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# Financial Declines, Financial Behaviors, and Relationship Happiness during the 2007 – 2009 Recession

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*Using a national data set collected during the summer of 2009 (N = 465), this study examines how financial difficulties are associated with sound financial management behavior and how sound financial management behavior is associated with relationship happiness among cohabiting and married participants. Findings suggest that financial declines were not directly related to sound financial management behavior, but that feelings of economic pressure were. Sound financial management behavior was positively associated with relationship happiness. Further, sound financial management behavior fully mediated the association between economic pressure and relationship happiness. It also moderated the association between financial declines and relationship happiness.*

*Keywords: financial behavior; economic distress; relationship quality*

The 2007 – 2009 Recession was marked by high levels of unemployment, restricted access to credit, the highest levels of home foreclosures seen since the Great Depression, and historically high levels of bankruptcy (U.S. Courts, 2010; Hurd & Rohwedder, 2010). The fact that the recession lasted nearly 18 months and that employment recovery has been painfully slow compounded the problem. Although we know much about the financial costs of the recession, we know less about how the recession has influenced households' financial behaviors and family relationships.

One way families may cope with financial difficulties is to stop engaging in sound financial management behaviors. For example, families may reduce or end contributions to

retirement accounts or begin to pay minimum payments on their credit cards. Alternatively, families may increasingly rely on consumer debt to maintain their standard of living (Baek & DeVaney, 2010). Reducing sound financial management behaviors may free up additional funds for families in the short term, but it may be financially problematic for them in the long term. Thus, one of the research questions we examine is whether families have reduced sound financial management behaviors in response to financial declines during the recession.

Reducing sound financial management behaviors may also harm relationship quality. For example, consumer debt has been linked to both marital conflict and the likelihood of divorce (Dew, 2007; 2011). Consequently, this study not only examined the financial strategies that households have taken to cope with the recession, but also examined whether they were associated with relationship quality for cohabiting and married couples.

A final important question is whether financial behaviors can moderate the effect of financial declines on relationship happiness. Research has suggested that relationship behaviors, such as problem solving, can buffer couples from the negative effects of economic pressure (Conger, Rueter, & Elder, 1999). Although research has indicated that *relationship behaviors* can buffer couples from the stress of financial difficulties, no study has shown whether *sound financial management behaviors* might also help couples weather economic difficulties with their relationship quality intact. For example, couples who continue to engage in positive financial behaviors like cutting back consumption to stay within their budget may be happier in their relationship compared to couples who utilize consumer debt to maintain their standard of living. Alternatively, it might strain couple relations to try and maintain a high level of sound financial management behaviors during economically difficult times.

This research uses data from a national survey of married and cohabiting individuals to examine these three research questions. It contributes to studies on how financial management behavior is related to financial difficulties, as well as to the literature on the association between financial issues and relationship quality. Few studies have used national data to show how households have modified their sound financial management behaviors to cope with the recession. Further, this study is among one of few to examine how actual financial management behaviors are associated with relationship quality. Most studies in this area (e.g., Dew, 2007; Gudmunson, Beutler, Israelsen, McCoy, & Hill, 2007) use actual financial well-being, such as assets or negative financial events. Finally, this is one of the first studies to test whether sound financial management behaviors mediate and/or moderate the relationship between financial declines and relationship happiness. Because the data were collected in the summer of 2009, this study offers a unique opportunity to examine how financial issues during the recession impacted couple relationships.

## LITERATURE REVIEW AND THEORETICAL BACKGROUND

### *Financial Declines and Financial Management Behavior*

Our first aim was to examine how individuals' reports of economic changes during the recession related to their reports of sound financial management behaviors. We define sound financial management behaviors as those behaviors that will help individuals and families attain a more stable financial position and build their net worth (i.e., reduce financial liabilities and/or increase their financial assets). (Hilgert, Hogarth, & Beverley, 2003). Although we do not label these behaviors in a moralistic way (e.g., good or bad), these behaviors do help individuals and families keep their spending within their income limits, build financial assets, and reduce the amount of money that goes toward interest payments. In short, financial planners, counselors, and therapists encourage their clients to engage in these types of behaviors because they will help clients reach their own financial goals.

Although sound financial management behaviors may allow individuals and families to have a stable financial situation and to reach their long-term financial goals, they do involve a cost. For example, funds that are saved or used to pay down debt quickly are unavailable for immediate consumption uses. Thus, engaging in sound financial management may force individuals and families to live at a lower standard of living than their income might otherwise afford them.

Research shows that when households experience financial declines, such as a job loss, they often modify their financial behavior to cope with the change. Some couples may try to cope with financial declines by having one or both partners work more hours (Mattingly & Smith, 2010; Yeung & Hofferth, 1998). Alternatively, families may utilize strategies to reduce their consumption (James, Brown, Goodsell, Stovall, & Flaherty, 2010; Yeung & Hofferth, 1998). For example, families may decrease their expenditures by purchasing clothing at "second-hand" or "thrift" shops (James et al., 2010).

Although these types of behaviors exhibit sound financial management, other types of financial coping strategies, like relying on consumer debt, may not. The permanent income hypothesis asserts that individuals will engage in financial behaviors that fit the resources that they expect over their lifetime (Friedman, 1957). Thus, families experiencing an economic reversal may engage in behaviors that will allow them to maintain their standard of living based on their perceived permanent income by dissaving. That is, couples experiencing economic difficulties will either utilize lines of credit or spend down their savings to maintain the lifestyle to which they are accustomed. In line with these predictions, studies based on pre-recession data have shown that couples may turn to lines of consumer credit or may use liquid savings to maintain their standard of living when facing economic difficulties (Baek & DeVaney, 2010). Finally, not all households have savings that they can spend or lines of credit they can use to cope with financial difficulties. Some families may cope by not paying their bills regularly, or by failing to use a budget, etc. Because of the cost of engaging in sound financial management behaviors, financial

declines and feelings of economic pressure may negatively relate to sound financial management behavior.

Hypothesis 1: Reported financial declines and feelings of economic pressure are negatively associated with reports of sound financial management behavior (see Figure 1).

