, economic pressure was added to the models. The husbands' marital satisfaction model was not included because neither employment problems nor housing problems were significant in that model. For the wives' marital satisfaction model (see Table 4), economic pressure fully mediated the relationship between the independent variables and marital satisfaction, as it was the only independent variable to continue to have a statistically significant relationship in this model (b = -.15, p < .001). In this model, with the inclusion of economic pressure, the magnitude of the housing problems coefficient decreased from b = -.19 to b = -.09. Furthermore, debt and socioeconomic status declined to non-significance in this model. The R^2 for the model was .03. A post-hoc Sobel test was run to check whether mediation was plausible. The post-hoc Sobel test of mediation for this model was -5.28 (p < .001) indicating that a mediation effect was plausible.

Next, wives' divorce proneness was regressed onto the independent variables while adding economic pressure to the model (see Table 4). Economic pressure partially mediated the relationship between the housing problem variable and divorce proneness. While economic pressure was significant (b = .16, p < .01), housing problems remained significantly associated with wives' divorce proneness (b = .42, p < .05). The coefficient for housing problems declined from b = .53 to b = .42 once economic pressure was added to the model. The R^2 for the model was .04. The post-hoc Sobel test of mediation was 2.94 (p < .01) indicating that this mediation effect was plausible.

Finally, with regard to the husbands' divorce proneness model (see Table 4), economic pressure (b =.15, p < .01) fully mediated the relationship between housing problems and divorce. In this model the coefficient for housing problems changed from b = .37 to b = .28 after the inclusion of economic pressure and was no longer statistically significant. R^2 for the model was .05. This model had a post-hoc Sobel test of mediation of 2.65 (p < .01). Thus, for the husbands' divorce proneness model, the mediation effect of economic pressure was plausible.

Table 3

Ordinary Least Squares Predictors of Marital Satisfaction (N = 1589 for wives, N = 1603 for husbands)and Divorce Proneness (N = 1587 for wives, N = 1600 for husbands)

	Wives' Marital Satisfaction			Wives' Divorce Proneness			Husbands' Marital Satisfaction			Husbands' Divorce Proneness		
	b	SEb	β	b	SEb	β	b	SEb	β	b	SEb	β
Intercept	4.00***	.04		1.97***	.10		3.85***	.02		1.96***	.10	
Employment Problems	-.03	.05	-.01	.15	.12	.03	-.07	.05	-.04	.13	.11	.03
Housing Problems	-.19*	.08	-.07	.53**	.18	.08	-.13	.07	-.05	.37*	.17	.06
Consumer Debt	-.03**	.01	-.08	.04*	.02	.05	-.03***	.01	-.09	.06**	.02	.07
Black[a]	.15	.13	.03	.44	.30	.04	-.06	.10	-.01	.84**	.24	.09
Hispanic[a]	-.05	.08	-.02	.30	.19	.04	.08	.08	.02	.04	.19	.01
Other race/ethnicity[a]	-.11	.08	-.33	.31	.19	.04	.10	.08	.02	-.05	.20	-.01
Socioeconomic Status	.06*	.03	.06	-.25***	.07	-.09	.04	.03	.04	-.19**	.07	-.07
R^2		.02			.03			.02			.03	

[a] Omitted category is White, Non-Hispanic
    * $p < .05$. ** $p < .01$. *** $p < .001$

Table 4

Ordinary Least Squares Predictors of Marital Satisfaction (N = 1589 for wives)and Divorce Proneness (N = 1587 for wives, N = 1598 for husbands) with Economic Pressure as a Mediator

	Wives' Marital Satisfaction			Wives' Divorce Proneness			Husbands' Divorce Proneness		
	b	*SEb*	*β*	*b*	*SEb*	*β*	*b*	*SEb*	*β*
Intercept	4.35***	.04		1.59***	.16		1.61***	.05	
Employment Problems	.01	.05	-.01	.11	.12	.02	.08	.11	.02
Housing Problems	-.09	.08	-.03	.42*	.18	.06	.28	.17	.04
Economic Pressure	-.15***	.02	-.20	.16**	.05	.09	.15**	.05	.09
Consumer Debt	-.01	.01	-.02	.02	.02	.02	.04	.02	.05
Black[a]	.12	.13	.02	.47	.30	.04	.83**	.24	.09
Hispanic[a]	-.08	.08	-.02	.31	.19	.04	.07	.19	.01
Other race/ethnicity[a]	-.08	.08	-.33	.28	.19	.04	.10	.20	.01
Socioeconomic Status	-.01	.03	-.01	-.17*	.07	-.07	-.13	.07	-.05
R^2		.03			.04			.05	

