

# Chapter 6.

## Economic Pressure in Rural Families: Couple Interactions that Reduce Risk for Emotional Distress and Marital Instability<sup>1</sup>

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*The research reported here moves in the direction of a next generation of research on family stress processes in general and economic stress in particular. Such research goes beyond earlier work that has dealt primarily with perceptions of satisfaction and closeness in family relationships to a focus on specific interactional qualities and individual characteristics that either promote resilience or increase vulnerability to difficult life conditions. Such research not only increases theoretical knowledge but also leads to more effective programs for assisting families during stressful periods in their lives.*

*Interventions involving such marital interactions, of course, represent only a sample of potential strategies for reducing the adverse consequences of economic hardship. The possibilities for helping families range from social structural- , such as the provision of alternative means for augmenting income, to individual therapy for the alleviation of personal distress. Although income generating solutions are ideal, other methods of assisting families with financial difficulties are often required as well..*

*Thus an important dimension of the current work involves the extension of economic stress research to rural couples and marriages. The findings demonstrated that the rural Midwest does not fit the stereotype of benign, untroubled country living (see Davidson, 1990 for a description of the harsh realities in contemporary rural America). Moreover, the economic stress effects found among rural families were particularly robust. For example, although Liker and Elder (1983) reported that the Depression-era men that they studied became emotionally distressed because of economic problems only if they had a prior history of emotional instability, the rural men in the present study were at risk for stress-induced emotional problems, regardless of their history of psychological difficulties (i.e., economic pressure had a main effect on men's emotional distress). Moreover, whereas Liker and Elder (1983) reported no direct effect of economic problems on the emotional lives of women, we found strong associations between these two variables in the present analyses. Apparently, contemporary rural couples not only experience the same degree of*

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*disruption in their lives as a result of economic hardship that urban couples have in the past, but they may be even more traumatized by their financial difficulties.*

As early as the Depression years of the 1930s, scholars proposed that specific qualities of marital relations play a major role in conditioning the impact of unemployment and economic hardship on individual and family well-being (Angell, 1965; Cavan & Ranck, 1938; Komarovsky, 1940). Research findings from that era consistently indicated that strong marital ties reduce the adverse impact of economic problems, helping both couples and individuals weather more successfully the storm of job and income loss. Despite the uniform results, however, this research was limited by methodological weaknesses, a trait-like approach to the concept of marital bonds, and a lack of specificity regarding important dimensions of marital interactions.

Methodological weaknesses in Depression-era studies are particularly evident in both their measurement and sampling strategies, which reflected convenience as much as known populations. Because little attention was given to the study of well-identified population groups, it is difficult to assess the generality of the findings even during the 1930s. An important limitation in this earlier work was its failure to study the influence of economic stress on rural couples, a limitation directly addressed in this paper. In addition, the approach to measurement was often qualitative, and little attention was given to issues of reliability and validity. Moreover, the measures often involved broad categories of action that were conceptually rich, but operationally difficult to identify (e.g., Angell's 1965 concept of family integration). This ambiguity and subjectivity in measurement make it difficult to replicate exactly the suggestive findings from these studies.

A second, and especially important, limitation in the Depression-era research studies concerns their conceptualization of marital relations. Too often these early studies treated marriage as a "stable, intrinsic characteristic of the family" (Liem & Liem, 1990, p. 201). That is, marriages were described in global terms as either strong and supportive or not. From this perspective, the strength of a couple's marital bonds was considered relatively immutable, even in the face of significant economic challenges. This view led to a static conception of the relationship between economic stress and marriage, a perspective not supported by more recent empirical findings.

Since these early studies, research in the area has explored the dynamic nature of the relationship between financial troubles and the course and consequences of marital relations. Liker and Elder (1983), for example, found that couples who experienced major income loss during the Depression years also experienced elevations in marital tension and instability. Their research suggests that economic problems often led to increased conflicts over finances, which in turn lead to decreased marital quality. Interestingly, Liker and Elder also found that economic difficulties posed less of a threat to couples with happier marriages. They reported that, although couples with stronger marriages were not entirely protected, they seemed to experience fewer of the adverse consequences of economic decline than less satisfied couples.

In an independent confirmation of these findings, Liem and Liem (1990) reported that high levels of preunemployment marital satisfaction protected husbands against the kinds of personal distress exacerbated by job loss. They found that, in general, husbands' psychological distress from job loss led to subsequent declines in marital quality. However, men who were happily married before job loss were more resilient in terms of both emotional problems and disruptions in their marriages. These more contemporary findings then suggest the presence of a reciprocal process. A supportive marriage can help each spouse cope more successfully with financial problems. However, even a strong marital relationship will likely suffer under the weight of serious and continuing deprivation.

