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Deadric T. Williams

University of Nebraska-Lincoln, dwilliams9@unl.edu

Jacob Cheadle

University of Nebraska-Lincoln, jcheadle2@unl.edu

Bridget J. Goosby

University of Nebraska-Lincoln, bgoosby2@unl.edu

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Hard Times and Heart Break: Linking Economic Hardship and Relationship Distress

Deadric T. Williams, Jacob E. Cheadle, and
Bridget J. Goosby

University of Nebraska–Lincoln, Lincoln, NE, USA

Corresponding author — Deadric T. Williams, University of Nebraska–Lincoln, 731
Oldfather Hall, Lincoln, NE 68558-0324, USA; email dwilliams0881@gmail.com

Abstract

We used the Fragile Families and Child Well-Being Study to examine an integrated mediational model linking economic hardship to relationship distress. Depressive symptoms, partner's discord, parenting stress, and co-parenting are combined into a joint model linking economic hardship to relationship distress among mothers and fathers in intimate relationships. Although economic hardship is significantly associated with each mediating factor, only discord is associated with both relationship distress and dissolution in the full model. Moreover, comparisons using multigroup structural equation modeling indicate that while economic hardship is associated with higher discord among both mothers and fathers, the influence is substantially larger among fathers. We suggest that the link between hardship and relationship distress is largely contingent on interactional processes (i.e., discord) and how mothers perceive their child's father in the midst of economic hard times.

Keywords: family stress, parenting stress, economic hardship, interpersonal discord, relationship distress

The ongoing economic crisis has affected millions of Americans over the past several years. The poverty rate increased from 11.3% in 2000 to 15.1% in 2010, and the total number of people in poverty (46.2 million) marks the largest since estimates have been published (DeNavas-Walt, Proctor, & Smith, 2011). This rise in poverty reflects a dramatic increase in unemployment, which rose from 4% in 2000 to 9.1% in 2011, and an accompanying drop in real median household income (DeNavas-Walt et al., 2011). These statistics are alarming given the ramifications the economy has on children and families (Edin & Kissane, 2010). Not surprisingly, there is a long tradition of family studies highlighting the effects of unfavorable economic conditions (i.e., poverty, unemployment, economic hardship, etc.) on couples' relationship quality and distress (for a review, see Conger, Conger, & Martin, 2010). This prior research documents that socio-economic status affects the stability of married couples (Amato, Booth, Johnson, & Rogers, 2007) and cohabitating unions (Wu & Pollard, 2000), while showing that favorable family economic conditions lead to better relationship quality and reduced divorce risk (Orbuch, Veroff, Hassan, & Horrocks, 2002; Stanley, Amato, Johnson, & Markman, 2006).

We build on this prior work by examining how economic hard times affect parents' depressive symptoms, parenting stress, interpersonal discord, and coparenting, and in turn, how these factors lead to relationship distress among married and cohabiting couples. Given that family units are composed of multiple members, we operationalized these mechanisms for mothers and fathers separately. We do this, in part, because men and women cope and respond to economic stress differently (Rosenfield & Mouzon, 2013). We know less, however, about the extent to which differences emerge as a response to hardship between mother and fathers on personal and familial processes. Although prior studies have focused on a small set of mechanisms linking hardship with relationship distress (e.g., Conger et al., 2010), other important family processes are not as well established. Using longitudinal data from the Fragile Families and Child Well-Being Study, the goal of this article is thus to present and evaluate an integrated parallel process model that combines several family mechanisms hypothesized to link economic hardship with relationship distress. Accordingly, we address three primary research questions: (a) Do depressive symptoms, interpersonal discord, parenting stress, and coparenting mediate relationships between economic hardship and relationship distress? (b) Which processes are most important? (c) Are there gender differences in the effects of economic hardship and the mediating pathways on relationship distress between mothers and fathers?

Literature Review

Theoretical Frameworks

Stress is generally the response to demands experienced as a result of a stressor event (Price, Price, & McKenry, 2010). Economic hardship has been shown to be one critical stressor with far reaching impacts on the lives of individuals and families (Edin & Kissane, 2010; Seccombe, 2000). Indeed, scholars have long argued that family stress can result in family crisis and strain (Lavee, Hamilton, & Patterson, 1985; McLoyd, 1998). The family stress model of economic strain explicitly links economic hardship to marital distress through a series of mediating family processes including parents' depressed mood, spousal conflict, and relationship quality (Conger et al., 2010; Conger & Elder, 1994; McLoyd, 1998). The model proposes that higher economic hardship levels (i.e., low income, high debt to asset ratio, and negative economic events) lead to economic pressure for couples. Consequently, couples experiencing economic pressure have greater emotional distress risks (e.g., depression; Conger et al., 2002; Mistry, Vandewater, Huston, & McLoyd, 2002). Subsequently, couples' emotional distress increases conflict between partners, and conflict results in poor relationship quality and distress within romantic relationships (Conger et al., 2002; Conger, Ge, & Lorenz, 1994; Gudmunson, Beutler, Israelsen, McCoy, & Hill, 2007).

Although the family stress model has been used to understand how economic hardship affects a range of family processes such as parenting behaviors and child adjustment (Conger et al., 2002; Goosby, 2007; Gutman, McLoyd, & Tokoyawa, 2005), the differential contributions of *family* stress along with other family processes such as *parenting* stress and *coparenting* has not been well established. Thus, we present an integrated parallel process model that builds on features of the family stress model by incorporating additional family processes to create a more holistic depiction of the mediating mechanisms that connect economic hardship and relationship distress.