[a] Omitted category is White, Non-Hispanic
* $p < .05$. ** $p < .01$. ***$p < .001$

As noted above, divorce proneness was positively skewed. Therefore, the same tests from Tables 3 and 4 were also run using logistic regression for divorce proneness as a test of the findings' robustness. The results for wives' divorce proneness in the logistic models were similar to the results obtained using OLS regression. However, for husbands, housing problems were not related to divorce proneness in the logistic models. This suggests that the husbands' OLS findings regarding divorce proneness should be interpreted with some caution.

DISCUSSION

Statistically significant relationships between recession-related housing problems and the outcome variables in three of the four models were found in the models. These recession-related problems did not explain much variance in the marital quality variables, however. This study may be one of the first to show an association between housing-related problems and marital quality. For the wives, housing-related financial problems were related to both lower marital satisfaction and higher divorce proneness. For the husbands, housing-related financial problems were positively associated with divorce proneness.

It is not surprising that housing-related stressors were associated with marital quality. Going into this recession, many couples were already contributing more than half of their household income to their housing expenses (Williams, 2012). Likewise, unlike some other items in a household's budget, housing-related financial items are generally not discretionary expenses (Nelson et al., 2013). While individuals can cancel piano lessons and postpone vacations, there are not comparable options with regard to rent and mortgage payments. As such, once a couple begins falling behind on these payments (or even loses their home), it likely signifies that other financial strategies have been employed and they are left without other options and without much hope. Not only would these couples find themselves mired in financial problems, already a threat to marital happiness and stability (Dakin & Wampler, 2008), but they are also faced with possible foreclosure and/or eviction-and the disruption that those events can cause.

Story and Bradbury (2004) noted that exposure to stress was correlated with marital dissatisfaction. Dakin and Wampler (2008) also suggested that financial issues were key factors in marital satisfaction. Thus, for couples experiencing financial problems, there would be constant financial stress knowing they were behind on house payments, or worse, dealing with the foreclosure of their home. Consequently, it is not surprising that wives' marital satisfaction was negatively correlated to housing-related financial problems. More surprising was the absence of a relationship between housing-related problems and marital satisfaction for the husbands. It may be that housing problems undermine the financial benefit that women expect in marriage (Dew, 2009). It is also possible that wives may invest more time and energy into their home and, thus, may find it harder to relocate to a new home. Similarly, it is possible that women build greater social networks within their neighborhood and, consequently, would have more to leave when relocation is required.

The findings regarding divorce proneness are even more interesting. Housing-related issues were positively associated with divorce proneness for both wives and husbands. This is one of the first findings showing an association between housing-related problems and divorce likelihood. One on level this may suggest that housing-problems are financially stressful enough to induce spouses into thinking that divorce is more likely. On another level, it is not just about economic pressure because economic pressure did not fully explain the association for wives. It might be that wives have more to lose from housing-related pressures as noted above. Alternatively, given that gendered norms regarding providing still exist, wives may view housing-related problems as a failure on the part of their husbands to

fully live up to their providing role. Whatever the reason, the association between housing problems and relationship functioning merits additional future research.

Surprisingly, recession-related employment problems were not associated with marital quality for wives or husbands. Because research suggested that there was a negative relationship between exposure to stress in general (Story & Bradbury, 2004) and financial problems in particular (Dakin & Wampler, 2008) and marital satisfaction, the absence of these hypothesized relationships was surprising. Additionally, over the last few decades there have been studies linking unemployment and decreased marital satisfaction (Sullivan, Warren, & Westbrook, 2000; Vinokur, Price, & Caplan, 1996; Rook et al., 1991).

Potential explanations for the lack of findings between recession-related employment problems and the outcome variables may be found in the literature. Research conducted since the 2007–2009 Recession found that couples strived to positively cope with the challenges of unemployment by engaging in wise financial behaviors (Baek & DeVaney, 2010). There was also a documented increase in wives' labor force participation during the recession (Mattingly & Smith, 2010). Thus, these creative solutions may have somewhat decreased the impact of unemployment and may also help explain the absence of the anticipated relationship between recession-related employment problems and marital satisfaction.