Studies of these processes illuminate the dynamic role that marriage can play in providing the social support needed to cope effectively with economic stress. Although the view of a static relation between hardship and marriage has been discarded, contemporary research evidence remains too global to clarify fully the processes of interest. For example, the Liem and Liem (1990) report that marital satisfaction protects against some of the psychological costs of unemployment reveals little about the interactional qualities in the marriage that actually provide such protection. Similarly, the Liker and Elder (1983) concept of marital tension is too global to improve understanding of the specific features of marriage that may decrease risk or increase vulnerability to economic problems. And as with earlier research in this area, contemporary studies have failed to examine links between economic stress and marital functioning in rural couples.

The next generation of research on these issues must identify the particular acts of spouses that reduce the risks associated with economic difficulties and promote resilient marriages. As Pearlin and McCall (1990, p. 39) have suggested in their study of marital response to work stress, “The social and interactional character of support have either been ignored altogether or largely taken for granted.” In this report we contribute to the next generation of research by identifying some of the specific transactions between spouses that increase their individual and joint resilience to family financial difficulties. Through this effort we hope to both add to the theoretical understanding of family stress processes and enable the identification of specific interactional mechanisms that might be targeted in prevention or treatment programs designed to aid families under economic pressure. The present study also examines these issues with a sample of rural couples, thus extending the previous focus on urban families.

## The Dynamic Relationship Between Economic Pressure and Marital Instability

In this report, we first present a model outlining a series of postulated processes through which family economic problems and the initial quality of the marriage are expected to affect each spouse's psychological distress and, ultimately, changes in marital instability (Figure 1). This model describes a chain of events that begins with two major difficulties in family life-- economic problems and a threatened marriage-- and then postulates a series of emotional and interactional events ensuing from these threats that may lead to further deterioration in marital relations. Specific dimensions of marital interaction are introduced at selected points in the overall model to determine the degree to which they might protect against the negative influence of economic stress on individual and family well-being. That is, these hypothesized protective influences are expected to inhibit the downward spiral depicted in the model.

### **A Process Model of Economic Pressure and Marital Instability**

As shown in Figure 1, two avenues lead to emotional distress (i.e., depression, anxiety, and hostility) among husbands and wives. First, consistent with earlier research (Conger et al., 1992; Conger et al., 1994; Kessler, Turner, & House, 1988; Liem & Liem, 1990), the model proposes that economic pressure or strain will increase emotional distress. The distress construct refers to the dysphoria, worry, and irritability that frequently follow from hardship experiences (Conger & Elder, 1994). Economic pressure refers to the daily financial problems created by low income, such as the inability to pay bills, meet basic material needs, and avoid painful cutbacks in expenditures (see Conger, Ge, Elder, Lorenz, & Simons, 1994). In accordance with the Family Stress Model of economic influence (Conger & Elder, 1994), we expected that these economic problems would create a psychologically painful, aversive state for adults. Earlier research has shown that such psychologically aversive experiences are linked to feelings of both anger and despondency (Berkowitz, 1989).

Second, contemporary research indicates that problematic marital relationships increase emotional distress among husbands and wives (Gotlib & McCabe, 1990). In the present study, marital instability refers to a series of thoughts or actions by spouses that frequently lead to actual separation or divorce (e.g., discussing the idea of obtaining a divorce or consulting with an attorney about a divorce). Thus, the theoretical model shows pathways of influence between Time 1 (the first year of the study) economic pressure and Time 2 (one year later) emotional distress as well as between Time 1 marital instability and Time 2 emotional distress. This sequencing of measures in time assures that the hypothesized causal variables actually occurred before the predicted emotional responses.

Figure 1. The Conceptual Model of Economic Pressure and Marital Instability.