The parenting stress framework proposes that parent and child characteristics, interactions between couples, characteristics of the environment, and the interplay between these factors are important to the formation of stress arising from the parenting role itself (Abidin, 1990, 1992). Notably, parenting stress has been often used in isolation of other stressors (e.g., Manuel, Martinson, Bledsoe-Mansori, & Bellamy, 2012). Yet there are reasons to believe that parenting stress should be considered along with family stress since experiencing economic hard times increases parenting stress (Chien & Mistry, 2012) and subsequently affects partnership quality (Lavee, Sharlin, & Katz, 1996).

Coparenting refers to the extent to which both parents are invested in a child, value the other parent's input and involvement with the child, respect each other's judgment, and have a desire to talk to each other about their child (Varga & Gee, 2010; Weissman & Cohen, 1985). Similar to parenting stress, economic hardship may put strain on the ability for parents to work together as effective coparents, which also may put strain on the stability of the relationship. Indeed, previous research shows that coparenting between parents plays a vital role for outcomes such as relationship quality and children's well-being (Cabrera, Scott, Fagan, Steward-Streng, & Chien, 2012; McClain, 2011). Although prior research identifies several determinants and consequences of both parenting stress (e.g., Cooper, McLanahan, Meadows, & Brooks-Gunn, 2009) and coparenting (e.g., Carlson & Hognas, 2011), we are particularly concerned with how economic hardship is related to family processes and how, in turn, these processes are associated with relationship distress.

Conceptual Model

We present a model in Figure 1 combining each factor and depicting the hypothesized relationships linking economic hardship and relationship distress. The relations among family processes are left unspecified, and the model instead depicts parallel processes. The model indicates that (a) economic hardship is positively related to relationship distress; (b) economic hardship is positively related depressive symptoms, relationship discord, parenting stress, and negatively related to coparenting; (c) in turn, three of these processes are positively associated with relationship distress (i.e., depressive symptoms, relationship discord, and parenting stress) and coparenting is negatively related to relationship distress. Overall, we expect that (d) these factors will serve as mediating pathways between economic hardship and relationship distress. The specification of this model places each mediating variable on an equal footing to reflect the simultaneity of each process. Although numerous empirical studies report results consistent with this model globally, a full specification incorporating each mediating process has yet to be assessed. By incorporating multiple factors into our specification, we will be able to evaluate the relative magnitudes of each process.

Support for each mediating factor comes from a variety of sources. Findings for the family stress model indicate that economic pressure generates marital distress by increasing couples' emotional distress, which, in turn, leads to higher levels of marital conflict. Moreover, marital conflict increases marital distress (Conger, Rueter, & Elder, 1999; Conger et al., 1990, 1994). Indeed, multiple studies report support for the hypothesized paths linking

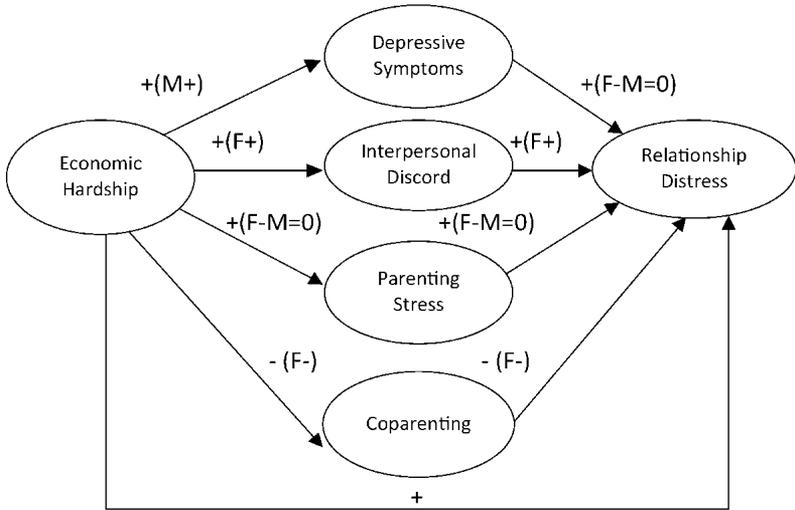


Figure 1. The hypothesized integrated model linking economic hardship to relationship distress through depressive symptoms, discord, parenting stress, and coparenting. The + or – outside the parenthesis indicates the relationship between constructs. “M” refers to mothers and “F” refers to fathers. The + or – inside the parenthesis indicates whether the effect is larger for one group than the other, or there are no differences ($F - M = 0$).

economic hardship with depression (Heflin & Iceland, 2009; Pearlin, Schie-man, Fazio, & Meersman, 2005; Zimmerman & Katon, 2005) and negative interactions between romantic partners (Cunradi, Caetano, Clark, & Schafer, 2000; Paat, 2011; Papp, Goeke-Morey, & Cummings, 2007). While early studies directly assessing this model relied on limited samples (e.g., Iowa farm families; Conger & Elder, 1994), contemporary studies are beginning to use more diverse samples (Conger et al., 2002; Gudmunson et al., 2007).

Prior research consistently finds that economic factors are associated with parenting stress. For example, poverty is linked to parenting stress (Chang et al., 2004; Webster-Stratton, 1990), and material hardship (i.e., food insecurity) predicts higher parenting stress levels (Chien & Mistry, 2012; Gershoff, Aber, Raver, & Lennon, 2007). The role of income, however, is more complicated. For instance, higher income levels are associated with increased parenting stress once material hardship is accounted for (Gershoff et al., 2007). This finding is consistent with a study reporting that among mothers with

higher income levels, mothers with higher self-efficacy report higher parenting stress (Raikes & Thompson, 2005). Although a large body of literature suggests that life stressors also affect the quality and stability of romantic relationships (for a review, see Bradbury, Fincham, & Beach, 2000), parenting stress predicts lower marital quality levels for both mothers and fathers (Lavee et al., 1996). Even so, the extent to which parenting stress is associated with relationship distress is unknown. Indeed, more work is needed to understand the extent to which parenting stress is related to relationship distress.