### ***The Family Stress Model: Economic Reversal and Relationship Quality***

A second research aim is to examine how financial difficulties during the 2007 – 2009 Recession were related to participants' relationship quality. Prior research has shown that as families experience economic difficulties, many experience increased marital distress. During the Great Depression, for example, families experienced negative financial events. This was linked to reports of many husbands becoming increasingly irritable and angry, reports of increased financial conflict, and reports of increased marital tension (Liker & Elder, 1983).

Studies of regional economic distress identified a similar process at work. During the farm crisis that engulfed much of the Midwest during the 1980s, researchers found that negative economic events were associated with increased feelings of economic pressure. This was then related to affective changes, such as increased depression and hostility, which were then associated with increased marital distress (Conger et al., 1990). The model whereby negative economic events lead to economic pressure, then worse affective states, and finally declines in marital quality is termed the family stress model of economic pressure and marital distress, or simply the family stress model (Conger & Elder, 1994). In addition to validating the family stress model using U.S. nationally-representative data (Dew, 2007; Gudmunson et al., 2007), researchers have validated the family stress model across countries and cultures (Kinnunen & Pulkkinen, 1998; Kwon, Rueter, Lee, Koh, & Ok, 2003). This study uses the family stress model as the main framework of this study. Because of the widespread economic difficulties that existed during the 2007 – 2009 Recession, financial declines may be negatively associated with relationship happiness. This association is likely to be mediated by reports of economic pressure, which will also be negatively associated with relationship happiness.

Hypothesis 2: Reports of financial declines are negatively associated with relationship happiness. This association will be mediated by reports of economic pressure, which will also be negatively associated with relationship happiness.

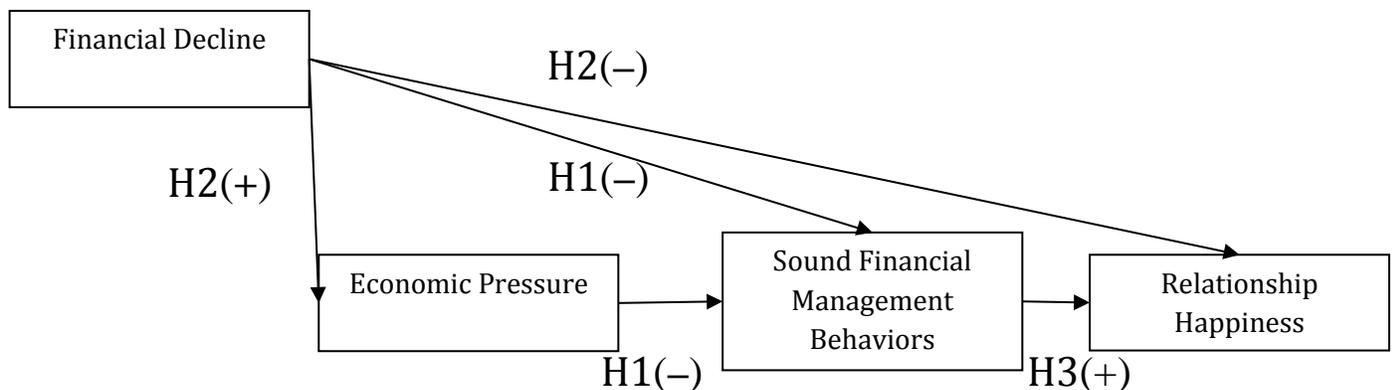
### ***Financial Behaviors as a Mediator***

Finally, this study examines the role of sound financial management behaviors in the family stress model. First, sound financial management behaviors may play a mediating role in the family stress model. As noted above, we expect couples may use sound financial management behaviors less often when faced with financial declines and the concomitant feelings of economic pressure.

Decreasing sound financial management behaviors, however, may explain why financial difficulties lead to lower relationship quality. Lower levels of savings and higher levels of debt are associated with lower marital quality, for example (Dew, 2007). Thus, as couples engage in less sound financial behaviors to cope with financial difficulties, they may experience lower levels of marital quality. Consequently, sound financial management behaviors may mediate the association between reported financial declines and relationship happiness and the association between economic pressure and relationship happiness. We use a path model to simultaneously test these three hypotheses (see Figure 1).

Hypothesis 3: Sound financial management behaviors mediate the association between financial decline, economic pressure, and relationship happiness.

**Figure 1. Financial behaviors within the Family Stress Model (based on Conger et al., 1990)**



*Figure 1.* Financial Behaviors within the Family Stress Model shows the proposed hypotheses where economic pressure and sound financial management behaviors mediate the relationship between financial decline and relationship happiness. The model was adapted from Conger et al., 1990.

### ***Financial Behaviors as a Moderator***

Instead of functioning as a mediator, sound financial management behaviors may moderate the association between financial difficulties and relationship happiness. That is, the relationship between financial declines, economic pressure, and relationship happiness may depend on individuals' financial management behavior. As noted above, some studies have investigated relationship dimensions that help couples weather financial strain with their relationship quality intact. Communication, problem solving, religiosity, and generosity toward one's spouse have all been found to buffer couples' relationship quality from economic strain (Dew & Jackson, 2012; Conger et al., 1999; Ellison, Henderson, Glenn, & Harkrider, 2011). However, the moderating ability of sound financial management behaviors remains untested.

The possible moderating role of sound financial management behaviors is ambiguous and leads to a competing hypothesis. Couples experiencing financial crises and economic pressure may be hard-pressed to save at the same levels that they were before, for example. It may be difficult for them to avoid increasing their levels of consumer credit. Further, savings kept for a rainy day is meant to be used during financial crises. Couples may use financial strategies that allow them to consume and live at the same standard of living precisely because these techniques help in the short term. Consequently, we hypothesize that couples who engage in less sound financial management behaviors report higher levels of relationship happiness during economic difficulties than those who maintain sound financial management.