Another main purpose for this study was to consider the role of economic pressure as a mediator between the employment and housing-related financial stressors and the outcome variables (marital satisfaction and divorce proneness). Mediation did take place with regard to housing-related problems.

Economic pressure fully mediated the association between housing-related financial problems and marital satisfaction for wives as well as the association between housing-related financial problems and divorce proneness for the husbands. Economic pressure provided partial mediation between housing-related financial problems and divorce proneness for the wives. For all three of the statistically significant main effect relationships, economic pressure offered either full or partial mediation.

Utilizing contemporary data from the recent recession, this current study replicated previous family stress model findings. Specifically, the relationships between financial stressors and adverse marital outcomes were fully or partially mediated by economic pressure. Though the causes of the financial stress have varied with the studies, these findings are consistent with previous studies framed by the family stress model (Conger et al., 1990; Conger, Rueter, & Elder, 1999; Cutrona et al., 2003; Dew & Xiao, 2013; Dew & Yorgason, 2010; Kinnunen & Feldt, 2004). It is not simply the presence of financial challenges that negatively impacts a relationship, rather it is the daily financial worries and troubles that increase the likelihood of harmful marital interactions and decrease the likelihood of warm and supportive marital interactions that can ultimately erode a relationship (Conger et al.,1999).

Implications for Practitioners

This study is among the first to link housing-related problems with relationship problems. A water heater might be a suitable metaphor for housing. When there are no problems with one's water heater, one does not think much about it. However, when problems arise it quickly becomes the focus of one's attention and effort. Although many financial practitioners undoubtedly already educate clients regarding wise housing practices (e.g., spending less than 27% of one's budget on housing related costs), this study provides a relationship reason for doing so that goes beyond or adds to the traditional financial reasons. Wise financial practices in general may also prevent couples from even approaching the need to miss mortgage payments or foreclose on their home. Financial practices such as frugality, debt avoidance (or minimization), and sufficient savings may provide a helpful buffer for the health of the marriage relationship. Less directly related to the findings, this study also offers relationship reasons to save some emergency funds that can be used to cover rent or mortgage payments during times of financial challenge. To summarize this point, financial practitioners may be able to help their clients engage in sound financial management behavior by pointing out the positive ways that it might help their relationships.

For relationship counselors, these findings also highlight the issue of housing. Housing-related problems in the context of the 2007–2009 Recession were associated with wives' marital satisfaction and wives' and husbands' divorce proneness. The findings highlight the context of actual financial stressors for relationship difficulties. Sometimes the economic pressure brought on by objective financial stressors can harm couples. These couples may need financial help from outside sources to help address these financial problems in addition to needing relationship help to support their marriage.

Limitations

As is the case with most studies, this study has limitations. First, the data were cross-sectional data. By contrast, a longitudinal study would have provided the opportunity to follow couples over time. A longitudinal study, for example, would have been able to examine actual divorce of couples rather than the perceived likelihood of future divorce. Further, because the data were cross-sectional it was not possible to test the direction of the relationships. For instance, Zagorsky (2005) noted that couples sometimes spend down assets prior to a divorce in an apparent attempt to prevent the other spouse from receiving more assets in the settlement. The cross-sectional data are both a weakness to this study and an opportunity for future research.

Second, the measures of recession-related stressors could have been improved. The housing-related question was: "Have you been through a foreclosure or had problems making mortgage payments since the recession began?" There is substantial difference between being one or two months late on a mortgage payment verses having already foreclosed on a home. The measure for employment issues was similarly limited. This question stated: "Have you been unemployed, had your pay cut, or had your work hours

reduced since the recession began?" Again, there is a substantial difference from individuals who may have had their hours temporarily cut for a month or two as compared to those who had experienced unemployment (especially long-term unemployment). Consequently, the recession-related stressor measures lacked both nuance and variance.

This problem may also relate to a third limitation—low effect sizes. While statistically significant associations arose, the effect sizes were somewhat small. Housing problems explained, at most, between 2–3% of the variance in the marital quality. Part of this issue likely relates to the imprecision with which both the housing-related and employment-related problems were measured.

