Developmental Psychology
1993, Vol. 29, No. 2, 368-381

0012-1649/93/$3.00

Social Network and Marital Support as Mediators and Moderators of the Impact of Stress and Depression on Parental Behavior

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Structural equation modeling was used with a sample of 451 2-parent families to test an elaboration of J. Belsky's (1984) model of the determinants of parental behavior. Results largely supported the model. Economic pressure disrupted parenting by increasing depression and undermining access to spouse support. Spouse support had both a direct effect on parenting and an indirect influence through depression. For mothers, spouse support moderated the impact of economic strain on parenting by reducing the disruptive impact of depression on parental behavior. Social network support only influenced parenting indirectly through depression. There was no support for the idea that social network support serves to buffer parental behavior against the adverse consequences of economic strain, nor was there evidence that it can compensate for low spouse support. The findings indicated, however, that spouse support is a more powerful determinant of quality of parenting when social network support is low.

Research on parental behavior has been heavily influenced by Belsky's (1984) conceptual model of the determinants of parenting. Although studies have been completed on particular elements of Belsky's schema, there has been little effort to test his model in a more comprehensive fashion. The present study is an attempt to examine the major components of Belsky's framework.[1] The model to be tested is depicted in Figure 1. The primary focus of the model is the manner in which marital and social network support influence parental behavior. The section to follow discusses the elements of the proposed model, noting where it corresponds to, elaborates on, or departs from Belsky's ideas.

The Proposed Model

Aversive Events and Psychological Well-Being

Belsky (1984; Belsky & Vondra, 1989) reviewed evidence that parental behavior is disrupted by work-related stressors. He argued that much of this effect may be mediated by the psychological well-being or personality of the parent. The proposed model depicted in Figure 1 suggests that this is true for life stress in general. The model posits that stressful events promote depression and irritability (Arrow A) and that such an emotional state reduces quality of parenting (Arrow I).

Besides this indirect effect through psychological well-being, life stress is expected to influence quality of parenting through its impact on access to marital support. This path is an addition to Belsky's model and is depicted by Arrow B. Aversive circumstances that make a person irritable and depressed are likely to stimulate a similar reaction in his or her marital partner. Thus, life stress would be expected to reduce the amount of social support received from a spouse. Consistent with this contention, past research has reported that family stress often diminishes the amount of support that a person receives from his or her mate (e.g., Conger et al., 1990).

The stressor used to test the proposed model is family economic pressure.[2] Individuals who are under severe economic

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This study (Journal Paper No. 14946 of the Iowa Agriculture and Home Economics Experiment Station, Ames, Iowa, Project No. 2931) is based on collaborative research involving the Iowa Youth and Families Project at Iowa State University, Ames, and the Social Change Project at the University of North Carolina at Chapel Hill. The combined research effort is currently supported by the National Institute of Mental Health (MH43270), the National Institute on Drug Abuse (DA05347), the Bureau of Maternal and Child Health (MCJ109572), the John D. and Catherine T. MacArthur Foundation Program for Successful Adolescence, and a Research Scientist Award (MH00567).

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[1] Belsky's (1984) model of determinants of parenting includes the parent's developmental history. He posited that effects of this variable are mediated through the parent's personality. Developmental history was not included in the present model so as to keep the number of parameters estimated in the structural equation modeling within the limits dictated by the sample. It should be noted, however, that the data set in the present study has been used to investigate the mechanisms whereby a major aspect of a parent's developmental history—quality of parenting received as a child—influences current parenting (Simons, Beaman, Conger, & Chao, in press; Simons, Whitbeck, Conger, & Wu, 1991). These analyses indicated that parenting received as a child has a direct effect (i.e., a modeling effect) on parental behavior, in addition to an indirect effect through impact on personality.

[2] In an effort to keep the number of parameters estimated in the structural equation modeling within the limits dictated by the size of the sample, income and other more objective indicators of hardship were not included in the proposed model. Albeit, prior analyses, using the same measures of constructs as those in the present article, indicated that low family income, high ratio of debts to assets, income loss, and employment instability are strong predictors of perceived economic pressure, and that perceptions of economic pressure serve to mediate the impact of these more objective indicators of family economic circumstances on the endogenous variables used in the present