There is growing research on the antecedents and consequences of coparenting among married and unmarried couples (Carlson & Hognas, 2011). Although studies have not focused exclusively on economic hardship and coparenting, one study shows that economic strain among couples leads to lower quality of the overall coparenting relationship (Hilton & Devall, 1997). Other studies, however, show that economically disadvantage populations tend to display lower levels of cooperative coparenting and higher levels of coparenting conflict (Bronte-Tinkew, Horowitz, & Carrano, 2010; Dorsey, Forehand, & Brody, 2007). The relationship between coparenting and the quality of intimate partnerships has received much attention, however. For example, using data from the Fragile Families and Child Well-being study, Fagan and Palkovitz (2011) and McClain (2011) find that coparenting has a significant effect on relationship quality and relationship stability. In the current study, we examine the extent to which coparenting mediates the relationship between economic hardship and relationship distress as a parallel process working jointly with the other mechanisms included in Figure 1.

Gender Differences in the Consequences of Stress

Next, we turn to the question of why and in what ways the integrated parallel process model depicted in Figure 1 may differ between mothers and fathers. Prior studies suggest that men and women cope differently with stressful events, especially events that involve financial strain and difficulty. Men tend to display more externalizing behaviors (e.g., anger, aggression, violence) in the presence of stressful situations (Conger, Lorenz, Elder, Simons, & Ge, 1993; Melzer, 2002; Paat, 2011), as indicated in Figure 1 by the F+ label (F = father, M = mother) on the path from hardship to interpersonal discord. Male behavior may reflect the Western notions of masculinity, which is traditionally associated with the breadwinner role. Thus, men who face financial hardship often become frustrated and display aggressive behaviors toward others (Paat, 2011). As a consequence, men's negative behavior may result in the dissolution of romantic relationships (Bowlus

& Seitz, 2006; DeMaris, 2000). For example, DeMaris (2000), using married and cohabiting couples, found that male discord (e.g., physical violence) increased the risk for dissolution more than female discord. Thus, we hypothesize that the effect of economic hardship on discord will be greater for fathers when compared with mothers. Moreover, the effect of discord on relationship distress will be greater for fathers than for mothers.

In contrast, women are more likely to internalize distress (e.g., depression, anxiety; Jang, 2007; Nolen-Hoeksema, Larson, & Grayson, 1999; Wade, Cairney, & Pevalin, 2002), which we have denoted as M+ for the path between hardship and depressive symptoms. Studies show that there is a higher prevalence of depression for women relative to men (Kessler, 2003). Although gender differences in depression are complex (Nolen-Hoeksema et al., 1999), some scholars suggest that the depression disparity between men and women is because of the unequal power and status in heterosexual relationships (Nolen-Hoeksema et al., 1999). These gender differences, in part, may reflect gender socialization and gendered processes (i.e., femininity and masculinity; Rosenfield & Mouzon, 2013). Research on gender differences in the association between depression and relationship distress are mixed (Mead, 2002), though there is some evidence of differences (Fincham, Beach, Harold, & Osborne, 1997) such that depression lowers marital satisfaction for husbands but not for wives (Fincham et al., 1997). Kurdek (1993), however, finds no gender differences in this association among a sample of first-married newlywed couples. In the current study, we expect that economic hardship will lead to higher levels of depression for mothers relative to fathers (M+); however, we expect no significant gender difference between depression and relationship distress ($F - M = 0$ label in Figure 1).

Earlier work assumed that stress in parenting would be more prevalent among mothers than fathers because child care is commonly associated with the maternal role (e.g., Belsky, 1984). Contemporary studies, however, suggest that fathers also experience parenting stress (Bronte-Tinkew et al., 2010). Studies exploring gender differences are few and the findings are generally mixed. Gender differences tend to be evident when children have health problems (e.g., Baker, Blacher, Crnic, & Edelbrock, 2002; Deater-Deckard & Scarr, 1996). Parenting stress, however, appears to be more prevalent among parents with new children (Lavee et al., 1996). As a result, time and energy spent on a new child puts strain on the mother–father relationship for both parents (Lavee et al., 1996). Thus, since both parents are equally at risk for parenting stress following the birth of a child, we expect that there will be no significant difference between mothers and fathers on the relationship between economic hardship and parenting stress and no difference in the relationship between parenting stress and relationship distress ($F - M = 0$).

Levels of coparenting that mothers and fathers demonstrate is largely contingent on resident status of the parents (i.e., parents that live together vs. parents that live apart; e.g., Carlson & Hognas, 2011). Prior studies have shown gender differences in coparenting between mothers and fathers in which fathers report higher levels of coparenting for mothers than mothers report about fathers (Margolin, Gordis, & John, 2001). Although studies have shown that coparenting benefits relationship quality (McClain, 2011), we know less about whether gender differences exist in the association. Thus, in the current study, we examine whether differences exist between mothers and fathers in the effect of hardship on coparenting, and the effect of coparenting on relationship distress. Mothers are more involved in parenting and socializing young children than fathers (e.g., McKinney & Renk, 2008) and often report that fathers show lower levels of coparenting than fathers report for mothers (Margolin et al., 2001). Accordingly, we expect that as hardship increases, mothers will report lower levels of coparenting for fathers than fathers will report of mothers (F-). Moreover, when fathers report higher levels of coparenting from mothers, it will have a larger effect on fathers' distress than mothers' report of coparenting from fathers on mothers' distress (F-).