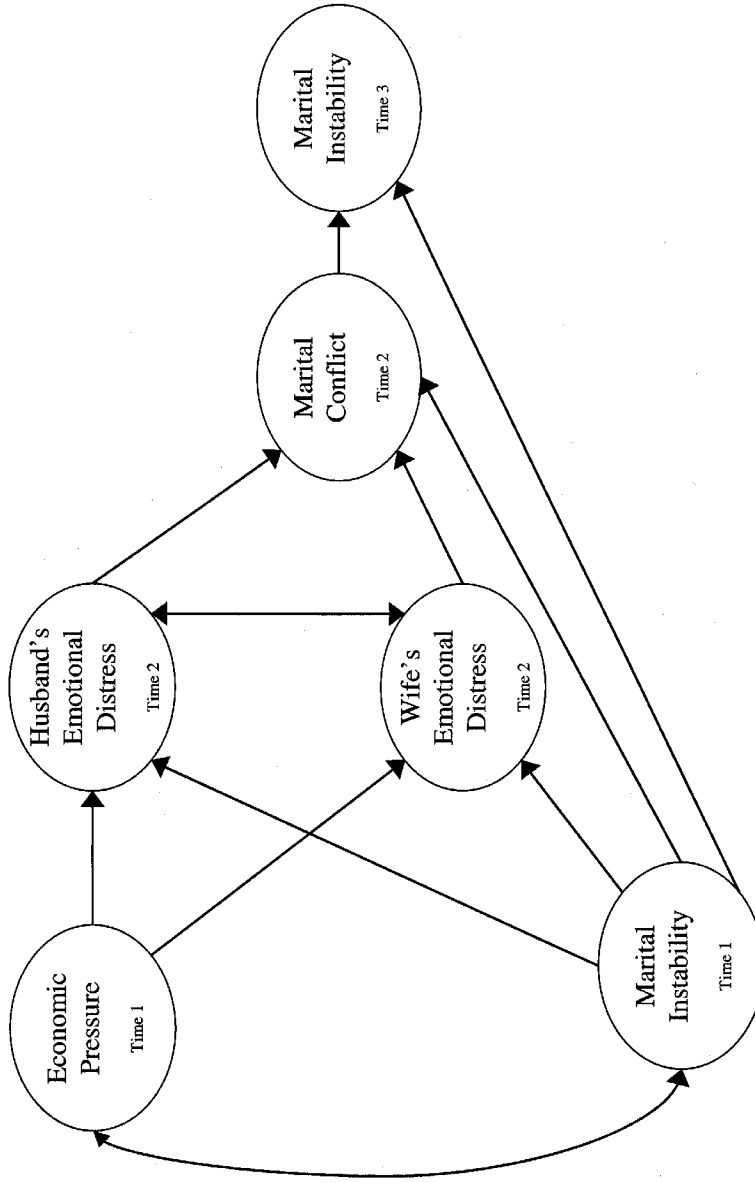


Figure 1 also illustrates our expectation that the psychological difficulties brought on by economic pressure and marital instability increase the risk for damaging conflict and hostility in the marital relationship. The model proposes that the anger, worry, and sadness exacerbated by economic problems will often find expression through marital interactions marked by argument, derogation, and insensitivity. Indeed, previous studies have shown that economic problems are indirectly associated with marital conflict through emotional distress (e.g., Conger et al., 1992; Liem & Liem, 1990), consistent with the proposed model. The hypothesized association between emotional distress and marital conflict also is consistent with empirical evidence showing that psychological problems can lead to both angry interactions and also to withdrawal in close relationships (Berkowitz, 1989; Conger et al., 1994; Downey & Coyne, 1990; Gotlib & McCabe, 1990).

In addition to causing emotional distress, marital instability was expected to influence marital conflict directly and indirectly. As shown in the Figure 1, the indirect relationship occurs through marital instability's influence on emotional distress, which in turn affects marital conflict. In addition, because unstable marriages are more likely to be marked by conflictual spousal interactions than stable marriages are (e.g., Conger et al., 1990), the model proposes a direct association between marital instability (Time 1) and marital conflict (Time 2). That is, the consideration of divorce will increase the likelihood of irritable interchanges between spouses.

Next, the theoretical model proposes that couples with unstable marriages at time 1 will likely experience continuing problems over the course of the study. Net of the influence of a couple's initial level of marital instability, however, we also expected time 2 marital conflict to lead to increased risk for time 3 marital instability. Consistent with earlier studies of marital distress (e.g., Conger et al., 1990), we proposed that high levels of spousal conflict would be associated with reports of relatively greater marital instability from year one to year three. Finally, the model hypothesizes that economic pressure will be indirectly related to time 3 marital problems through its impact on emotional distress and associated couple conflicts.

It is important to note that much of the earlier work supportive of the model was done with urban populations. One might assume that the degree of stress produced by economic hardship would not be as great in rural families because of the presumably more benign and supportive environments found in rural areas. Because of the enormous economic upheavals in rural America (e.g., Lasley, 1994), however, we hypothesized the reverse. That is, we expected that the rural couples in the present study would suffer the negative consequences of economic stress depicted in the theoretical model. We also predicted that they would benefit from the protective mechanisms described in the following discussion.

### **Marital Interactions and Couple Resilience**

Thus far the theoretical model builds upon earlier work by suggesting a dynamic process through which earlier economic pressure increases individual distress and exacerbates marital problems. The major concern of the present study, however, is the identification of points in these hypothesized processes at which particular patterns of marital interaction might protect against the damaging influence of economic pressure on each spouse and on their relationship. Theoretical insights from multiple sources led to the selection of two potentially important links in the model for the operation of protective influences: (a) marital empathy, linking economic pressure and emotional distress, and (b) solution generation, linking marital conflict and marital instability.