On the other hand, engaging in less sound financial management behaviors may prove problematic. Assets are positively linked to a higher sense of well-being (Dew, 2007; Muntaner, Eaton, Diala, Kessler, & Sorlie, 1998) and negatively linked to the likelihood of additional financially problematic events occurring (Rothwell & Han, 2010). Consumer debt is also linked to higher levels of anxiety and economic pressure (Conger et al., 1993; Dew, 2007; Drentea, 2000). Further, financial assets are positively linked to relationship quality, whereas consumer debt is negatively linked to relationship quality (Dew, 2007; 2011). Although none of the aforementioned studies have explicitly examined financial behaviors, they would suggest that couples who have high levels of sound financial management behaviors during negative economic events may have higher levels of relationship happiness. We hypothesize, then, that couples who engage in more sound financial management behaviors report higher levels of higher levels of relationship happiness during economic difficulties than those who engage less in sound financial management.

Hypothesis 4: Sound financial management behaviors moderate the association between financial decline, economic pressure, and relationship happiness.

## **METHOD**

### ***Data and Sample***

Data were drawn from the Familial Response to Financial Instability Study. The purpose of collecting the data was to create and psychometrically validate a measure of sound financial management behaviors in a prior study (Dew & Xiao 2011). The survey also included questions about participants' financial changes during the recession, their feelings of economic pressure, and their relationship happiness.

Data were collected by a survey research firm (Knowledge Networks). This firm used stratified random-digit dialing and stratified random address-based sampling to create a national sample of over 1,000 individuals. Participants completed the survey via the internet. Individuals who did not have internet connectivity were provided the means to do so. The response rate of this survey was 66%.

Data collection occurred during the summer months of 2009. Respondents answered questions related to their economic status, financial management behaviors, relationship happiness, and demographic characteristics. The present study used all individuals in the larger study who were either married or cohabiting and were of working age (i.e., 18 – 64 years). The final sample size was 465 individuals. We restricted the sample to those who were cohabiting or married because they were the only participants asked about their relationship happiness. We used only the working-aged participants because prior studies have shown that the family stress model sometimes operates differently for retirement-aged individuals (Dew & Yorgason, 2010).

### **Measures**

**Dependent variable.** The dependent variable was an item that asked participants to rate their relationship happiness “overall.” The response set ranged from 1 (*very unhappy*) to 7 (*very happy*). Global assessments of relationship happiness have been shown to have adequate psychometric properties in large samples (Johnson, 1993).

**Independent variables.** Participants reported how their finances had changed in the past year (e.g., between summer 2008 and summer 2009). The range of responses was from 1 (*have gotten much worse*) to 5 (*have gotten much better*). We reverse coded the item so that higher scores represented change for the worse.

Like prior studies of the family stress model, we included a measure of economic pressure. The item we used asked participants how often they worried about not being able to pay bills or meet necessary expenses. The response set ranged from 1 (*never*) to 5 (*all the time*).

A scale of financial management behaviors served as the mediator and moderator variable. This scale – the Financial Management Behavior Scale (FMBS) (see Dew & Xiao, 2011) – measures 15 financial behaviors that range from sound cash management (e.g., keeping a written or electronic budget/spending plan), to savings and investments (e.g., saving for a long-term goal), and from credit management (e.g., maxing out one’s credit card) to insurance behaviors (e.g., maintaining or purchasing a health insurance plan). Each of the 15 items ranged from 1 (*never*) to 5 (*always*) engaging in the financial behavior in the past six months (or one year for insurance behaviors). We reverse coded the risky credit behaviors so that higher scores represented positive credit behaviors. We then took a mean of the 15 items to create the scale.

Research has previously validated the FMBS as a measure of financial behaviors (Dew & Xiao, 2011). Because this study only used married or cohabiting couples, and the scale was validated using a national sample of adults (whether in a relationship or not), we examined whether the FMBS was still a reliable measure. The Chronbach’s alpha for the FMBS in this sample was .83 – an adequate level of reliability. Further, the savings behavior questions of the FMBS were positively correlated with participants’ reports of their actual levels of liquid savings ( $r = .55, p < .001$ ) and the debt management behavior questions

were negatively correlated with participants' reports of their consumer debt levels ( $r = -.48, p < .001$ ). This suggests that the FMBS maintains adequate reliability and validity when it is used solely with married and cohabiting individuals.

In the path models (see below), we controlled for variables that might be associated with relationship happiness. These variables included number of children in the home and age. We also controlled for financial variables so that we could measure the different associations regarding financial management behaviors without participants' actual financial status as a confounding variable. These variables were completed education, income, consumer debt, liquid savings, and employment status. Participants' completed level of education was measured on a 13-point scale (from 2–14). A score of 2, for example, signified completing 2<sup>nd</sup>, 3<sup>rd</sup>, or 4<sup>th</sup> grade. A score of 14 signified completing a professional or doctoral degree. Income was measured on a 19-point scale from 1 (*less than \$5000*) to 19 (*\$175,000 or more*). The question on consumer debt asked participants how much money they had outstanding in credit card debt, non-vehicle installment loans, and past-due bills. Savings was a measure of couples' total amount of money in savings accounts, government bonds, certificates of deposits, etc. These variables were measured on a scale from 1–9, with 1 being "*none or \$0*" and 9 being "*\$100,000 or more.*"

The measures had between 0% and 6% of the responses missing. We examined results using both listwise deletion and multiple imputation. Multiple imputation is generally less likely to bias samples than listwise deletion (Rubin, 1987). In multiple imputation, the statistical software generated five data sets with plausible values in place of the missing values. The software then synthesized the analyses that we ran using the multiply imputed sets. Our findings, however, suggested that the results from the models using listwise deletion were not substantially different than the results generated using multiple imputation. Consequently, we report the listwise deleted models.

## ***Analyses***

We used path modeling (using AMOS 20) to examine the association between financial decline, economic pressure, sound financial management behaviors, and relationship happiness. Path analysis allows multiple regression equations to be tested simultaneously. For example, Figure 1 shows three regressions that will be tested at the same time: relationship happiness as a dependent variable with sound financial management behaviors, economic pressure, and financial declines as predictors, sound financial management behaviors as a dependent variable with financial decline and economic pressure as predictors, and economic pressure as a dependent variable with financial decline as a predictor. Path analysis also gives measures of model fit that shows how well the data fit the hypothesized model.