The Current Study

This study contributes to the literature in a number of ways. First, we address how economic hardship affects each parent (i.e., depressive symptoms), the relationship between parent and child (i.e., parenting stress), and the relationship between parents (i.e., interpersonal discord and coparenting). To our knowledge, prior studies have not examined the relative and joint effects of these four processes as mediating mechanisms linking economic hardship to relationship distress simultaneously. Second, we analyze mothers and fathers separately, which is important because prior research has documented discrepancies in couples' reports on the quality of the relationship (e.g., Willson, Shuey, Elder, & Wickrama, 2006). Third, our study examines whether the integrated model differs by gender (i.e., mothers and fathers). These additions to the existing literature are consistent with Barnett's (2008) call for an expansion of the family stress model of economic strain while addressing the shortcomings of prior studies by adding the perspectives of fathers, including married and cohabitating couples, and using longitudinal measures on large-scale heterogeneous samples. Finally, family processes are centrally important in an era of economic uncertainty because adverse circumstances place strains on parents that can lead to unfavorable outcomes for all involved (e.g., Conger et al., 2010).

Data and Method

Data for this study are from the Fragile Families and Child Well-being Study (FFCWS). The FFCWS is a longitudinal study following a birth cohort of 4,898 children (3,712 unmarried and 1,186 married births) and their parents in 20 U.S. cities with populations of 200,000 or more. When weighted, these data are representative of births in U.S. cities with populations more than 200,000. The baseline study was conducted during 1998 to 2000 and contains 4,898 mothers and 3,830 fathers. Mothers were interviewed in person while in the hospital within 48 hours of the birth, and fathers were interviewed in person or by phone once he was located (for more detailed information, see Reichman, Teitler, Garfinkel, & McLanahan, 2001). Parents were reinterviewed when the child was 1, 3, and 5 years of age.

The sample for this study includes data from Waves 3 and 4. More specifically, the analyses are based on data from mothers and fathers who were either married or cohabiting at Wave 1 (baseline) and remained in this family structure up to Wave 3. These criteria resulted in 2,784 mothers and fathers. Mothers and fathers were asked identical questions concerning the focal endogenous variable (relationship distress), the mediating variables (depressive symptoms, parenting stress, partner's discord, and coparenting), and the focal exogenous variable (economic hardship). Because of different patterns of missingness among variables between mothers and fathers, the final analytic sample yielded approximately 1,304 mothers and 1,230 fathers with about 819 married and 485 cohabitating respondents (there are small variations in the sample size across subequations in the total model). We focus on Waves 3 and 4 because distress was only at Wave 4, which limits us from assessing distress at earlier waves. Notably, a large percentage of Fragile Families parents do not remain romantically involved 5 years after a nonmarital birth (Bendheim-Thomas Center for Research on Child Well-Being and Social Indicator Survey Center, 2007). Because dissolution could bias our distress estimates, we model both distress and dissolution as outcomes in order to assess the robustness of the model across both relationship states.

Endogenous Variables

Relationship distress at Wave 4 is measured using three items that asked mothers and fathers how often they did the following: (a) "How often have you thought your relationship with (mother/father) might be in trouble," (b) "You and (mother/father) discussed ending your relationship," and (c) "You talked to a close friend or relative about breaking up with (mother/father)." Responses range from (1) *never* to (3) *often* (mothers $\alpha = .84$; fathers $\alpha = .79$).

The items used for relationship distress are similar to the items originally developed by Booth, Johnson, and Edwards (1983) to represent marital stability though their notion of marital stability is concerned with actual separation or divorce rather than contemplation (see Karney & Bradbury, 1995; Conger et al., 1999). Although previous work has referred to these items as marital distress (Conger et al., 1999), we refer to these items as relationship distress because the sample consists of both married and cohabitating respondents. To check for robustness, we also examined an additional endogenous variable, namely, relationship dissolution (see the appendix). *Relationship dissolution* is measured as a dichotomous variable with 1 representing the presence of dissolution and 0 indicating the absence of dissolution between waves.

Mediating Variables

The four mediating variables are interpersonal discord, depressive symptoms, parenting stress, and coparenting. *Interpersonal discord* (mothers $\alpha = .74$; fathers $\alpha = .74$) at Wave 3 is measured using 12 items gauging the frequency (1 = *never* to 3 = *often*) of parent's behaviors (e.g., "he/she was fair and willing to compromise," "he/she expresses affection or love," etc.). *Depressive symptoms* (mothers $\alpha = .98$; fathers $\alpha = .98$) at Wave 3 was assessed using the Composite International Diagnostic Interview–Short Form for Major Depression (CIDI-SF). The CIDI-SF is a standardized instrument used to assess the presence of mental disorders as specified by the *Diagnostic and Statistical Manual of Mental Disorders*, 4th edition (American Psychiatric Association, 1994). Respondents were asked two stem questions about whether they felt sad, blue, or depressed and whether they lost interest in most things during the past 12 months for at least 2 weeks or more. Respondents who affirmed these questions were asked seven dichotomous symptom questions (e.g., "losing interest," "feeling tired," etc.). Previous studies using the FFCWS study assessed depressive symptoms for both mothers and fathers (e.g., Bronte-Tinkew, Moore, Matthews, & Carrano, 2007; Heflin & Iceland, 2009).

Parenting stress (mothers $\alpha = .63$; fathers $\alpha = .64$) at Wave 3 is measured using four items adapted from the Parenting Stress Index developed by Abidin (1983). The FFCWS study used a short form to identify stress in parenting. Mothers and fathers were asked about their agreement (1 = *strongly disagree* to 4 = *strongly agree*) to four questions about parenting (e.g., "Being a parent is harder than I thought it would be," "I feel trapped by my responsibilities as a parent," etc.). *Coparenting* (mothers $\alpha = .70$; fathers $\alpha = .64$) at Wave 3 is measured using six ordinal items (0 = *never true*

to 3 = *always true*; "When [mother/father] is with child, he/she acts like the mother/father you want for your child," "You can trust [mother/father] to take good care of child," etc.).