*Marital empathy.* Theoretical insights provided by Weiss (1990) and by Pearlin and McCall (1990) played an important role in our selection of spousal behaviors that might reduce the adverse impact of economic pressure. Weiss (1990) suggested that when outside threats such as economic pressure exist, reassurance of worth by a spouse might be the most protective form of support. Similarly, Pearlin and McCall (1990) proposed careful listening and expressions of affection are effective forms of marital support during stressful times. Both sets of investigators suggested that emotional reassurance would be more protective against work-related stresses, such as insufficient income, than an emphasis on advice giving.

Drawing on these ideas we developed a concept named marital empathy. Marital empathy refers to the tendency of each spouse (a) to listen to the other's cares and concerns, (b) to maintain a cooperative and helpful posture in relation to expressed concerns, and (c) to indicate sensitivity to the partner's point of view. Couples rated highly on this interaction style also express a willingness to make changes in their own behavior to help meet the needs of the spouse. We expected that this pattern of couple interaction would be especially important for families experiencing significant economic pressure; many cooperative forms of adjustment are required to meet the demands of difficult financial conditions. Specifically, we proposed that couples high on this interactional attribute would experience less economically related emotional distress than those demonstrating low marital empathy. Furthermore, we hypothesized that advice giving, in the form of proposing numerous solutions to current difficulties, would do little to alleviate the emotional distress produced by economic pressure.

***Generating solutions.*** The next point of concern in the processes shown in Figure 1 involves the connection between Time 2 marital conflict and Time 3 marital instability. Assuming that empathy does not entirely eliminate the connection between economic pressure and distress and that initially unstable marriages will continue to experience greater conflict, the question of interest turns to strategies that couples might use to reduce the adverse consequences of such conflict for the marriage. To help answer that question we turned to the work of Levinger and Huston (1990), who noted that conflict occurs in all marriages at some time and that it is the means by which couples resolve disputes that distinguishes more successful from less satisfying relationships. In many instances couples engage in conflict as a contest that results in a winner and a loser, or they withdraw from disagreements, leaving the underlying dispute as a nagging and unresolved issue in the marriage. Contrary to these destructive styles of dealing with conflict, Levinger and Huston (1990, p. 51) proposed that "collaborating to resolve a problem jointly is the principal way to go beyond a zero-sum conception of an interpersonal conflict." They suggested that such collaborative problem solving provides the most effective means for resolving conflicts in a mutually satisfying manner.

Drawing on the work of Levinger and Huston (1990), we developed a concept called solution generation. Couples who do well at solution generation work effectively together to develop or identify realistic and nonexploitative solutions to conflicts they experience. We proposed that couples demonstrating this interactional quality, compared to those who rated low on this attribute, would report smaller increases in marital instability as a result of the normal conflicts and disagreements in married life. Additionally, we expected that marital empathy would not moderate the relationship between marital conflict and marital instability. That is, we proposed that internal family stressors such as marital conflict require more than an understanding response to reduce their negative influence on family relationships. Without some degree of resolution these stressors will be a continuing threat to family well-being. The following analyses empirically test both our basic process model and the hypothesized protective marital interactions linked to specific portions of the model.

## **Method**

### **Sample**

The married couples in the study were mothers and fathers participating in an investigation of rural family economic stress. At Year 1 of the study (1989), each family included two parents (average length of marriage, 17.9 years), a seventh-grade adolescent, and another sibling. The age of the sibling varied, but all were within 4 years of the seventh grader's age. All of the families lived in small towns or the countryside: 34% lived on a farm, 12% lived outside a town but not on a farm, and 54% lived in a town with a population no greater than 6,500. The average family size was 4.95 members, and family median income for 1988 was \$33,399.

When first interviewed in 1989, the sample consisted of 451 white, lower-middle and middle class families. During the next three years, 44 families withdrew from the study and as many as 36 families were deleted from some of the following analyses because of missing data. Participants were interviewed in three successive years-- 1989, 1990, and 1991. The retention rate for each year of data collection was about 95 %. Families who withdrew from the study were, in most respects, not significantly different from those who remained in the study. In terms of education, however, husbands who dropped out averaged 12.74 years of education, whereas those who remained in the study averaged 13.58 years. This difference was statistically significant ( $p < .05$ ). Wives who dropped out averaged 12.87 years of education, not significantly different from the 13.48 years of education for wives who stayed in the study. Other longitudinal studies of families with adolescents also have reported greater attrition of less educated parents (e.g., Flanagan & Eccles, 1993).