Path analysis and the related technique of structural equation modeling have been common analytical tools in testing the family stress model (e.g., Conger et al., 1990). Although structural equation models do have some advantages over path modeling, we did not conduct one because of data limitations. We did not have multiple variables for any of the constructs except the financial management behavior scale. Further, path modeling

allowed us to easily test the moderation hypotheses. Moderation models can be more difficult to test in structural equation modeling (Schumacker & Rigdon, 1995).

Moderation models are different from mediation models in that moderation models test whether the relationship between an independent variable and a dependent variable depends on a second independent variable (Baron & Kenny, 1986). In this study, for example, we have hypothesized that the effect of economic pressure on relationship satisfaction depends on participants' sound financial management behaviors. That is, economic pressure may have a smaller or larger effect on relationship satisfaction depending on participants' sound financial management behaviors. A mediation model, by contrast, tests whether the effects of an independent variable on a dependent variable work through a second independent variable. In this study, we hypothesized that the negative effects of economic pressure on relationship satisfaction work through sound financial management behaviors by decreasing those behaviors.

We tested the mediating role of financial management behaviors in the family stress model using three models (Baron & Kenny, 1986). In other words, we ran three separate path analyses to test whether some of the relationship between financial declines, economic behavior, and relationship happiness indirectly worked through financial management behavior. In the first model, we regressed participants' financial management behavior scale scores onto financial declines and economic pressure. In the second model, we examined whether financial declines and economic pressure were associated with relationship happiness. Finally, we added the financial management behavior scale score as a mediator between financial change, economic pressure, and relationship happiness (for the final model, see Figure 1). Three conditions would show evidence of a mediation model: (a) financial decline and/or economic pressure predicting sound financial management behavior, (b) sound financial management behaviors predicting relationship happiness, and (c) adding financial management behaviors reducing the association among financial decline, economic pressure, and relationship happiness (Baron & Kenny, 1986).

In a fourth model, we added two interaction variables to test our moderation hypotheses. To create the interaction terms, we mean-centered (i.e., subtracted the mean from each score) financial decline, economic pressure, and the FMBS. We then multiplied participants' mean-centered financial decline score and their mean-centered FMBS score for the first interaction term. We created the second interaction term by multiplying the mean-centered economic pressure score with the mean-centered FMBS score. If these variables were significant predictors of relationship happiness, we considered that to be proof of the moderation effects.

## RESULTS

### *Descriptive Statistics*

Table 1 shows the descriptive statistics for the sample. Participants were generally happy in their relationship, with an average of 5.35. Many of them reported financial

declines over the year prior to the survey; the mean was 3.3 out of 5. The mean financial management behavior score was 3.58. The mean savings was 4.40. This corresponds to a savings level between 4 (*\$3,000 – under \$5,000*) and 5 (*\$5,000 – under \$10,000*). The mean for consumer debt was 4.11, which represents about the same level for savings because they are on the same scale. The average income was at 12.34. Income was measured on a 19-point scale with an income level of 12 meaning an income of between \$50,000 and \$59,999, and an income of 13 meaning between \$60,000 and \$74,000. On average, households had one child in the home and the mean age was 43.36 years. The mean completed education was 10.11, which corresponds to having completed some college.

**Table 1**  
**Descriptive statistics**

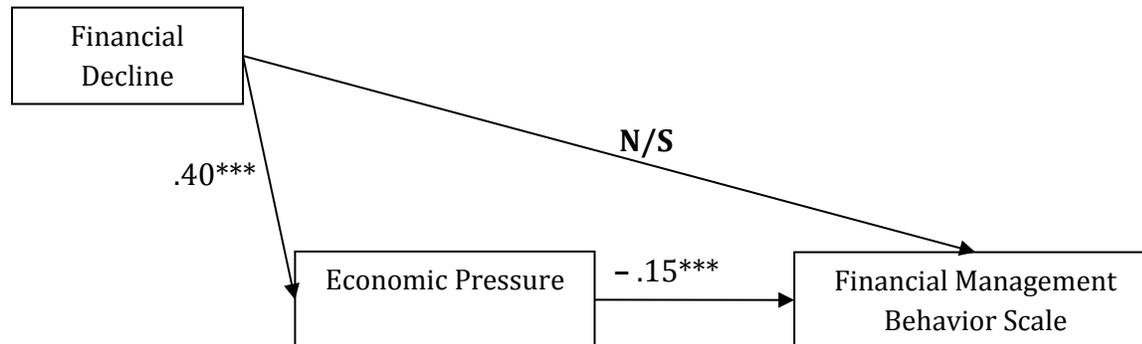
	<i>Mean</i>	<i>SD</i>	<i>Range</i>	<i>Explanation</i>
Relationship Happiness	5.35	1.64	1 – 7	Very Unhappy – Very Happy
Reported Financial Declines	3.35	1.13	1 – 5	Financial situation has gotten much better – Financial situation has gotten much worse
Financial Management Behavior Scale	3.58	.74	1.5 – 5	Never – Always engage in those financial management behaviors
Feelings of Economic Strain	3.16	1.21	1 – 5	Never – Almost all the time
Liquid Savings	4.40	2.70	1 – 9	None – \$100,000 or more
Consumer Debt	4.11	2.40	1 – 9	None – \$100,000 or more
Income	12.34	3.55	1 – 19	Less than \$5,000 - \$175,000 or more
Number of Children in the Household	.88	1.21	0 – 8	--
Age	43.36	12.76	19 – 64	--
Completed Education	10.11	1.98	2 – 14	2 <sup>nd</sup> , 3 <sup>rd</sup> , or 4 <sup>th</sup> grade - Professional or Doctoral Degree

***Financial Management Behavior as a Mediator***

Our first set of analyses examined whether sound financial management behavior mediated the association between feelings of economic pressure and relationship happiness. We first tested how financial declines and economic pressure were associated with the FMBS. Model 1, in both Figure 2 and Table 2, show the results. Financial decline was positively associated with economic pressure ( $b = .40, p < .001$ ), but was not directly associated with the FMBS scores. Economic pressure was negatively associated with participants’ FMBS scores ( $b = -.15, p < .001$ ). The more economic pressure participants reported, the less they reported engaging in sound financial management. The chi-square was not significant, indicating a good fit between the model and the data ( $\chi^2 = 4.32, df = 3$ ). Other indices also suggested a good model fit (CFI = .99, IFI = .99, RMSEA= .03). These findings partially support Hypothesis 1 that financial declines and economic pressure

would be negatively related to sound financial management behaviors.