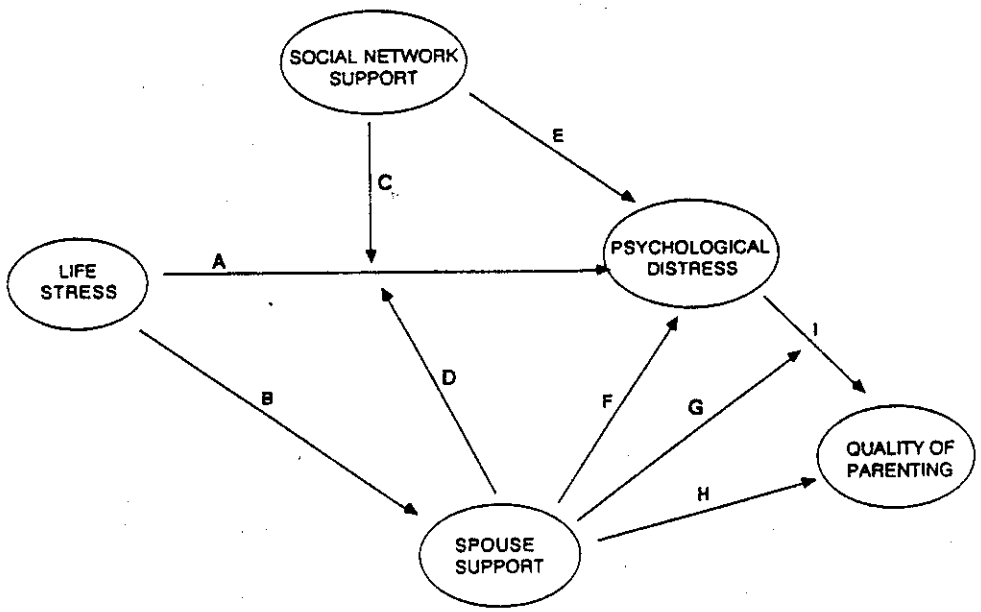

Figure 1. Model to be tested.

pressure cannot pay their bills, are unable to purchase basic necessities, and must make financial adjustments such as borrowing money, taking an additional job, or terminating their medical insurance. Thus, economically pressured persons are deprived of a wide variety of highly valued outcomes and are forced to endure many exceedingly unpleasant events, while lacking the resources or opportunities necessary to change their plight. Past studies have found a relationship between economic pressure and inept parenting (e.g., Elder & Caspi, 1988; Simons, Lorenz, Conger, & Wu, 1992). The proposed model indicates that the association between economic pressure and quality of parenting is mediated by the parent's emotional state and access to marital support. A study by Conger, Elder, Lorenz, Simons, and Whitbeck (1992) provides some support for this idea.

Support From Spouse

The construct most often considered in studies of the determinants of parenting is quality of the marital relationship. An association between marital satisfaction and skillful parenting has been found for both mothers and fathers, in various countries, and for parents of infants, toddlers, and preschoolers (see Belsky, 1990). A recent study by Cox, Owen, Lewis, and Henderson (1989) reported that the influence of marital quality on parenting remains after controlling for the effects of parents' psychological characteristics.

Building on this literature, Belsky (1981, 1984; Belsky & Vondra, 1989) argued that the marital relationship is the principle support system for parents. His conceptual model posits that spouse support is likely to have a direct effect on quality of parenting, as well as an indirect effect through psychological well-being. A direct effect is expected, because a supportive spouse is likely to provide advice and assistance to his or her mate regarding the tasks and responsibilities of parenting. This resource should enable a parent to perform his or her parenting duties in a more competent fashion. This function is depicted in Figure 1 by Arrow F, which links spouse support to quality of parenting.

An indirect effect is also posited as positive marital interaction would be expected to promote life satisfaction and reduce the probability of depression. Consonant with this expectation, a variety of studies have found high marital support to be associated with low levels of psychological distress (e.g., Glenn & Weaver, 1981; Merikangas, Prusoff, Kupfer, & Frank, 1985). Hence, it is anticipated that spouse support will influence quality of parenting indirectly through its influence on the mate's emotional well-being (Arrow F).

In addition to these direct and indirect effects, Belsky (Belsky & Vondra, 1989) noted that marital support may buffer parenting when the parent is suffering from reduced psychological resources. This hypothesis is represented by Arrow G. Supportive spouses might be expected to provide increased encouragement, advice, and assistance with parenting when they perceive their mate to be stressed or emotionally upset. Consequently, psychological distress is less apt to disrupt a person's parenting when he or she has access to spouse support. In such cases, marital support operates as a coping resource functioning to moderate the association between psychological distress and quality of parenting.

There is a second way in which marital support might operate to buffer parenting that is not cited by Belsky. Spouse sup-

study: parents' emotional well-being, marital interaction, and parental behavior (Conger et al., 1990; Conger et al., 1992; Simons, Lorenz, Conger, & Wu, 1992). These findings are based on two independent samples of families, including the one used in the present article. Thus we use economic pressure as the starting point in the proposed model.

port may serve to reduce the extent to which economic pressure, and other such stressors, produce psychological distress. Although findings have been inconsistent, several studies have reported that supportive social relationships serve to moderate the relationship between stressful events and depression (Kessler, Price, & Wortman, 1985; Thoits, 1985). Given the emotional intensity and frequency of interaction in marital relationships, a person's mate should be a particularly potent source of social support (Fincham & Bradbury, 1990; Rees, 1990). Thus, it is posited that an individual will be less apt to show psychological distress in the face of economic pressure when his or her spouse is a source of understanding, advice, and assistance (Arrow C in Figure 1).

There is some evidence that marital support moderates the disruptive impact of life stress on parenting. Elder, Liker, and Cross (1984) found this buffering effect for fathers in their study of families of the Great Depression, whereas Simons, Lorenz, Conger, & Wu (1992) reported this finding for mothers. The model tested in the present study goes beyond these findings by examining the processes whereby this buffering effect is achieved (viz. reduction of the impact of economic strain on psychological distress or reduction of the impact of psychological distress on quality of parenting).

Social Network Support

Social network support refers to warmth, encouragement, and assistance provided by friends, neighbors, and extended family. A few studies have found social network support to be associated with parenting (Powell, 1980; Weinraub & Wolf, 1983). Belsky's (1984; Belsky & Vondra, 1989) conceptual framework posits that social network support influences parenting in a manner analogous to marital support. Thus social network support is described as exerting a direct and indirect effect on parenting and as functioning as a coping resource that buffers parenting in the case of reduced parental psychological resources.