Exogenous Variable

Economic hardship (mothers $\alpha = .62$; fathers $\alpha = .60$) at Wave 3 is measured by mothers and fathers agreeing that they (a) "received free meals," (b) "had trouble paying rent or mortgage," (c) "had trouble paying gas/electric bill," (d) "borrowed money from friends or family to pay bills," and (e) "cut back on buying clothes for herself/himself." Each item is a dichotomous variable where 1 indicates the presence of a hardship. These measures are also used in other national surveys such as the Survey of Income and Program Participation, the National Survey of America's Families, and the American Housing Survey (see Beverly, 2001).

Control Variables

There are several covariates in this study that includes both individual and couple characteristics. Individual characteristics include respondents' race/ethnicity (Bulanda & Brown, 2007; Dressler, Oths, & Gravlee, 2005; Lin & Harris, 2008), education (Mirowsky & Ross, 2001), and age (Miech & Shanahan, 2000). To measure mothers' and fathers' race/ethnicity, dummy variables are used to represent *White* (reference), *Black*, *Hispanic*, and *other*. Mothers' and fathers' *education* level has four categories: (a) less than high school, (b) high school or equivalent, (c) some college or tech training, and (d) college graduate or more. *Age* is measured as a continuous variable.

Couples' characteristics include family structure (Brown, 2000, 2003), age dissimilarity (Berardo, Appel, & Berardo, 1993), education dissimilarity (Tzeng, 1992), and whether the couple is racially homogenous (Bratter & King, 2008). *Family structure* is measured as a dichotomous variable that indicates whether the couple is married (reference) or cohabitating. *Age dissimilarity* is measured in two ways so that the age discrepancies are mirrored in the gender-specific models. First, for the mothers' model father age is subtracted from mother age. Positive scores indicate that mothers are older than fathers. Second, for the fathers' model mother age is subtracted from father age. Positive scores indicate that fathers are older. Similar to age dissimilarity, *education dissimilarity* is also measured as a difference. To measure *racially homogenous* couples, a dichotomous variable is used to indicate mothers and fathers from the same racial/ethnic group (reference) and couples from different racial/ethnic groups.

Analytic Strategy

Multigroup structural equation modeling (e.g., Bollen, 1989) is used to (a) examine the relationship between economic hardship and relationship distress through each of the four mediating pathways and to (b) test whether model parameters differ by gender (i.e., mothers and fathers). The multi-group approach allows mothers and fathers to have different covariance structures that can then be compared using parameter constraints to compare across groups. The model thus allows individual parameters to be assessed within groups, and then to be compared across groups (we use *t* tests of parameter constraints). Each factor depicted in Figure 1 is included as a latent variable with the items modeled using binary and ordered probit equations reflecting the item measurement level (Muthén & Muthén, 2010). The factor models were compared by gender to assure that the factors captured the same constructs for both mothers and fathers (for an example, see Cheadle & Amato, 2011). The analyses were implemented in *Mplus* 6.11 (Muthén & Muthén, 2010). For the multivariate analyses, the data are not weighted because we control the key characteristics that the weights adjust for (marital status at birth, age, race, and education) and adding weights with the controls they adjust for can bias estimates (see Winship & Radbill, 1994).

Results

Descriptive Statistics

Table 1 shows the descriptive statistics for the sample. Because the demographic characteristics were similar for both mothers and fathers, the descriptive statistics reflect all respondents. Approximately 36% of the sample is non-Hispanic White, 29% are African American, 29% are Hispanic, and 5% are "other" race/ethnicity. The average age of the sample is 29 years; and on average, respondents have a high school diploma/GED or at least some college experience. Sixty-three percent of the sample is married. On average, mothers and fathers are of the same age and share the same educational background. Approximately 12% of the sample couples were mixed race.

Confirmatory Factor Analysis

Table 2 shows the fit statistics using confirmatory factor analysis for each latent construct for mothers and fathers. The models were estimated using probit weighted least squares estimators to link the items to the latent fac-

Table 1. Descriptive Statistics.

	Analytic sample		Weighted sample		Min	Max
	Mean or %	SD	Mean or %	SD		
Education	2.51	1.10	2.64	1.10	1	4
Education difference	0	0.89	0.87	-.3	3	
Age	29.03	6.61	29.78	5.96	16	53
Age difference	0	5.30	0.00	5.43	-32	32
White	36%		47%		0	1
Black	29%		12%		0	1
Hispanic	29%		32%		0	1
Other race	6%		9%		0	1
Mixed race couple	0.13	0.33	0.13	0.34	0	1
Married	63%		85%		0	1
Cohabiting	37%		15%		0	1

A mean of "0" indicates that mothers and fathers are the same age and have the same levels of education.

Table 2. Fit Statistics for Each Latent Construct for Mothers and Fathers.

	No. of items	χ^2	df	p value	RMSEA	CFI	TLI
Mothers							
Economic hardship	5	13.52	5	<.05	.035	.992	.984
Depressive symptoms	7	36.54	14	<.05	.034	.999	.999
Parenting stress	4	30.11	2	<.05	.101	.974	.923
Discord	12	233.26	54	<.05	.049	.965	.957
Coparenting	6	3.19	1	>.05	.042	.997	.962
Fathers							
Economic hardship	5	19.54	5	<.05	.051	.981	.962
Depressive symptoms	7	25.98	15	<.05	.026	.999	.999
Parenting stress	4	1.23	2	>.05	.000	1.000	1.000
Discord	12	345.943	55	<.05	.065	.915	.898
Coparenting	6	31.4	5	<.05	.062	.975	.925

RMSEA = root mean square error of approximation; CFI = comparative fit index; TLI = Tucker–Lewis index. Relationship distress is constructed using three items; therefore, the model is just identified. The models were estimated using a probit weighted least squares estimator so the χ^2 test uses a noncentral χ^2 distribution for the test of model fit.

tors. Thus, the chi-square test uses a noncentral chi-square distribution for the test of model fit (Muthén & Muthén, 2010). The fit indices indicate that each model fit the data well. Although not presented in the table, all of the

Table 3. Mediation Models Linking Economic Hardship and Relationship Distress (Without Covariates).