**Figure 2. Financial decline, economic pressure, and the FMBS**



*Figure 2.* Coefficients are unstandardized. Control covariates not shown. \* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$

In the next model, we regressed relationship happiness onto financial decline and economic pressure without the FMBS (see Model 2 in Figure 3 and Table 2). The data fit the specified model fairly well; the chi-square was not significant (4.34,  $df = 3$ ). Other indices of model fit were acceptable (CFI = .99, IFI = .99, RMSEA = .03). Without the FMBS in the model, economic pressure was negatively associated with relationship happiness ( $b = -.15$ ,  $p < .05$ ). That is, the more economic pressure that participants reported, the lower their reported relationship satisfaction, on average. Further, financial decline predicted economic pressure ( $b = .40$ ,  $p < .001$ ), but economic pressure did not fully mediate the association between financial decline and relationship happiness ( $b = -.27$ ,  $p < .001$ ). Hypothesis 2 was supported, indicating that financial decline and economic pressure were associated with relationship happiness with the exception that the mediating role of economic pressure was not full mediation.

**Figure 3. Results of the Family Stress Model without financial management behaviors**

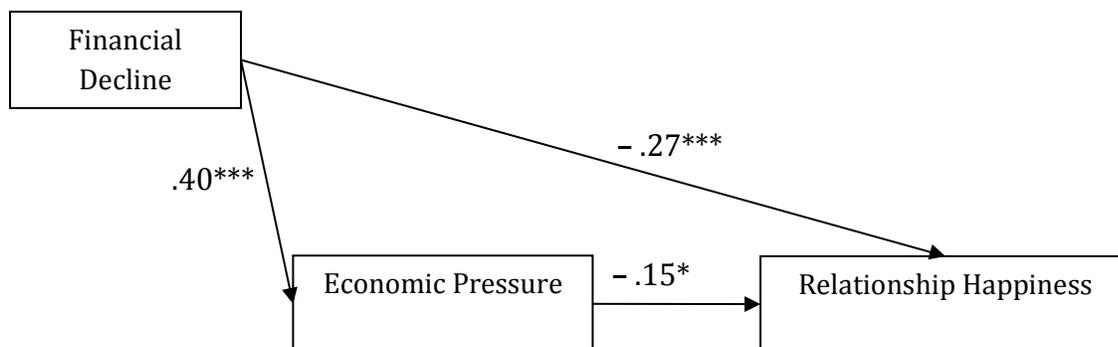


Figure 3. Coefficients are unstandardized. Control covariates not shown. \* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$

The fourth model added the FMBS score (see Figure 4 and also Table 2, Model 3) to test Hypothesis 3. The model fit was similar to the first two models ( $\chi^2 = 4.34$ ,  $df = 3$ ,  $p > .05$ , CFI = .99, IFI = .99, RMSEA = .04). With the FMBS score in the model, economic pressure was no longer a statistically significant predictor of relationship happiness, though financial decline was ( $b = -.26$ ,  $p < .001$ ). Financial management behavior positively predicted relationship happiness ( $b = .34$ ,  $p < .01$ ). These findings support the idea that financial management behaviors fully mediate the association between economic pressure and relationship happiness. However, it did not mediate financial decline.

Figure 4. Results of financial behaviors in the Family Stress Model

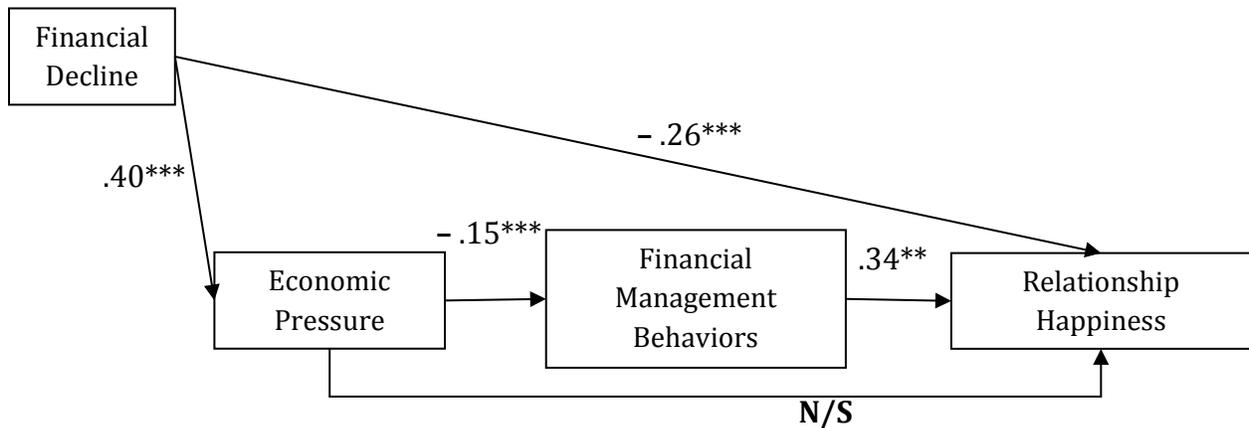


Figure 4. Coefficients are unstandardized. Control covariates not shown. \* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$

**Table 2**  
**Mediation models**

	Model 1			Model 2			Model 3		
	<i>b</i>	<i>SE</i>	$\beta$	<i>b</i>	<i>SE</i>	$\beta$	<i>b</i>	<i>SE</i>	$\beta$
<i>Predicting Economic Pressure</i>									
Financial Decline	.40***	.04	.37	.40***	.04	.37	.40***	.04	.37
Pseudo-R <sup>2</sup> (Squared Multiple Correlations)		.30			.30			.30	
<i>Predicting Financial Management Behavior</i>									
Financial Decline	-.04	.03	-.06	-	-	-	-.04	.03	-.06
Economic Pressure	-.15***	.03	-.25	-	-	-	-.15***	.03	-.25
Pseudo-R <sup>2</sup> (Squared Multiple Correlations)		.47						.47	
<i>Predicting Relationship Happiness</i>									
Financial Decline	-	-	-	-.27***	.07	-.19	-.26***	.07	-.18
Economic Pressure	-	-	-	-.15*	.07	-.11	-.09	.07	-.07
Financial Management Behavior	-	-	-	-	-	-	.34**	.13	.16
Pseudo-R <sup>2</sup> (Squared Multiple Correlations)		-			.12			.13	

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

Note. Coefficients for the control covariates are omitted for the sake of readability.