Belsky (1984; Belsky & Vondra, 1989) is quick to add, however, that although friends, relatives, and neighbors may operate as a support network for parents, their influence is apt to be secondary to that of the marital relationship. His argument is based on the observation that individuals typically invest much time and emotional energy in their marriage compared with other relationships. Consistent with this view, studies that have examined the relative importance of marital versus other kinds of support find that quality of the marital relationship is a stronger predictor of parenting than social network support (Crnic, Greenberg, Ragozin, Robinson, & Basham, 1983; Friedrich, 1979; Wandersman & Unger, 1983).

The model proposed in the present study attempts to elaborate this finding regarding the relative importance of the two types of social support by identifying various ways in which spouse support is likely to exert a greater influence on parenting than social network support. First, in contrast to spouse support, it is improbable that social network support has a direct effect on parenting. Friends and relatives, while they may occasionally help with child care, are not available in the household to provide assistance with the everyday tasks and responsibilities of parenting. Hence, contrary to the suggestions of Belsky, the model in Figure 1 shows no arrow between social network support and quality of parenting.

Social network support might be expected, however, to influence parental behavior indirectly through its impact on emotional well-being (Arrow E). Several studies have reported that support from friends and relatives diminishes feelings of depression (Kessler et al., 1985). Although a supportive social network should operate to reduce depression, this effect is apt to be smaller than that for spouse support. Given the intensity and frequency of interaction with the marital partner, the level of support and assistance provided by this individual is expected to influence emotional well-being to a greater degree than the quality of interaction with friends and relatives. Consistent with this argument, past studies have found that quality of the marital relationship is a stronger predictor of depression than satisfaction with less intimate relationships (Brown & Harris, 1978; Leaf, Weissman, Myers, Tischler, & Holzer, 1984). Thus, the magnitude of the association for Arrow F is posited to be larger than that for Arrow E.

Finally, social network support is viewed as secondary to spouse support, because it is expected to buffer parenting in a more limited fashion. First, as noted earlier, studies have reported that supportive social relationships serve to moderate the relationship between stressful events and depression. Given differences in frequency and intensity of interaction, spouse support is more likely to produce this buffering effect than support from friends and relatives (i.e., Arrow D is expected to have a larger effect than Arrow C).

Second, whereas spouse support was posited as a moderator of the impact of depression on parenting, social network support is not expected to display this effect. Although friends and relatives may offer understanding and encouragement that moderates the effect of stressors, such as economic pressure, on emotional well-being, it is unlikely that friends and relatives will be able to lessen the disruptive influence of depression on parenting. This is because friends and relatives are not usually available in the household to provide advice and assistance with the everyday tasks and responsibilities of parenting. Thus, whereas Belsky posits that social network support will buffer parenting when parents experience psychological distress, the present model indicates that the buffering effect of social network support is limited to the association between economic pressure and psychological distress.

Although Belsky and Vondra (1989) asserted that the marital partner is the primary support system for parenting, they contend that the social network becomes the principal parental support system when marital support is absent. They argued that social network support becomes more salient (i.e., it substitutes or compensates) when spouse support is low. Based on the arguments developed earlier, this compensation phenomena is most likely to be expressed in the relationship between support and depression. Compared with persons high on spouse support, individuals who receive little warmth and assistance from their marital partner are more dependent on their social network for social support. Therefore, under the condition of low spouse support, understanding, assistance, and companionship provided by friends and relatives would become more salient, that is, more rewarding (Emerson, 1981; Homans, 1974). To the extent that this is true, the association between social

network support and depression (Arrow C) should be stronger for persons low compared with those high on spouse support.

As noted earlier, spouse support is expected to display a direct effect on quality of parenting (Arrow H), whereas social network is not. Furthermore, social network support is not expected to compensate or substitute for spouse support by manifesting a direct effect on parenting in the absence of spouse support. Friends and relatives are so rarely present in the household that, even under conditions of low spouse support, it is unlikely that they will be able to provide assistance at a level that makes a significant contribution to the quality of everyday parental behavior.

Whereas Belsky and Vondra (1989) emphasized the compensation of social network for spouse support, the reverse might also be expected. Under conditions of low social network support, an individual is highly dependent on his or her spouse for advice, assistance, and companionship. Hence, the relationship between spouse support and depression should be higher for persons low compared with those high on social network support. Furthermore, a person highly dependent on another for rewards tends to reciprocate with deference and compliance (Blau, 1964; Emerson, 1981). This being the case, an individual is more likely to be influenced by his or her mate's advice and expectations regarding parenting when social network support is low. Therefore the relationship between spouse support and quality of parenting should be stronger for parents low compared with those high on social network support.

The dimension of parenting used as an outcome in testing the hypothesized model was parental involvement and support. Supportive, involved parents take an interest in their child's activities, help solve problems, praise and reward accomplishments, and show love and affection (Amato, 1990; Maccoby & Martin, 1983; Rollins & Thomas, 1979). High parental support has been linked to child self-esteem, academic success, psychological adjustment, social skills, and cognitive ability, whereas the absence of parental support has been shown to be associated with delinquent behavior and other negative developmental outcomes (Argyle & Henderson, 1985; Maccoby & Martin, 1983; Peterson & Rollins, 1987; Rollins & Thomas, 1979). Thus, if one defines parenting as the task of providing an atmosphere conducive to children's positive psychosocial development (Rutter, 1985a, 1985b), the evidence indicates that level of parental support and involvement is a fundamental feature of such an environment.