Another limitation was that the data did not exist to fully model the family stress model. The negative affect measures (e.g., hostility) that the family stress model specifies were missing. Without these variables in the model, only an incomplete picture of how financial stressors relate to marital quality is shown.

Another limitation common to most survey research, that may also be present in this study, is that of selection bias. Although a national sample was conducted by a survey research firm, it is possible that the sample is not representative of the U.S. married population between the ages of 18–55. Indeed, given that not everyone in the panel agreed to participate this is likely the case. Furthermore, the affective states (which may be related to the likelihood of participation) were not modeled. Non-random participation of the couples may have distorted the analyses' findings.

The final limitation is that of potential period effects. The objective financial stressor variables measured problems that were specific to a particular historical time period (i.e., the 2007–2009 Recession). These findings might be a product of that specific time. Additional research on housing-related problems would need to be done to replicate the findings outside of a recessionary time period.

This research begins to tell the story regarding marital implications resulting from the Great Recession. However, questions remain and further research is needed to better understand the relationship between employment and housing problems stemming from the 2007–2009 Recession and marital quality.

Conclusion

Prior to this study, little was known regarding the impact of housing-related financial problems on the marital relationship (Nelson et al., 2013). It appears that recession-related housing problems were negatively associated with marital satisfaction (wives model only) and positively associated with divorce proneness. This is an important finding. With many experts referencing the current economic recovery as a "jobless recovery" and with some homes still below pre-recession value, many couples did experience, are experiencing, and will likely continue to experience housing-related financial problems that initially originated with the 2007–2009 Recession. These findings may be helpful in beginning to understand the role of foreclosure and other housing-related financial problems on the quality and stability of the marriage relationship.

It was also interesting that this study yielded no main effect findings between recession-related employment problems and the marital outcome variables. It may be that there is a certain "financial stress" threshold that couples can typically navigate, including initial unemployment. However, if this unemployment leads to housing-related financial problems, or if housing problems arise apart from any employment issues, it is possible that couples are no longer able to effectively cope with that higher level of financial stress–thus the correlation with the marital outcome variables. Regardless, this is an interesting finding that merits additional research.

The findings of this study also added to the body of family stress model research. The current study replicated Conger's earlier work (e.g., Conger et al., 1990; Conger et al., 1999) with a larger nationally representative sample. The current study was also important as it was the first to utilize the family stress model with the 2007–2009 Recession and examined contemporary stressors such as housing-related problems.

Differences in gender perception were also key findings in this study. It is fascinating that husbands and wives can share the same marriage, experience the same financial stressors, and yet feel differently regarding the satisfaction of their marriage as well as how prone their marriage may be to future divorce. This is important because the unit of measurement in marriage studies is often the couple and, at least according to the results of this study, wives and husbands may not necessarily respond in the same manner to various stressors. These findings also merit additional research to help provide further clarity regarding how and why two individuals within the same marriage might perceive their relationship differently.

Millions of Americans experienced recession-related employment problems and housing problems stemming from the 2007–2009 Recession. This study took an important preliminary look at recession-related problems and their relationship with marital outcomes. Future research is needed to continue to understand how marriages are responding to the largest economic disaster since the 1930s.

REFERENCES

Aaronson, D., Mazumder, B., & Schechter, S. (2010). What is behind the rise in long-term unemployment? *Economic Perspectives*, *34*(2Q), 28-51. doi: ssrn.com/abstract=1655960

Baek, E., & DeVaney, S. A. (2010). How do families manage their economic hardship? *Family Relations*, *59*, 358-368. doi: 10.1111/j.1741-3729.2010.00608.x

Baron, R. M., & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, *51*, 1173-1182. doi: 10.1037/0022-3514.51.6.1173

Blomquist, D. (2012). Slideshow: 2012 foreclosure market outlook. http://www.realtytrac.com/content/news-and-opinion/slideshow-2012-foreclosure-market-outlook-7021

Conger, R. D., & Elder Jr., G. H. (1994). *Families in troubled times, adapting to change in rural America*. New York: Walter de Gruyter, Inc.