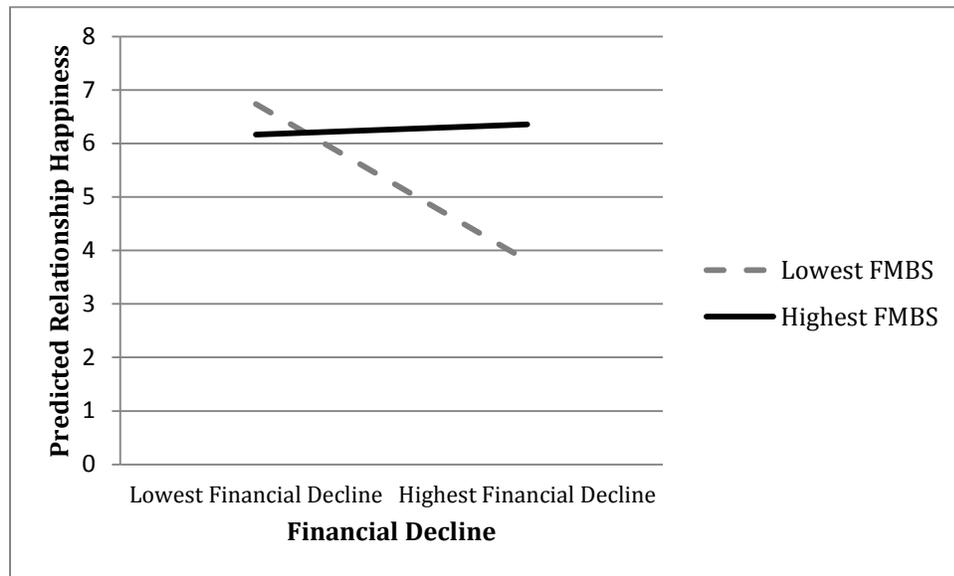
**Financial Management Behavior as a Moderator**

Our final analyses examined whether financial management behavior moderated the association between financial decline, economic pressure, and relationship happiness (Hypothesis 4). To conduct the analysis, we added the interaction between reports of financial decline and the FMBS score to the model shown in Figure 4. We also added the interaction between reported economic pressure and the FMBS interaction term. The economic pressure by FMBS interaction term was not associated with relationship happiness. The financial decline by FMBS interaction term was positively associated with relationship happiness ( $b = .20, p < .05$ ).

Figure 5 shows predicted values of relationship happiness for four hypothetical individuals, including (a) one with the lowest levels of financial decline and lowest FMBS scores, (b) one with the lowest levels of financial decline and the highest FMBS scores, (c) one with the highest levels of financial decline and the lowest FMBS scores and (d) one

with the highest levels of financial decline and the highest FMBS scores. We also assumed that each hypothetical case had one child – the only control covariate that was a statistically significant predictor of relationship happiness. Figure 5 suggests that participants' relationship happiness was reasonably stable when individuals were practicing high levels of sound financial management behaviors. It did not really matter whether these individuals experienced low or high levels of financial decline during the recession. However, for those who practiced low levels of sound financial behaviors, their relationship happiness was predicted to be much lower when they experienced high levels of financial decline during the recession. Therefore, hypothesis 4 was partially supported.

**Figure 5. Predicted levels of relationship happiness by financial decline and financial management behavior**



## DISCUSSION

### *Findings and Research Implications*

This study examined the relationships among financial decline, economic pressure, sound financial management behaviors, and relationship quality at the end of the 2007 – 2009 Recession. It also examined whether sound financial management mediated and/or moderated the association between financial declines, economic pressure, and relationship happiness. We framed the analyses using the family stress model of economic and marital distress. To our knowledge, this is one of the first studies that examines how sound financial management behaviors are associated with relationship happiness.

Our first hypothesis was that financial difficulties and economic pressure would be associated with lower levels of sound financial management behavior. We found that reports of financial decline were only indirectly related to financial management behaviors at the end of the recession. That is, higher levels of financial declines were associated with

higher levels of feelings of economic pressure. Feelings of economic pressure were then negatively associated with reports of sound financial management behavior. These findings suggest that families can experience financial decline, but still maintain sound financial management if they do not also experience feelings of economic pressure.

At the same time, the findings suggest that feelings of economic pressure may be important predictors of sound financial management behavior. When individuals and families feel that they are having a hard time meeting their expenses, they may decrease their sound financial management. Sound financial management may become a “luxury” that they feel they can no longer afford. Even though families might be financially better off in the long run by continuing sound financial management, the emotional pressures of feeling like they cannot meet their expenses may prevent them from doing so.

One question that naturally arises from this finding is the directionality of the relationship between economic pressure and financial behaviors. Other studies (Dew, 2007) suggested that sound financial management behaviors should reduce economic pressure. It is possible that financial management behavior predicts economic pressure. Given that our data is cross-sectional, we could not test this question with the present data. Future research using longitudinal data would be necessary to thoroughly examine the likely reciprocal relationship between sound financial management behaviors and feelings of economic pressure.

Our second hypothesis was that reports of financial decline during the 2007 – 2009 Recession and economic pressure would be associated with lower levels of relationship happiness. We did find that individuals who reported that their financial situation had become worse over the past year had lower relationship happiness than those whose financial situation had stayed the same or improved. Further, individuals who experienced increased feelings of economic pressure reported lower levels of relationship happiness. This finding is similar to other studies (e.g., Conger et al., 1990), suggesting that negative financial events and economic pressure take their toll on relationship quality. One unique explanation for this finding is that as individuals experienced greater feelings of economic pressure, they used fewer sound financial management behaviors. As a result, relationship happiness was lowered.