Method

Sample

Data for the present study were collected as part of a broader project concerned with the life-course trajectories of parents and their children. A sample of 451 two-parent families was recruited through the cohort of all seventh-grade students, boys and girls, in eight counties in North Central Iowa who were enrolled in public or private schools during winter and spring of 1989. An additional criterion for inclusion in the study was the presence of a sibling within 4 years of age of the seventh grader. Slightly less than half of the cohort of seventh graders had families who met these criteria. Seventy-eight percent of the eligible families agreed to participate in the study. Families in the present project received $250 for their effort, which translated into about $10 per hour for each family member's time.

The families in the study lived on farms (about one third) or in small towns. All of the families were White, and annual income ranged from zero to $135,000, with a mean of $29,642. Fathers' education ranged from 8 to 20 years, with a mean of 13.5 years of education, and for mothers, the range was from 8 to 18 years, with a mean of 13.4 years. Additional information regarding the sample is available in Conger et al. (1992) and Simons, Whitbeck, Conger, and Wu (1991).

Procedure

Each family was visited twice at their home. During the first visit, each of the four family members completed a set of questionnaires focusing on family processes, individual family member characteristics, and economic circumstances. On average, it took approximately 2 hr to complete the first visit. Between the first and second visits, family members completed questionnaires left with them by the first interviewer. During the second visit, which normally occurred within 2 weeks of the first, the family was videotaped while engaging in several different structured interaction tasks. A description of the tasks is provided in Conger et al. (1992). The videotapes were coded by project observers using the Iowa Family Interaction Rating Scales (Melby et al., 1990). These scales focus on the quality of behavior exchanges between family members. The project observers were staff members who had received several weeks of training on rating family interactions and specialized in coding one of the four interaction tasks.

Measures

Economic pressure. Three indicators were used to measure both mothers and fathers perceived economic pressure. Two items assessed the degree to which the parents felt they "can't make ends meet." Each spouse reported whether they have difficulty paying bills each month (1 = *no difficulty at all*; 5 = *a great deal of difficulty*) and whether they have money left over at the end of the month (1 = *more than enough money left over*; 4 = *not enough to make ends meet*). The two items were correlated (r = .62 for mothers and r = .60 for fathers).

Each parent also responded to seven items that asked if they agreed or disagreed on a 5-point scale that their family had the money they needed for a home, clothing, household items, a car, food, medical care, and recreational activities. The items were summed to form a *material needs* indicator of economic pressure. Coefficient alpha was .89 for mothers and .89 for fathers.

The final indicator, *economic adjustments*, consisted of reports from both parents concerning changes they have made in response to financial difficulties during the past year. Each spouse noted (1 = *yes* and 0 = *no*) whether their family had used any of 17 possible strategies in an attempt to cope with financial difficulties during the past year. The strategies included behaviors such as cashing in life insurance, changing residence, eliminating medical insurance, borrowing money, selling property, and receiving government assistance.

Social network support. The Tangible, Appraisal, and Belonging subscales of the Interpersonal Support Evaluation List (ISEL; Cohen & Hoberman, 1983; Cohen, Mermelstein, Kamarck, & Hoberman, 1985) were summed to form an index of social network support. The ISEL was developed as a measure of supportive social resources that might facilitate coping with stressful situations (Cohen & Hoberman, 1983). The Tangible subscale focuses on perceived availability of instrumental assistance (e.g., "If I were sick, I could easily find someone outside my immediate family to help me with my daily chores"); the Appraisal subscale is concerned with perceived availability of someone to talk with about one's problems (e.g., "There is someone outside my immediate family I can turn to for advice about handling problems with my

family"); and the Belonging subscale assesses perceived availability of people with whom to do things (e.g., "If I wanted to have lunch with a friend, I could easily find someone to join me"). The ISEL has been shown to have strong internal consistency and to correlate with other measures of social support (Cohen et al., 1985). In the present sample, coefficient alpha was .76 for fathers and .75 for mothers.

As discussed in the Results section, the social network support variable had to be split at the median to test hypotheses regarding its moderating influence on the relationship between economic strain and quality of parenting. To facilitate separation of the sample into high and low levels of social support, we summed the three subscales of the ISEL to form a single indicator of social support, rather than treating the subscales as three separate indicators. Cohen et al. (1985) presented findings indicating that this is a legitimate use of the instrument, and this approach appeared justified in the present study, because prior analyses with the data set used here found that the three subscales of the ISEL showed comparable associations with economic strain and depression (Lorenz, Simons, & Robertson, 1991).

Measures of social support are often criticized for relying on self-report instruments. Such measures are problematic in that perceptions of social support may be colored by the respondent's level of self-esteem, mood, or other personality characteristics. Thus, studies that find a relationship between self-reports of social network support and parenting practices leave open the possibility that the association between the two is spurious, explainable by the personal dispositions of the respondent. Although the present study used a self-report measure of social network support, the models tested included the construct psychological depression. Hence, the impact of social network support on parenting was examined while controlling for the effect of psychological well-being.