Model/parameter	Mothers		Fathers	
	<i>b</i>	<i>SE</i>	<i>b</i>	<i>SE</i>
Model 1: Baseline				
Economic Hardship → Relationship Distress	0.51*	0.07	0.53*	0.08
Model 2: Hardship → Depression → Distress				
Economic Hardship → Relationship Distress	0.43*	0.08	0.43*	0.09
Economic Hardship → Depressive Symptoms	0.49*	0.06	0.46*	0.07
Depressive Symptoms → Relationship Distress	0.18*	0.07	0.23*	0.08
Model 3: Hardship → Parenting Stress → Distress				
Economic Hardship → Relationship Distress	0.48*	0.07	0.50*	0.08
Economic Hardship → Parenting Stress	0.24*	0.05	0.21*	0.05
Parenting Stress → Relationship Distress	0.11*	0.06	0.19*	0.06
Model 4: Hardship → Discord → Distress				
Economic Hardship → Relationship Distress	0.37*	0.07	0.50*	0.09
Economic Hardship → Discord	0.41* ^d	0.05	0.19*	0.05
Discord → Relationship Distress	0.47* ^d	0.06	0.60*	0.08
Model 5: Hardship → Coparenting → Distress				
Economic Hardship → Relationship Distress	0.41*	-0.08	0.55*	0.09
Economic Hardship → Coparenting	-0.41* ^d	-0.05	-0.08	-0.05
Coparenting → Relationship Distress	-0.30* ^d	0.06	-0.49*	0.08

"d" denotes that the path is significantly different between mothers and fathers.

* $p < .05$

factor loadings are statistically significant ($p < .05$) with standardized loadings above .4 (and higher). The primary dependent variable, relationship distress, is constructed using three items so that the model is just identified. As a result, no fit statistics were produced, which is why it is not presented in the table. However, Cronbach's alpha for mothers and fathers (as noted above) provides evidence for internal consistency among the three items justifying its use. Overall, the factor models show adequate fit and supplementary models indicated that the factor models were consistent between mothers and fathers.¹

Structural Equation Analyses: Baseline Models

Table 3 provides the results for the baseline structural equation models linking economic hardship and relationship distress. Model 1 shows the direct relationship between economic hardship and relationship distress. Consistent with previous research, economic hardship is significantly associated with relationship distress and the standardized loadings indicate that each

standard deviation (*SD*) of hardship is associated with an approximately .5 *SD* increase relationship distress for both genders ($b_m = .51$ and $b_f = .53$).

Model 2 incorporates depression as a mediating variable. As expected, economic hardship leads to increased levels of depression for mothers and fathers, $b_m(\text{mothers}) = .49$ and $b_f(\text{fathers}) = .46$, and depression leads higher levels of relationship distress ($b_m = .18$ and $b_f = .23$). The inclusion of depression has a small attenuating influence on the relationship between hardship and relationship distress, although the association remains strong ($b_{mf} = .43$). Next, Model 3 specifies parenting stress as the mediating factor building off of Model 1. Hardship is associated with increases in parenting stress ($b_m = .24$ and $b_f = .21$) and parenting stress affects relationship distress ($b_m = .11$ and $b_f = .19$), though the relationship between hardship and relationship distress is only slightly attenuated. Notably, there are no gender differences in either Model 3 or 4, in contrast to the expectations for depression, but consistent with our expectations for parenting stress.

Model 4 next examines the role of interpersonal discord as a mediating factor linking hardship with relationship distress. It is important to note that the coefficient for mothers ($b_{m(\text{discord})}$) refers to mothers' report of discord displayed by fathers; and the coefficient for fathers ($b_{f(\text{discord})}$) refers to fathers' report of discord displayed by mothers. Thus, the findings indicate that economic hardship is associated with elevated levels of discord for fathers (as reported by mothers; $b_m = .41$) and mothers (as reported by fathers $b_f = .19$), and the difference is statistically significant ($t_{\text{difference}} = -3.66, p < .05$). In other words, as economic hardship increases, mothers report higher father discord levels than fathers' report for mothers. In addition, discord is a significant predictor of relationship distress ($b_m = .47$ and $b_f = .60$) and the effect magnitude is larger than for economic hardship. To be clear, the findings suggest that mothers who report that fathers display higher levels of discord have higher average distress levels. Likewise, fathers who report that their child's mother is discordant also report higher levels of relationship distress. Moreover, the significant pathways differ between mothers and fathers as predicted.

Model 5 adds coparenting as a mediating variable. Similar to the discord measure above, the coefficient ($b_{m(\text{coparenting})}$) refers to mothers' report of coparenting displayed by fathers; and the coefficient for fathers ($b_{f(\text{coparenting})}$) refers to fathers' report of coparenting displayed by mothers. Thus, the results show that economic hardship decreases coparenting among fathers and mothers; however, the relationship is only significant for fathers (as reported by mothers; $b_m = -.41, p < .05$). Moreover, the effect of hardship on coparenting between mothers and fathers is statistically significant ($t_{\text{difference}} = 4.64$,