### **Procedures**

The families in the study were recruited from all 34 public and private schools with a seventh-grade class in selected communities of 6,500 people or less, in eight counties. After receiving a letter explaining the research project, families were contacted by telephone and asked to participate. About 78% of the eligible families agreed to take part in the study. Each participating family member was paid approximately \$10 per hour of participation.

In each year of the study, families were visited twice in their own home. During the first visit, each of the four family members completed a set of questionnaires focusing on, family member characteristics and patterns of family interaction. The second visit occurred within 2 weeks of the first. A trained interviewer began the second visit by asking both parents and the two children to complete checklists designed to identify current family disagreements or conflicts. Potential areas of disagreement between parents and children included household chores, homework, and transportation. Potential areas of disagreement between the marital couple included money, relatives, and drug or alcohol use. After completing the checklists, family members were asked to gather around a table for the videotaping of four different structured interaction tasks.

For the first interaction task (Task 1), family members were given a set of cards containing questions to discuss about their family life (e.g., activities they do together) that were designed to elicit family interactions. Family members were asked to review the cards in sequence and one at a time. As in all four tasks, the interviewer explained the task procedures, completed a practice card with the family, and checked the video recording equipment before leaving the room for another part of the house. Each family spent a total of 30 minutes discussing the Task 1 cards. The problem solving task (Task 2) began shortly thereafter and lasted 15 minutes. During this task, parents and children discussed and attempted to resolve three problems identified on the previously completed questionnaires. Families were asked to first discuss the problem that created the most difficulties and disagreements between parents and adolescents. They were told to go on to the second and third problems only after resolving the first one. Data for the measures of problem solving behavior were collected while the family addressed the first problem.

The third task involved only the siblings and lasted 15 minutes. The two children discussed such topics as things they do together, school activities, and their plans for the future. During the sibling interaction task, the parents completed questionnaires in another room. For the fourth task, the husband and wife spent 25 minutes discussing several topics, including the history and status of their relationship, areas of agreement or disagreement, and their plans for the future. Meanwhile, the two children worked on questionnaires in another room. The analyses reported here used observational data collected from the second and fourth interaction tasks. Survey data from the study's first, second, and third years were also used in these analyses.

The video taped family interactions were coded by trained observers who used the Iowa Family Interaction Rating Scales (Melby et al., 1990) to rate styles of family interaction of theoretical interest. Before they began coding videos, all observers received 200 hours (20 hours per week for 10 weeks) of training and passed extensive written and viewing reliability tests. They then attended at least two coder training sessions each week to ensure their continued reliability. To test interobserver reliability, we randomly assigned 25 % of all videotaped tasks to be coded by a second, independent coder. The primary and secondary codings were then compared using intraclass correlations (Suen & Ary, 1989). An observer rating manual with a complete description of all coding procedures and all task procedures, as well as definitions for all rating scales, is available from the first author.

## **Measures**

Previous research suggests that using just one reporter to measure study variables can produce strong associations among theoretical constructs that are, at least in part, a function of that reporter's dispositional characteristics (Bank, Dishion, Skinner, & Patterson, 1989; Lorenz, Conger, Simons, Whitbeck, and Elder, 1991). Indeed, high correlations have been found between a person's self-perception or mood state and his or her perceptions of others, particularly of close family members (Brewin, Firth-Cozens, Furnham, & McManus, 1992; Gara et al., 1993). These strong associations seem to reflect traits of negative or positive affectivity as much or more than linkages among separate empirical realities (Watson & Pennebaker, 1989). To reduce this method variance problem in the present study, we gathered information from several agents, using multiple methods of data collection. A description of each measure follows.

***Economic pressure.*** Economic pressure encompasses the daily irritations and difficulties created by economic hardship, such as the inability to pay one's bills, a lack of resources to finance economic necessities, and the need to continually reduce expenditures (see Conger et al., 1992, 1994). This construct is consistent with but also expands on the concept of economic strain (Conger & Elder, 1994). We used it as our primary exogenous variable reflecting family economic conditions because several studies have shown that presumably objective indicators of economic hardship, such as low income and job loss, affect individual and family functioning primarily through the actions or experiences included in the economic pressure construct (Broman, Hamilton, & Hoffman, 1990; Conger et al., 1994; Kessler et al., 1988). That is, because other indicators of hardship increase economic pressure, they affect the well-being of family members; therefore, including both the pressure construct and other measures of economic conditions in the model would be redundant and complicate later statistical estimation of the proposed processes.