Spouse support. A composite measure of spouse support was formed by combining scores on a self-report instrument with those from an observational scale. The *self-report instrument* consisted of 20 items focusing on various behaviors that spouses sometimes display during interaction with each other. Respondents were asked to think about times during the prior month when they had spent time talking or doing things with their spouse and to indicate how often during these occasions their mate had engaged in the actions described in each item. The response format ranged from 1 (*always*) to 7 (*never*), with a middle category of 4 (*about half of the time*). Eight of the items involved supportive behaviors (e.g., "helping you with something important to you," "showing support and understanding," or "acting loving and affectionate"), and they were summed to form a supportive interaction scale. The other 12 items focused on coercive actions contrary to expressions of support (e.g., "criticize you," "ignore you," or "try to make you feel guilty"). These items were summed to form a coercive interaction scale. The correlation between these two scales was −.52 for mothers and −.63 for fathers. The two scales were standardized, and a measure of spouse support was formed by subtracting the standardized coercive interaction scale from the standardized supportive interaction scale.

It was important to include both positive and negative items in the spouse support measure, because some persons may be inconsistent in their behavior, sometimes showing support but at other times engaging in criticism and attack. Clearly, such a person is a less dependable source of support than a mate who is consistently helpful and affectionate. Thus, respondents obtained a high score on the self-report scale if their spouse displayed high levels of warmth, encouragement, and assistance while manifesting few coercive behaviors.

The observational scale was constructed from the warmth/support and hostility observational ratings of spousal interaction from Task 4 (the marital interaction task). Each scale is rated from 1 to 5, with 1 indicating *no evidence of the behavior* and 5 indicating *extreme evidence of the behavior*. The Warmth/Support scale focuses on the extent to which a person shows interest and concern for his or her spouse. Coders cue to nonverbal communication (e.g., physical gestures or eye contact), emotional expression (e.g., smiling and laughing), supportiveness (e.g., showing concern for the other's welfare and offering encouragement), and responsiveness (e.g., head nods and asking questions to show interest). The Hostility scale focuses on the extent to which an individual displays hostile, angry, critical, or rejecting behavior toward his or her spouse.

The interobserver reliability coefficient for the Warmth/Support scale was .72 for both fathers and mothers, whereas the coefficients for the Hostility scale were .79 and .78 for fathers and mothers, respectively. The correlation between the Warmth/Support scale and the Hostility scale was −.46 for mothers and −.45 for fathers. As with the self-report measure, an observational measure of spouse support was formed for both mothers and fathers by subtracting the Hostility scale from the Warmth/Support scale. Thus, persons who scored high on the observational indicator of spouse support were individuals whose partners were displaying high levels of affection and encouragement coupled with little anger and criticism (i.e., they were a dependable source of support).

The correlation between the self-report and observational measures of spouse support was .34 for mothers and .30 for fathers. We formed a composite measure of spouse support for each of the parents by standardizing and then summing their self-report and observation scores. Rather than using the measures as two separate indicators of a latent construct, we constructed a composite measure to facilitate testing for the moderating influence of spouse support.

When multiple regression procedures are used, moderator effects are investigated by testing the significance of interaction terms formed by multiplying the potential moderator by the explanatory variable it is thought to moderate. Such interaction terms are problematic, however, when structural equation modeling is used to investigate the effect of explanatory variables consisting of latent constructs constituted by multiple indicators, as is the case with Economic Strain in the present analysis. The recommended approach in such situations is to divide the sample into groups high and low on the moderator construct and to examine differences in the effect of the explanatory variable between the two groups (Bollen, 1989; Joreskog & Sorbom, 1989). Albeit, if the moderator construct is to be divided at the median, it is necessary that it be represented by a single indicator. For this reason, the self-report and observational indicators were summed to form a single composite measure.

Depression. Three measures were used as indicators of each parent's depressed mood. Both mothers and fathers completed the depression subscale from the *SCL-90-R* (Derogatis, 1983), which has demonstrated reliability and validity. Coefficient alpha was .87 for both mothers and fathers. Parents also answered two questions that were summed to create a *spouse report of depression*. They each indicated on a 5-point scale whether they agreed or disagreed that their spouse is a happy person (Item 1, reverse-coded) or whether he or she is always sad or depressed (Item 2). The correlations between these two items were .65 and .54 for mothers and fathers, respectively.

The final measure of depressed mood, *observer reported depression*, came from a single rating by each of two independent observers (one for Task 2 and one for Task 4) who reported, on a 5-point scale, whether each parent was sad or unhappy during their videotaped interactions. The two ratings were summed to create a single indicator of depressed affect. Observer reliability was adequate (.54 for fathers and .73 mothers in Task 2; .60 for fathers and .67 for mothers in Task 4).

Supportive parenting. As noted earlier, supportive parents show concern about their child's feelings, take an interest in his or her daily activities, manifest love and acceptance, encourage appropriate behavior, help with problems, and reinforce accomplishments. Measures based on parent self-report, child report, and observational data were

used as indicators of this construct. The self-report measure consisted of a nine-item Supportive Parenting scale that focuses on the various components of supportive parenting (Simons et al., 1992). The scale includes items such as, "How often do you talk with your seventh grader about what is going on in his or her life?" "How often does your seventh grader talk with you about things that bother him or her?" and, "How often do you ask your seventh grader what he or she thinks before making decisions that affect him or her?" Coefficient alpha was .81 for fathers and .78 for mothers. These same nine items were reworded to so that the adolescent could report on the behavior of his or her parents. Coefficient alpha was .87 and .83 for *child report* of his or her father and mother, respectively.