This relates to our third hypothesis that sound financial management would mediate the association between feelings of economic pressure and relationship happiness. As just described, we found that sound financial management fully mediated the association. That is, without financial management behaviors in the model, economic pressure was negatively associated with relationship happiness. However, when financial management behaviors were in the model, economic pressure was not associated with relationship happiness. This finding suggests that when individuals experienced financial declines, they practiced lower levels of sound financial management to maintain the lifestyle they are accustomed to living. Engaging in less sound financial management behaviors was also associated with lower relationship happiness. Thus, cutting back on sound financial management behaviors during feelings of economic pressure might help

individuals maintain their lifestyle, but they may also pay a relationship cost.

The analysis of this question also allowed us to examine how financial behaviors were associated with relationship happiness. We found that sound financial management behaviors were associated with increased relationship happiness. This is one of the first studies to find a direct link from financial behaviors to relationship happiness even after controlling for participants' financial status. This result could be related to couples engaging in sound financial management behaviors progressing toward jointly held financial goals. As couples realize their financial goals, they may be more satisfied in their relationship. Alternatively, engaging in sound financial management may simply allow individuals and couples to feel that they have more control over their lives.

### ***Implications for Practice***

These findings have implications for the practice of financial advisers and relationship therapists. First, the fact that financial reversals were not directly associated with sound financial management behavior, but that feelings of economic pressure were directly associated may suggest an avenue of intervention. Practitioners desiring to help individuals develop more sound financial management behaviors might have additional success as they address the negative emotions that sometimes accompany problematic financial situations. If emotions – rather than perceived financial reality – are key to helping individuals engage in more sound financial management, then a practitioner might help individuals and couples who are going through a difficult financial situation to mitigate or control feelings of stress. Clients may then be more likely to engage in or continue to engage in sound financial management, rather than reducing sound financial management to cope with their emotional stress.

Like other studies, the findings also suggest that financial difficulties associated with macroeconomic problems can impact relationships. From studies of the Great Depression (Liker & Elder, 1983), to the Farm Crisis of the 1980s (Conger et al., 1990; Conger & Elder, 1994), to the most recent recession, macroeconomic difficulties seem to harm couple relationships by increasing feelings of economic pressure. This insight is likely well-known among both financial and relationship practitioners who see the results of continued widespread financial difficulties among their clients. The implication is that partnered clients may be experiencing stress from two sources, a decline in their financial situation and a decline in their relationship quality. Practitioners who help couples build their relationship quality may find it helpful to seek the advice of a financial practitioner who can help them understand the complexities of family finance so that they can better assist their clients and vice-versa.

A more unique implication from this study is that some of the relationship difficulties couples experience because of feelings of financial stress actually arise through decreased sound financial management behaviors. The path model suggested that individuals who had feelings of economic pressure were less likely to practice sound financial management. Yet, practicing lower levels of financial management behaviors may lead to experiences of decreased relationship happiness. One previous study (Aniol &

Snyder, 1997) supports this notion, suggesting relationship and financial difficulties can be comorbid. This finding is complemented by the finding that sound financial behaviors moderate the experience of a worsening finances. Individuals who reported declines in finances during the recession, but who maintained sound financial management, reported relationship happiness levels that were the same as those who did not experience financial declines.

Cutting back on sound financial management behaviors to cope with feelings of economic stress seems to be precisely the wrong strategy. Practitioners may use these findings as additional evidence as to why clients should practice sound financial management behaviors during times of economic stress. When clients experience economic reversals and/or economic pressure, it would help them financially and relationally if they could maintain sound financial management behaviors. Engaging in sound financial management might help individuals improve their financial and relationship positions during times of economic pressure.

This finding may also have implications for those who work to help couples improve their relationship happiness. One way to enhance relationship happiness would be to practice sound financial management behaviors more frequently. Therapists who work with married and cohabiting couples might be able to leverage financial issues to improve the relationship (Shapiro, 2007; Stanley & Einhorn, 2007; Zimmerman, 2010). Alternatively, some couples may need the assistance of a financial advisor who can help them develop sound financial behaviors. Although this study did not “prove” that sound financial behaviors improve relationships for couples who are facing financial difficulties, the findings insinuate this idea (see also Zimmerman, 2010).

### ***Limitations***

Limitations exist in this study. First, the data are cross-sectional, limiting the ability to draw cause and effect assertions. We drew our hypotheses and path models from a strong theoretical model that has been verified many times. We recognize, however, that we still cannot make conclusive statements about the directions of the effects. For example, it may be that feelings of economic pressure influence the likelihood of participants reporting financial declines. Alternatively, marital happiness might actually bring about more sound financial behaviors. Couples who are happy and stable in their relationships may be more likely to invest in it by accumulating wealth, etc. (Finke & Pierce, 2006; Zagorsky, 2003).

Measurement limitations also exist. As noted above, we only had one item to measure the majority of the variables. Consequently, they may have lower levels of reliability than they would if we had multiple items for each construct.

Finally, some of our findings may still be a result of selection. For example, the association between financial management behaviors and relationship happiness may actually be explained by a third variable of conscientiousness. That is, individuals who are

globally conscientious in their lives may manage their finances in a more sound manner and likewise attend to their relationships more. This might increase their levels of relationship happiness. We also did not have measures of relationship duration. Individual who had been in their relationships longer may have happier relationships and be more likely to utilize sound financial management. Although we could differentiate between the cohabiting and married couples, controlling for relationship status (and presumably relationship duration to some extent) did not change the findings. Due to cost constraints, we were not able to ask every question that we would have liked and so we were not able to control all possible relevant variables.