Conger, R. D., Elder, G. H., Lorenz, F. O., Conger, K. J., Simons, R. L., Whitbeck, L. B., ... & Melby, J. N. (1990). Linking economic hardship to marital quality and instability. *Journal of Marriage and Family, 52*, 643-656. doi: 10.2307/352931

Conger, R. D., Rueter, M. A., & Elder, G. H. (1999). Couple resilience to economic pressure. *Journal of Personality and Social Psychology, 76*, 54-71. doi: 10.1037/0022-3514.76.1.54

Cutrona, C. E., Russell, D. W., Abraham, W. T., Gardner, K. A., Melby, J. N., Bryant, C., & Conger, R. D. (2003). Neighborhood context and financial strain as predictors of marital interaction and marital quality in African American couples. *Personal Relationships, 10*, 389-409. doi:10.1111/1475-6811.00056

Dakin, J., & Wampler, R. (2008). Money doesn't buy happiness, but it helps: Marital satisfaction, psychological distress, and demographic differences between low- and middle-income clinic couples. *The American Journal of Family Therapy, 36*, 300-311. doi: 10.1080/01926180701647512

Dew, J. (2009). The gendered meanings of assets for divorce. *Journal of Family Economic Issues, 30*, 20-31. doi: 10.1007/s10834-008-9138-3

Dew, J., & Xiao, J. J. (2013). Financial declines, financial behaviors, and relationship happiness during the 2007–2009 Recession. *Journal of Financial Therapy, 4*(1), 1-20. doi: 10.4148/jft.v4i1.1723

Dew, J., & Yorgason, J. (2010). Economic pressure and marital conflict in retirement-aged couples. *Journal of Family Issues, 31*, 164-188. doi: 10.1177/0192513X09344168

Elsby, M. W., Hobijn, B., & Sahin, A. (2010). *The labor market in the great recession*. (NBER Working Paper No. 15979). National Bureau of Economic Research. doi: 10.3386/w15979

Fligstein, N., & Goldstein, A. (2009). *Catalyst of disaster: Subprime mortgage securitization and the roots of the great recession*. Institute for Research on Labor and Employment. Retrieved from https://escholarship.org/uc/item/83x2h03n#page-1

Katz, L. F. (2010). *Long-term unemployment in the great recession*. Retrieved from http://scholar.harvard.edu/files/lkatz/files/long_term_unemployment_in_the_great_recession.pdf

Kinnunen, U., & Feldt, T. (2004). Economic stress and marital adjustment among couples: Analyses at the dyadic level. *European Journal of Social Psychology*, *34*, 519-532. doi: 10.1002/ejsp.213

Mattingly, M. J., & Smith, K. E. (2010). Changes in wives' employment when husbands stop working: A recession-prosperity comparison. *Family Relations, 59*, 343-357. doi: 10.1111/j.1741-3729.2010.00607.x

Nelson, S., Delgadillo, L., & Dew, J. P. (2013). Housing cost burden and marital satisfaction. *Marriage and Family Review, 49*, 546-561. doi: 10.1080/01494929.2013.789460

Rook, K., Dooley, D., & Catalano, R. (1991). The effects of husbands' job stressors on the emotional health of their wives. *Journal of Marriage and the Family, 53*, 165-177. doi: 10.2307/353141

Story, L. B., & Bradbury, T. N. (2004). Understanding marriage and stress: Essential questions and challenges. *Clinical Psychology Review, 23*, 1139-1162. doi: 10.1016/j.cpr.2003.10.002

Sullivan, T. A., Warren, E., & Westbrook, J. L. (2000). *The fragile middle class: Americans in debt.* New Haven: Yale University Press.

Vinokur, A. D., Price, R. H., & Caplan, R. D. (1996). Hard times and hurtful partners: How financial strain affects depression and relationship satisfaction of unemployed persons and their spouses. *Journal of Personality and Social Psychology, 71*, 166-179. doi: 10.1037/0022-3514.71.1.166

Williams, L. (2012). *An annual look at the housing affordability challenges of America's working households*. Center for Housing Policy, February 2012. Retrieved from http://www.nhc.org/media/files/Landscape2012.pdf

Yeung, W. J., & Hofferth, S. L. (1998). Family adaptations to income and job loss in the U.S. *Journal of Family and Economic Issues, 19*, 255-283. doi: 10.1023/A:1022962824012

Zagorsky, J. L. (2005). Marriage and divorce's impact on wealth. *Journal of Sociology, 41*, 406-424. doi: 10.1177/1440783305058478