An observational measure of supportive parenting was formed by summing the warmth/support, quality time, and positive reinforcement parenting scales from Task 1. Importantly, interactions in Task 1 (family interaction) and Task 4 (marital interaction) were coded by different raters, thereby avoiding the problem of method variance between observational ratings of parenting and spouse support. The Warmth/Support scale focuses on the extent to which the parent shows caring and concern for the child. The generalizability coefficient for this scale was .79 for fathers and .70 for mothers. The Quality Time scale is concerned with the quality of parental involvement in the child's life. It rates the extent to which the parent takes advantage of opportunities for conversation, companionship, and the like. The generalizability coefficient for this scale was .60 for fathers and .65 for mothers. Finally, the Positive Reinforcement scale rates the degree to which the parent provides praise, approval, smiles, and other rewards contingent on appropriate behavior. Coefficient alpha was .70 and .54 for fathers and mothers, respectively. As noted, an index of supportive parenting was constructed by summing these three observational scales. Coefficient alpha for this new three-item measure was .74 and .72 for fathers and mothers, respectively.

Results

Table 1 presents the correlation matrices for the variables used in the analysis. Coefficients above the diagonal are for mothers, those below the diagonal are for fathers, and those on the diagonal are the correlations between mother and father scores. Overall, the pattern of associations suggests adequate convergent and discriminant validity for the various measures. The table shows that for both mothers and fathers, there are strong associations between the three indicators of Economic Pressure. The correlations between the indicators for Depression and for Supportive Parenting are more modest. Generally, the coefficients are between .25 and .30. The magnitude of these associations is consistent, however, with the findings of other studies using reports from different family members (Schwarz, Barton-Henry, & Pruzinsky, 1985).

For both mothers and fathers, the indicators of Economic Pressure show negative correlations with Spouse Support and the Depression measures. The strain scales are also negatively associated with the measures of Supportive Parenting, although the coefficients are larger and more consistent for mothers than for fathers. Spouse Support shows an inverse relationship with the Depression measures for both mothers and fathers. Social Network Support is less consistently associated with the Depression measures, although the table shows more significant correlations for mothers than for fathers. Finally, for both mothers and fathers, Spouse Support is correlated with the indicators of Supportive Parenting, whereas Social Network Support is only significantly related to the self-report measure of parenting.

Testing for Main Effects

Using the LISREL VII statistical program (Joreskog & Sorbom, 1989), we found that the association between the latent constructs Economic Pressure and Supportive Parenting was −.29 for mothers and −.24 for fathers. Both coefficients were significant at the .01 level. Having established that Economic Pressure is negatively related to Supportive Parenting, we used LISREL VII to test models regarding the extent to which this association is mediated by Spouse Support, Social Network Support, and Depression. Analysis was performed separately for mothers and fathers and began with the fully recursive model. The residuals among the ISEL, the self-report measure of Social Network Support, and the self-report indicators of Depression and Supportive Parenting were allowed to correlate. This had the effect of correcting for the association between these measures caused by shared method variance.[3] The modification indexes indicated that no other residuals needed to be correlated. In an effort to obtain the most parsimonious model, paths with a t of 1.8 or less were deleted one at a time over several iterations.

Figure 2 presents the reduced model derived for mothers and fathers. The results for fathers are presented in parentheses. First, considering the findings for mothers, the paths between Economic Pressure and Supportive Parenting and Social Network Support and Supportive Parenting were not significant and have been deleted. Also, there was no significant association between Social Network Support and Spouse Support. Deleting these three paths from the fully recursive model resulted in a reduction of only 1.71 in chi-square. This change in chi-square is not significant (p = .66) and suggests that the most parsimonious model is one that excludes these paths. The chi-square, goodness-of-fit index, and critical N all indicate that the reduced model fits the data well.

The reduced model is consistent with the hypothesized model presented in Figure 1. Figure 2 shows a strong association between Depression and Supportive Parenting (β =

[3] When a single indicator is used as the measure of a construct, it is assumed to be a perfect measure (i.e., lambda is fixed to be 1). When this strategy is used, the indicator has no residuals, which precludes allowing the residuals for the indicator to correlate with the residuals of the indicators of other constructs in the model. This constraint was a problem in the present analysis because the ISEL—the self-report scale used as the single indicator for Social Network Support—was likely to share method variance with self-report indicators used for other constructs. Therefore, rather than treating the ISEL as a perfect indicator, coefficient alpha was used to calculate the scale's loading on Social Network Support (see Bollen, 1989). Consequently, the residuals from the ISEL could be allowed to correlate with the residuals from the self-report measure of depression and parenting, thereby taking into account the phenomena of method variance and improving the fit of the model. This procedure was not necessary in the case of the single indicator used to measure Spouse Support, because it was a composite measure formed by summing both an observational and a self-report scale. Hence it would be expected to show little or no method variance with other measures.