Economic pressure was measured in the study's first year. Self-reports from both parents were used to develop the three indicators for this construct. For the first indicator, husbands and wives independently responded to three items about making ends meet. Both spouses were asked if they had enough money to meet their expenses (1 = strongly agree, 5 = strongly disagree), if they had difficulty paying monthly bills (1 = no difficulty at all, 5 = a great deal of difficulty), and if they had any money left over at the end of the month (1 = more than enough money left over, 4 = not enough money to make ends meet). Each spouse's responses were standardized and summed. The correlation between the spouse reports on the summed indexes was substantial ( $r = .64$ ); therefore the two indexes were combined to produce a single indicator for the construct ( $\alpha = .86$ ).

The survey items for the second indicator of economic pressure asked if the husband and wife believed their family had enough income to meet their basic material needs. Each spouse was asked whether they had the money needed to purchase clothing, household items, a home, a car, food, medical care, and recreational activities (1 = strongly agree, 5 = strongly disagree). The summed husbands' and wives' indexes were strongly correlated ( $r = .54$ ) and were combined to form a second indicator for the economic pressure construct ( $\alpha = .91$ ).

The final indicator of economic pressure, economic adjustments, measured the extent to which families had made cutbacks in expenditures during the past year in response to financial difficulties. Husbands and wives independently responded (0 = no, 1 = yes) to a list of 16 possible adjustments, including giving up medical or household insurance, reducing household expenditures, and changing vacation plans. The husbands' and wives' indexes were significantly correlated and were combined into a single indicator ( $\alpha = .89$ ). For instances in which both spouses responded in the affirmative for a specific item, the index increased only by 1, resulting in a possible range of 0 to 16 for the economic adjustments measure.

***Marital instability.*** We measured marital instability during the study's first and third years using two indicators. The first indicator was developed from the husbands' responses to five self-report survey items, and the second indicator was developed from the wives' responses to the same five items. In 1989, both spouses used a 4-point scale (1 = never, 2 = yes, prior to the last three years, 3 = yes, within the last three years, 4 = yes, within the last three months) to report if they had thought their marriage might be in trouble, had thought of getting a divorce or separation, had discussed divorce or separation with a close friend, had ever seriously suggested the idea of divorce, or had talked about consulting a lawyer regarding divorce or separation (Booth, Johnson, & Edwards, 1983). During year 3 the possible responses were not in the past year, within the past year, within the last six months, and within the past three months. This altered response set allowed us to predict changes in marital instability from Year 1 to Year 3. Scale items were summed to produce a husband's and wife's report of marital instability at Time 1 ( $\alpha = .82$  for husbands,  $\alpha = .85$  for wives) and Time 3 ( $\alpha = .82$  for husbands,  $\alpha = .87$  for wives). These separate reports were used as indicators for the marital instability construct.

***Emotional distress.*** We measured the husbands' and wives' levels of emotional distress during the study's second year using self-reports, spouse reports, and observer ratings. Each husband and

wife completed the depression, anxiety, and hostility subscales of the Symptom Checklist-90-Revised (Derogatis, 1983). For both husbands and wives, responses to these three subscales were highly intercorrelated. The self-report indicator of emotional distress, therefore, was formed by combining responses to the three subscales ( $\alpha = .92$  for husbands,  $\alpha = .92$  for wives). For the second indicator for the construct we asked each spouse four questions about the partner's level of emotional distress. These survey items were rated on a five-point scale (1 = strongly disagree, 5 = strongly agree). Each spouse was asked whether his or her partner is a happy person (reverse coded), is always sad or depressed, is usually tense and irritable, and is a worrier. Summing these items produced the wife's report of her husband's distress ( $\alpha = .79$ ), and the husband's report of his wife's distress ( $\alpha = .77$ ).

Three observational codes from task four (the marital interaction task) were summed to create the third indicator of emotional distress. Each observed behavior (both verbal and nonverbal) was rated on a 5-point scale (1= the behavior is not at all characteristic of the individual, 5 = the behavior is very characteristic of the individual). In the first code observers rated the extent to which each spouse appeared to be sad or unhappy. Observers rated each spouse's display of anxiety or agitation in the second code. Finally, a rating of each spouse's level of contentment or satisfaction with self and his or her surroundings was reverse coded to produce a measure of lack of positive affect. The three codes were summed to form a single measure of observed emotional distress for the wives ( $\alpha = .69$ ) and for the husbands ( $\alpha = .69$ ). Interobserver agreement for the rating scales used in this measure averaged .71 for wives and .67 for husbands.