### ***Conclusion***

Although these limitations exist, this study contributes to the literature in a number of ways. It is the first study that we are aware of that used a national survey to examine the associations among financial problems during the 2007 – 2009 Recession, financial management behaviors, and relationship happiness. It also included both married couples and cohabiting couples. Further, it is one of the first studies to demonstrate that financial behaviors are associated with relationship happiness. Hopefully future studies will continue to examine the relationship between financial behaviors and relationship quality. The insights garnered from such studies would be particularly useful both to researchers and to practitioners who work with couples.

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## REFERENCES

- Aniol, J. C., & Snyder, D. K. (1997). Differential assessment of financial and relationship distress: Implications for couple therapy. *Journal of Marital and Family Therapy, 23*, 347–352.
- Baek, E., & DeVaney, S. (2010). How do families manage their economic hardship? *Family Relations, 59*, 358–368.
- 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.
- Conger, R. D., Conger, K. J., Elder, G. H., Jr., Lorenz, F. O., Simons, R. L., & Whitbeck, L. B. (1993). Family economic stress and adjustment of early adolescent girls. *Developmental Psychology, 29*, 206–219.
- Conger, R. D., & Elder, G. H., Jr. (1994). *Families in troubled times: Adapting to change in rural America*. New York: Walter de Gruyter.
- Conger, R. D., Elder, G. H., Jr., Lorenz, F. O., Conger, K. J., Simons, R. L., Whitbeck, L. B., ... Mellby, J. N. (1990). Linking economic hardship to marital quality and instability. *Journal of Marriage and the Family, 52*, 643–656.
- 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.
- Dew, J. P. (2007). Two sides of the same coin? The differing roles of assets and consumer debt in marriage. *Journal of Family and Economic Issues, 28*, 89–104.
- Dew, J. P. (2011). The association between consumer debt and the likelihood of divorce. *Journal of Family and Economic Issues, 32*, 554–565.
- Dew, J. P., & Jackson, M. (2012, November). *What protects couples' marital quality during financial strain?* Paper presented at the annual conference of the National Council on Family Relations, Phoenix, AZ.
- Dew, J. P., & Xiao, J. J. (2011). The Financial Management Behavior Scale: Development and validation. *Journal of Financial Counseling and Planning, 22* (1), 19–35.
- Dew, J. P., & Yorgason, J. (2010). Economic pressure and marital conflict in retirement-aged couples. *Journal of Family Issues, 31*, 164–188.
- Drentea, P. (2000). Age, debt, and anxiety. *Journal of Health and Social Behavior, 41*, 437–450.
- Ellison, C. G., Henderson, A. K., Glenn, N. D., & Harkrider, K. E. (2011). Sanctification, stress, and marital quality. *Family Relations, 60*, 404–420.
- Finke, M. S., & Pierce, N. L. (2006). Precautionary savings behavior of maritally stressed couples. *Family and Consumer Sciences Research Journal, 34*, 223–240.
- Friedman, M. (1957). *A theory of the consumption function*. Princeton, NJ: Princeton University Press.
- Gudmunson, C. G., Beutler, I. F., Israelsen, C. L., McCoy, J. K., & Hill, E. J. (2007). Linking financial strain to marital instability: Examining the roles of emotional distress and marital interaction. *Journal of Family and Economic Issues, 28*, 357–376.

- Hilgert, M. A., Hogarth, J. M., & Beverly, S. G. (2003). Household financial management: The connection between knowledge and behavior. *Federal Reserve Bulletin*, *89*, 309–322.
- Hurd, M. D., & Rohwedder, S. (2010). *Effects of the financial crisis and great recession on American households* (NBER Working Paper No. 16407). Retrieved from National Bureau of Economic Research website: <http://www.nber.org/papers/w16407>
- James, S., Brown, R., Goodsell, T., Stovall, J., & Flaherty, J. (2010). Adapting to hard times: family participation patterns in local thrift economies. *Family Relations*, *59*, 383–395.
- Johnson, D. R. (1993). *Are single-item measures of marital quality valid? The case of marital happiness*. Paper presented at the annual conference of the National Council on Family Relations, Baltimore MD.
- Kinnunen, U., & Pulkkinen, L. (1998). Linking economic stress to marital quality among Finnish marital couples. *Journal of Family Issues*, *19*, 705–724.
- Kwon, H.-K., Rueter, M. A., Lee, M.-S., Koh, S., & Ok, S. W. (2003). Marital relationships following the Korean economic crisis: Applying the family stress model. *Journal of Marriage and Family*, *65*, 316–325.
- Liker, J. K., & Elder, G. H., Jr. (1983). Economic hardship and marital relations in the 1930s. *American Sociological Review*, *48*, 343–359.
- Mattingly, M., & Smith, K. E. (2010). Changes in wives' employment when husbands stop working: A recession-prosperity comparison. *Family Relations*, *59*, 343–357.
- Muntaner, C., Eaton, W. W., Diala, C., Kessler, R. C., & Sorlie, P. D. (1998). Social class, assets, organizational control and the prevalence of common groups of psychiatric disorders. *Social Science and Medicine*, *42*, 2043–2053.
- Rothwell, D. W., & Han, C.-K. (2010). Exploring the relationship between assets and family stress among low-income families. *Family Relations*, *59*, 396–407.
- Rubin, D. B. (1987). *Multiple imputation for non-response in surveys*. New York: Wiley.
- Schumaker, R. E., & Rigdon, E. (1995, April). Testing interaction effects in structural equation models. Paper presented at the annual meeting of the American Educational Research Association, San Francisco, CA.
- Shapiro, M. (2007). Money: A therapeutic tool for couples therapy. *Family Process*, *46*, 279–291.
- Stanley, S. M., & Einhorn, L. A. (2007). Hitting pay dirt: Comment on "Money: A therapeutic tool for couples therapy. *Family Process*, *46*, 293–299.
- U.S. Courts (2010). *Bankruptcy statistics* Retrieved October 4, 2010, from <http://www.uscourts.gov/Statistics/BankruptcyStatistics.aspx>
- 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.
- Zagorsky, J. L. (2003). Marriage and divorce's impact on wealth. *Journal of Sociology*, *41*, 406–424.
- Zimmerman, K. J. (2010). *The influence of a financial management course on couples' relationship quality* (master's thesis). Retrieved from Proquest UMI. (Publication No. 1476363)