Table 1
Correlation Matrices for Study Variables

Variable	1	2	3	4	5	6	7	8	9	10	11
1. Ends meet	.65*	.69*	.63	−.10	−.24*	.33*	.06	.28*	−.13*	−.15*	−.11
2. Material need	.67	.52*	.51*	−.23*	−.21*	.36*	.13*	.28*	−.23*	−.13*	−.18*
3. Economic adjustment	.63*	.52*	.60*	−.04	−.17*	.22*	.04	.25*	−.04	−.10	−.04
4. Social support	−.09	−.10	.01	.17*	.10	−.28*	−.18*	−.07	.23*	.03	.06
5. Spouse support	−.25*	−.13*	−.13*	−.11	.63*	−.28*	−.24*	−.26*	.25*	.20*	.21*
6. Depression self-report	.26*	.24*	.25*	−.17*	−.14*	.09	.27*	.18*	−.20*	−.13*	−.05
7. Depression spouse report	.28*	.23*	.23*	−.06	−.27*	.20*	.14*	.22*	−.15*	−.18*	−.16*
8. Depression observer rating	.20*	.17*	.16*	−.04	−.19*	.17*	.29*	.31*	−.11	−.13*	−.08
9. Parenting self-report	−.10	−.17*	−.01	.24*	.26*	−.09	−.18*	−.02	.34*	.32*	.29*
10. Parenting child report	−.11	−.15*	−.03	.06	.12	−.03	−.16*	−.16*	.25*	.62*	.24*
11. Parenting observer rating	−.11	−.18*	−.06	.09	.24*	−.01	−.11	−.13*	.31*	.27*	.66*

Note. Coefficients above the diagonal are for mothers, those below the diagonal are for fathers, and coefficients on the diagonal are correlations between mother and father scores.
* $p \leq .05$.

−.394). Spouse Support is also related to Supportive Parenting, although the coefficient is more modest ($\beta = .197$). In addition, Spouse Support has an indirect influence on parenting through its association with Depression. Social Network Support is only related to parenting indirectly through its association with Depression. The effect of Economic Pressure on Supportive Parenting is indirect through Spouse Support, Social Network Support, and Depression.

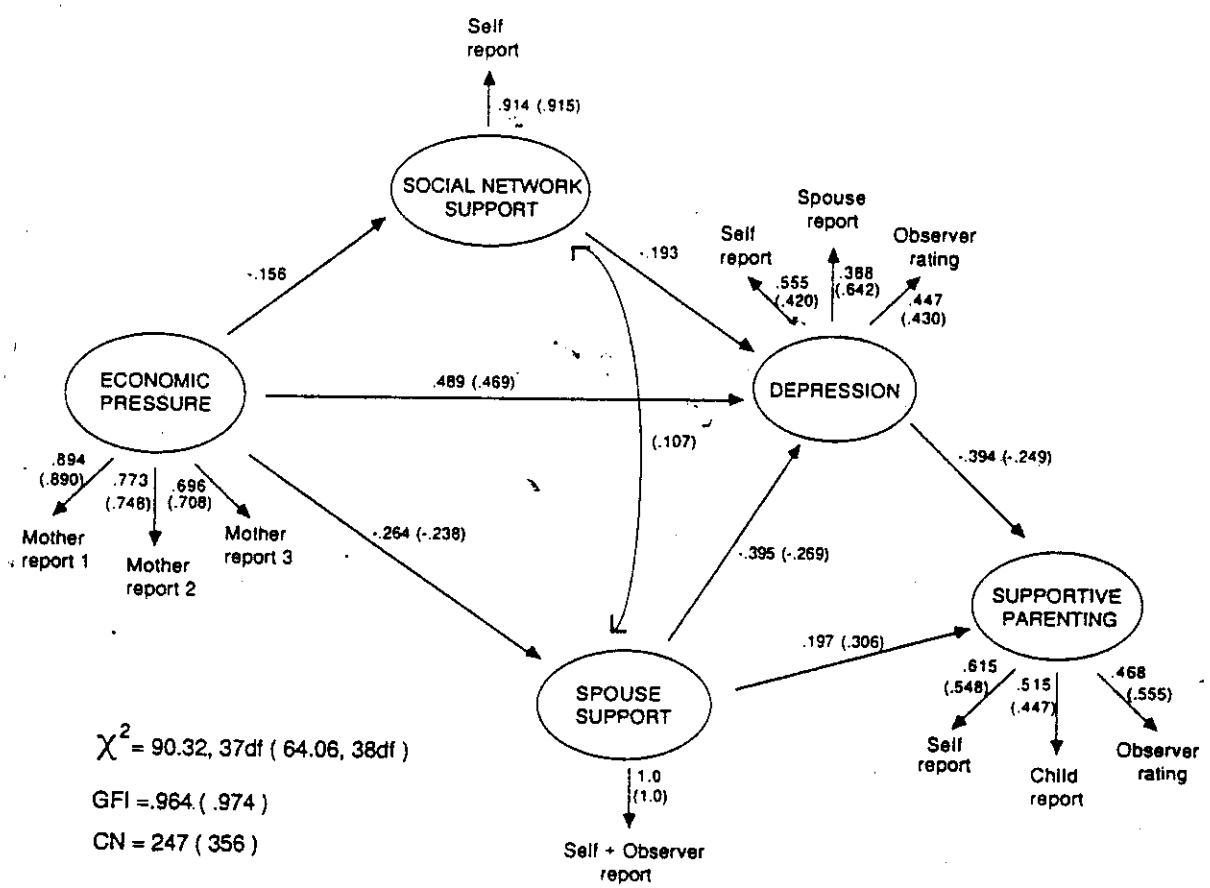

Figure 2. Support and depression as mediators of the impact of economic pressure on the supportive parenting of mothers and fathers ($N = 429$). (Coefficients in parentheses are for fathers.)