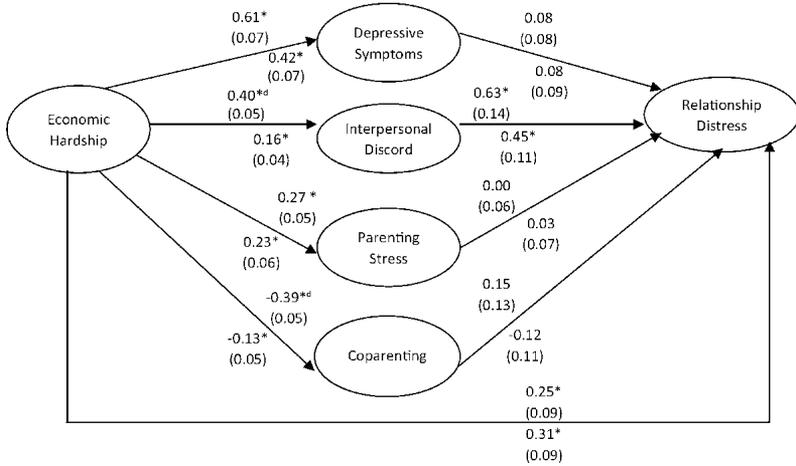


Figure 2. Estimated integrated model linking economic hardship to relationship distress through depressive symptoms, discord, parenting stress, and coparenting. All estimates are standardized with standard errors in parenthesis. Estimates for mothers are above the arrows. “d” signifies significant different between mothers and fathers. The model controls for mothers’ and fathers’ education, age, race, family structure, age difference, education difference, and mixed race couples. **p* < .05.

p < .05), which suggests that the effect is stronger for fathers (as reported by mothers) than mothers (as reported by fathers). Also, coparenting is associated with lower levels of relationship distress for both mothers and fathers ($b_m = -.30$ and $b_f = -.49$). These results support our expectations. In other words, when economic hardship increases, mothers report lower fathers coparenting than fathers report for mothers. Moreover, when fathers report higher maternal coparenting levels, relationship distress is lower compared with mothers’ perceptions of father coparenting on distress.

Structural Equation Analyses: Full Model

Finally, Figure 2 presents the full model with each of the family processes added to the system of equations along with control variables. There are similarity and differences with respect to the baseline results in Table 3. These results suggest that net of all covariates, economic hardship is associated with elevated risks for depression, parenting stress, discord, and lower levels of coparenting for both mothers and fathers. Additionally, when all covariates enter the model, discord is the only mediating factor linking economic hardship and relationship distress that remains significant. These results in-

dicating that the discord between mothers and fathers is the critical link between economic hardship and relationship distress even after taking into account several demographic characteristics. In other words, though the other family process variables were related to distress in the simpler specifications in Table 3, those results generally reflect intercorrelations with interpersonal discord (results are similar to those without control variables; data not shown). Thus, the model suggests that the other family processes influence distress by influencing discord.

The second goal of this study was to examine whether the mediational model differed by gender. Using multigroup structural equation modeling, the effect of economic hardship on interpersonal discord ($t = -3.68, p < .05$) and coparenting ($t = 3.64, p < .05$) was significantly different between mothers and fathers. These differences suggest that as economic hardship increases, mothers report that fathers tend to display higher levels of discord and lower levels of coparenting when compared with mothers (based on fathers' reports). Although these results supported our hypothesis, the effect of discord on relationship distress was not significantly different between mothers and fathers, which did not support our hypothesis. Also, there were no significant differences between mothers and fathers in the effect of hardship on depression (hypothesis not supported) and the effect of depression on relationship distress (hypothesis supported). Next, there were no significant differences between mothers and fathers in the effect of hardship on parenting stress and the effect of parenting stress on relationship distress (hypothesis supported). Last, although differences between parents emerged between coparenting and distress in the baseline model, there was no significant difference between mothers and fathers in the effect of coparenting on relationship distress in the full model (hypothesis not supported). All in all, the effect of hardship on discord and coparenting proved to be significantly different between mothers and fathers, controlling for other characteristics.

Additional Analyses

Given that our analyses are based on data from Waves 3 and 4, mothers and fathers with higher levels of stress at Wave 3 may select themselves out of sample by Wave 4 when the relationship dissolves. Thus, we examine relationship dissolution to explore whether the mediational model works similarly for mothers and fathers who dissolved the romantic relationship with their partner by Wave 4. The results from the model in the appendix were specified the same as in Figure 2; however, we only report the effects of the mediating factors and the control variables on relationship dissolution as the results of hardship on the mediating factors are identical to those of

Figure 2. Because the relationship dissolution is dichotomous variable, the analyses we performed produced probit estimates. The results show that similar mediational factors link economic hardship and relationship dissolution as with relationship distress; the effects are small, however. For example, only father's discord was significantly related to relationship dissolution. The effects only increased the odds by 2%. This may be because of only a small proportion of the sample dissolving their relationship between waves. That is, only about 50 respondents ended their romantic relationship between waves, which only represents approximately 4% of the analytic sample. Nevertheless, the results suggest that parallel processes link economic hardship to both distress and dissolution, namely, father's discord behavior (as perceived by mothers).

Discussion

There is a well-developed body of literature providing empirical evidence that economic hard times increase the risk for relationship distress (Conger et al., 2010). The purpose of this study was to examine an integrated parallel process model that combines several important family factors to understand the link between economic hardship and relationship distress and whether the integrated model differed by gender. The findings show that during times of economic hardship, mothers tend to find their partners to be more difficult companions. As a result, mothers become less committed to their relationship with the child's father. The results of this study are consistent with the work of Conger and colleagues (Conger et al., 1990, 2010) and other scholars (Gudmunson et al., 2007; McLoyd, 1990) that indicate negative interactions between individuals are a significant link between economic hardship and relationship distress. The consistency in findings across studies is important because it demonstrates that essential features of the family stress model as it applies to relationship distress function similarly across a broad range of structurally differentiated social contexts. Furthermore, by elaborating differences by gender, rather than mixing mother and father reports into a single model, these results indicate that family stress processes operate relatively similarly by gender.

At the same time, however, the results across models are not completely consistent between mothers and fathers. As we have shown, fathers appear to be more reactive to economic hardship than mothers are. More specifically, economic hardship is associated with higher levels of discord when compared with mothers. With regard to discord, some scholars have suggested that men's negative response to economic hardship may be because of contradictions to men's masculine identity, particularly, the economic provider

role (Conger et al., 1993; Paat, 2011). The consequence, however, is that economic hardship leads to greater levels of relationship discord such that fathers become unfavorable relational partners, which, in turn, weakens a mother's commitment to the relationship, as measured by relationship distress.