***Marital conflict.*** We defined marital conflict as the extent to which the couple engaged in disagreements or conflictual interactions. Both parents and both children reported on the amount of marital conflict during the study's second year. The husband and wife reports were derived from their responses to the marital problems checklist. Using this checklist, both spouses reported how much they argued or disagreed about 16 different issues (0 = not at all, 4 = all the time). Potential areas of conflict included work, relatives, vacations, and money. Each spouse's responses were summed to form the two indicators of self-reported marital conflict ( $\alpha = .85$ , husbands;  $\alpha = .84$ , wives).

The two children in the study provided the information for the third indicator of marital conflict. Each child responded to three questionnaire items. First, the children independently rated

how often their parents argued or disagreed with each other (1 = never, 5 = often), how often their parents argued specifically about money (1 = never, 5 = always), and whether their parents had argued more than usual with each other during the past year (1 = no, 2 = yes). Each set of responses was standardized and summed. After determining that the two children's measures were highly correlated, we combined them to form a 6-item scale ( $\alpha = .67$ ).

Nine observational codes assessed during the marital interaction task (Task 4) were summed to form the final indicator of marital conflict. For each of these codes, observers rated verbal and nonverbal behavior using a 5-point scale (1 = the behavior is not at all characteristic of the individual, 5 = the behavior is very characteristic of the individual). The first code, hostility, measured the extent to which each spouse directed hostile, angry, critical, disapproving, or rejecting behavior toward his or her partner. Observers also coded the degree to which each spouse used verbal or nonverbal threats or bullying to gain compliance from his or her partner. A third code measured the extent to which an individual was impatient, self-centered, or unwilling to comply with his or her partner's wishes. Observers rated each spouse on these three codes, producing a total of six ratings.

For the next three codes observers rated the couple as a unit (producing a total of three ratings). Transactional conflict measured the extent to which the couple engaged in reciprocal exchanges of hostility that became progressively more negative. This measure differed from the hostility code in that it assessed intensifying conflict in the marriage, rather than individual displays of anger and hostility. A high score on the eighth observational measure, relationship quality (reverse coded), reflected a marital relationship that was brittle and conflictual. Finally, with the silence/pause code, observers rated the extent to which the couple engaged in protracted silences that were tense and uncomfortable. These nine observational ratings were summed to form the observer's report of marital conflict ( $\alpha = .89$ ). Interobserver reliability for the individual ratings used in the scale averaged .76.

**Marital empathy.** Marital empathy included behaviors indicative of cooperation and helpfulness between the spouses, sensitivity to one another's situation, and a willingness to modify one's own behavior to meet the other's needs. This construct was measured during the study's first year using observational ratings from Tasks 2 (the family problem solving task) and Task 4 (the marital interaction task). Thus, couples showing a high level of marital empathy exhibited empathetic behavior toward one another while confronting a problem as well as during a general marital discussion. Task 2 and Task 4 observers rated the wife's empathy toward her husband and the husband's empathy toward his wife, and these four ratings were summed. Interobserver reliability for the individual ratings included in this measure averaged .65 ( $\alpha = .55$ ).

**Solution generation.** Solution generation, a couple's demonstrated ability to identify or develop a number of useful solutions to a problem, was measured during the study's first year using reports from three informants. First, each spouse rated his or her partner's ability to generate solutions to problems. Using a 7-point scale (1 = always, 7 = never) spouses were asked how often, when confronted with a problem, their partner "has good ideas about how to solve the problem" (reverse coded) and how often their partner "has poor ideas about how to solve the problem." Four observational codes also were used to measure solution generation. Task 2 observers (the problem solving task) rated both the husband and the wife on the number of problem solutions each identified (1 = no solutions identified, 5 = 4 or more solutions identified). Observers also rated each spouse on the quality of his or her solutions (1 = no solutions identified, 5 = at least one solution identified that is reasonable, nonexploitative, realistic, achievable, and specifically stated). Interobserver reliability for these codes averaged .76. To form a single measure of solution generation, the wives', husbands', and observers' ratings were all standardized and summed ( $\alpha = .62$ ).

## Results

The results are generally supportive of the process model derived from the research literature and illustrated in Figure 1. All of the postulated direct paths were statistically significant as were factor loadings for the indicators of the various constructs. Moreover, the overall goodness-of-fit index was quite robust. The findings suggest that two major family stressors, economic pressure and marital instability, are associated with high levels of emotional distress for both husbands and wives. (See Conger & Elder, 1994) These emotional problems, in turn, lead to conflicts in the marriage (see also Liem & Liem, 1990). The results replicate earlier findings regarding the association between psychological distress and problems in marital and other family relations (Conger et al., 1990, 1994; Coyne & Downey, 1991). Presumably, emotions such as anger and depression surface in the marriage through instances of irritable conflicts and withdrawal from intimacy.