Although we did not directly specify a multistage mediational model with economic hardship influencing depressive symptoms, parenting stress, and coparenting, which, in turn, operate through relationship discord, our results are consistent with such a model. For example, depressive symptoms, parenting stress, and coparenting were significant individually but not when relationship discord was included in the model. This result suggests that relationship distress is largely because of externalizing behaviors (i.e., discord) rather than internalizing behaviors (i.e., depressive symptoms and parenting stress) and positive interactions among couples. That is not to say that hardship is not related to depressive symptoms, parenting stress, and coparenting (Gershoff et al., 2007; Heflin & Iceland, 2009), as we show it does, but rather that these factors are manifested in relationships in other negative ways that lead to greater discord. Sociological theorists are increasingly turning to complex human emotions and situating their genesis, constraints, and manifestations in the social contexts within which individual lives are embedded (Collins, 2004; Turner, 2007; Turner & Stets, 2006). The family is clearly one such venue and the impacts of social inequalities bleed-out into individual relationships by creating discord and hastening the demise of intimate relationships (e.g., Gudmunson et al., 2007). As the current study shows, economic hard times have diffuse impacts on family behaviors and relationships, increasing discord (particularly as mothers view their child's father), and lower relationship commitment.

Although this study demonstrates that economic hardship affects families in many ways, the current study also has some limitations. First, the measures of discord are based on mothers' and fathers' perceptions of their partner. Mothers and fathers could exaggerate their partner as displaying higher levels of discord, which suggests that there could be some cognitive confounding. The approach adopted here, however, is not uncommon in the couple literature (e.g., Fagan, 2009; Paat, 2011). Second, we focused exclusively on a mediational model linking economic hardship with relationship distress. As a result, other possible empirical relationships were not analyzed. For example, previous studies using the family stress model analyzed the relationship between depressed mood and conflict within couples (Conger et al., 2002). Nevertheless, we chose, instead, to focus on how the core processes differ by gender in order to move the much larger body of literature forward by using the perspective of both partners in two separate model instead of one model (e.g., Conger et al., 2002; Conger & Elder, 1994). Focusing more di-

rectly on couple dyads (e.g., Kenny, Kashy, & Cook, 2006) is an important avenue for future work building on the results presented here.

Another limitation is the measures of economic hardship. The current study uses a limited number of items to gauge economic hardship. Indeed, other studies provide a broad range of items that reflect economic and material hardship (Iceland & Bauman, 2007). Although there are other items of economic hardship in the Fragile Families data, only a select few of the same items were asked to both mothers and fathers about economic hardship. Last, given that there is a diverse set of racial/ethnic minorities, and these populations are more likely to experience economic disadvantage and relationship distress, performing race/ethnic specific analyses could further highlight how the mediating process vary by race/ethnicity. Indeed, future research is needed to unpack how these processes may be different across race/ethnic and other (e.g., socioeconomic status) groups.

Despite these limitations, there are several strengths. First, this study uses a more heterogeneous sample (e.g., cohabiting and married unions and different racial/ethnic groups) to model family stress than many prior studies have been able to (e.g., Conger et al., 1990, 1999). Second, we incorporate parenting stress and coparenting with features of the family stress framework. This allows us to examine different family processes, and how such processes link hardship and relationship distress. Third, we use measures from both mothers and fathers to get a better sense of the family unit (e.g., Willson et al., 2006), and finally, we examine how the focal processes differ by gender.

Conclusion

The current economic trends in the United States are alarming for parents and children. With the rise in poverty and unemployment (DeNavas-Walt et al., 2011), many more families may begin to experience economic stress. Indeed, many Americans are concerned not only about the economy but also their own economic insecurity (Bartholomae & Fox, 2010). Policy efforts to strengthen the economy and families are crucial to helping economically vulnerable families and children. This investigation shows that strengthening couples' economic circumstances may prove to be valuable for positive interactions within intimate relationships, and thus lead to relationship stability. Family policies such as the Healthy Marriage Initiative that aims to strengthen intimate relationships provide important avenues in this agenda, and as our study shows, helping families economically is an important dimension for creating healthy families. Policy efforts that aim to improve families' economic conditions will not only help relationships, they will also improve children's well-being (Edin & Kissane, 2010; White & Rogers, 2000).

Appendix

Mediational Model Linking Economic Hardship With Relationship Dissolution

Variables	Relationship dissolution			
	Mothers		Fathers	
	<i>b</i>	<i>SE</i>	<i>b</i>	<i>SE</i>
Hardship	0.00	0.01	0.01	0.01
Depressive Symptoms	0.00	0.01	0.02	0.01
Parenting Stress	-0.01	0.01	-0.01	0.01
Discord	0.04*	0.01	0.02*	0.01
Coparenting	0.02	0.01	0.01	0.01
Education	0.01	0.01	0.00	0.01
Education difference	0.00	0.01	-0.01	0.01
Age	0.00*	0.00	0.00*	0.00
Age difference	0.00	0.00	0.00	0.00
White (reference)				
Black	0.07*	0.02	0.07*	0.02
Hispanic	0.01	0.02	0.00	0.02
Other race	-0.04	0.03	-0.01	0.03
Mixed race couple	0.06*	0.02	0.05*	0.01
Married (reference)				
Cohabiting	-0.08*	0.03	-0.08*	0.03

**p* < .05

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Notes

1. There were only four factor loadings that were significantly different between mothers and fathers; however, the largest difference in the standardized factor loadings was .3. These results suggest that, on average, the factors captured the same underlying constructs for both mothers and fathers.

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