As expected, distress-related marital conflicts led to a subsequent increase in marital instability. Also as predicted, the influence of economic pressure on later marital instability was entirely indirect through the proposed mediating processes, personal distress and marital conflict. Moreover, just as the eventual influence of economic stress on marital instability was indirect, so was its association with marital conflict. We conclude that economic hardship has its most significant impact on marriage through its exacerbation of wives' and husbands' emotional problems. But are there specific marital resources that can inhibit this destructive set of processes?

We predicted that specific types of interactional skills in marriage would be protective at different points in the postulated set of causal relationships. The theoretical ideas of Weiss (1990) and Pearlin and McCall (1990) suggested that affection, sensitivity, and personal affirmation by marital partners are most effective in reducing the negative impact of work-related threats on personal well-being, whereas advice giving has little protective influence. Drawing on these perspectives, we proposed that marital empathy would be especially likely to act as a buffer against the emotional costs of economic pressure for both husbands and wives. The measure of empathy involved the observed tendency of both spouses to demonstrate concern, caring, sensitivity, and helpfulness to one another during two videotaped interaction tasks. As expected, couples who rated high on this interactional skill compared to those who were not were significantly less likely to

suffer emotionally as a result of family economic difficulties. Also as expected, the ability to generate solutions to problems did not alleviate emotional distress brought on by economic concerns.

Theoretically, this finding provides important new information regarding specific properties of marriages that are protective in the face of economic stress. The results tell us what couples actually do that has a protective influence, rather than simply indicating that those who are happy with their marriages are more resilient in the face of economic difficulties than those who are not. Presumably it is these actions that account both for their satisfaction with their relationships and for the buffering effect of happy marriages. In fact, as we have defined marital empathy, it involves a set of behaviors quite similar to a range of positive acts found to be associated with marital satisfaction (Gottman, 1993).

Data regarding specific social behaviors provides the type of information needed to assist in the development of interventions for stressed couples. *The behaviors included within the empathy construct can be taught to and applied by couples who, as a result, should increase their degree of resilience to such outside threats as economic stress. If the source of stress for couples results from difficulties within the family itself, however, other interactional skills are needed to reduce their adverse impact. That is, concern and understanding should provide affirmation that benefits a spouse when stressors from the outside pose a threat to well-being. When one's partner is the source of stress, however, resolution of the problematic behavior is required rather than empathy alone.*

Drawing on the work of Levinger and Huston (1990), we proposed that couples with strong problem-solving skills would be most able to respond effectively to marital conflict, reducing its impact on later marital instability. As noted, we also predicted that marital empathy would do little to moderate the relationship between marital conflict and marital instability. The findings were consistent with these hypotheses. Couples who demonstrated the ability to generate realistic and nonexploitative solutions to their conflicts and disagreements were less likely to suffer instability in their marriages as a result of such conflicts than less capable couples. On the other hand, a couple's ability to respond with empathy did little to protect their marriage from the damaging effect of marital conflict. These findings suggest that, when faced with an internal family stressor, couples need to do more than provide sensitivity and concern. They also need to be able to negotiate, bargain, and reach agreement on realistic solutions to these internal family matters. This finding

sharpens our knowledge regarding specific social support processes and also provides a potential tool for assisting couples, almost all of whom will experience periods of conflict in their relationships. We expect solution-generating skills to be teachable and useful in programs designed to help couples develop strategies for promoting more satisfying relationships.

## Implications

*The present study, of course, requires replication with both urban and rural families. Moreover, these findings need confirmation with other ethnic groups and with other family forms, such as childless married partners. Also important will be extension of this work to other family relationships. For example, will empathy and problem-solving skills have similar influences for parent/child or extended family relationships? The model of economic stress and marital instability tested here also needs to be compared with other possible models regarding the same process. The current results remain tentative until additional work is done to address these issues. Nonetheless, we can conclude that the data are consistent with both the hypothesized process model of economic pressure and marital instability and with the protective mechanisms hypothesized to moderate specific linkages in the model.*

This study attempted to shed new light both on the processes through which economic stress affects marital relations and on particular characteristics of interactions between spouses that might reduce the cumulative harm produced by such processes. The initial impetus for the research derived from the Depression-era studies of the 1930s, which produced suggestive evidence that spouses with strong marriages were less likely to suffer either personally or as a family when jobs or income were lost (Angell, 1965; Cavan & Ranck, 1938; Komarovsky, 1940). This research, however, had several conceptual and methodological weaknesses including limitations in measurement and sampling and a static rather than dynamic view of marriage. Many of the problems in these early studies have been addressed by more contemporary findings that have shown that marital quality both influences and is affected by the economic stress process (Liem & Liem, 1990; Liker & Elder, 1983). This work has taken the field beyond the earlier, trait-like conception of marital quality.

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