Although both types of social support are related to Depression, the path coefficient for Spouse Support is larger than that for Social Network Support (−.395 vs. −.193). We tested the statistical significance of this difference by noting the difference in chi-square for the model when these two paths were constrained to be equal compared with the chi-square associated with the model when the paths were free to differ (Bollen, 1989). The difference in chi-square with 1 degree of freedom was 32.22, which is significant at the .001 level.

Turning to the coefficients in parentheses, the findings for fathers largely paralleled those for mothers. There were no significant paths from either Economic Pressure or Social Network Support to Supportive Parenting. In contrast to the findings for mothers, however, there were also no significant paths from Economic Pressure to Social Network Support, nor from Social Network Support to Depression. Indeed, as shown in Figure 2, the only significant association between Social Network Support and any of the other constructs in the model was a small positive correlation with Spouse Support. Deleting the insignificant paths from the model produced a change in chi-square of 6.86. With 4 degree of freedom, this change is not significant and suggests that the most parsimonious model is one that excludes these paths. The chi-square, goodness-of-fit index, and critical N for the reduced model indicate that it provides a reasonable fit of the data.

Consonant with the findings for mothers, Figure 2 shows both Depression and Spouse Support to be related to Supportive Parenting ($\beta = -.249$ and .306, respectively). Spouse Support has an indirect effect on parenting through Depression, and Economic Pressure influences parenting indirectly through its associations with Spouse Support and Depression. As was the case for mothers, the path between Spouse Support and Depression ($\beta = -.286$) is significantly stronger than the path between Social Network Support and Depression ($\beta = -.062$). The difference in chi-square between the model that fixed these two paths to be equal versus the model that freed them to differ was 16.63. With 1 degree of freedom, this chi-square difference is significant at the .001 level.

Summarizing the findings to this point, for both mothers and fathers, the effect of Economic Pressure on Supportive Parenting is mediated by Depression and Spouse Support. Spouse Support influences Supportive Parenting more than Social Network Support: Spouse Support has a direct effect on Supportive Parenting whereas Social Network Support does not, and Spouse Support has a larger indirect effect on Supportive Parenting through Depression than does Social Network Support.

Testing for Moderator Effects

To test for the buffering effect of Spouse Support, we divided both mothers and fathers into two groups depending on whether they were above or below the median on Spouse Support. The associations among Economic Pressure, Social Network Support, Depression, and Supportive Parenting were then compared for parents high and low on Spouse Support. Figure 3 presents the results for mothers. There is a strong association between Depression and Supportive Parenting for women low on Spouse Support ($\beta = -.480$), whereas this path is rather modest ($\beta = -.275$) for women high on Spouse Support. Furthermore, the coefficient between Economic Pressure and Depression is larger for women low compared with those high on Spouse Support (.662 vs. .496, respectively). Both of these findings are consistent with the contention that Spouse Support moderates the impact of stressful events on parenting.

To test the significance of these differences, we estimated the models for women high and low on Spouse Support with all of the parameters constrained to be equal, and then we reestimated after allowing either the path between Depression and Supportive Parenting or the path between Economic Pressure and Depression to differ between groups (Bollen, 1989). The results are reported in Table 2. Allowing the path between Depression and Supportive Parenting to differ between groups resulted in a reduction in chi-square of 4.07. With 1 degree of freedom, this difference is significant at the .04 level. Freeing the path between Economic Pressure and Depression to differ between groups reduced chi-square by 2.02. With 1 degree of freedom, this change has a p value of .16. Thus the results indicate that Spouse Support moderates the disruptive influence of Economic Pressure on Supportive Parenting by reducing or eliminating the association between Depression and Supportive Parenting. Although the direction of the findings suggests that Marital Support may also buffer Supportive Parenting by moderating the association between Economic Pressure and Depression, the effect only approaches statistical significance.

The coefficient between Social Network Support and Depression is stronger for women low than for those high on Spouse Support (−.300 and −.139, respectively). This difference is consistent with the hypothesis that Social Network Support becomes more important (i.e., exerts a larger influence) when Spouse Support is absent. As shown in Table 2, contrasting the model in which all parameters were constrained to be equal with that in which the path between Social Network Support and Depression was free to differ between groups produced a difference in chi-square of 1.57. The p value for a chi-square of this magnitude with 1 degree of freedom is .21. Thus, although the direction of the findings is in keeping with the substitution hypothesis, the difference is not statistically significant.

No significant differences were found for fathers high and low on Spouse Support and, therefore, in an effort to save space, the figure depicting these results is not presented. The path between Economic Pressure and Depression was somewhat larger for men low compared with those high on Spouse Support (.577 and .466, respectively). The same was true for the path between Depression and Supportive Parenting, in which the coefficient was −.338 for fathers low on Spouse Support and −.228 for those high on Spouse Support. Although these differences are consistent with the buffering hypothesis, analysis showed that neither of them approached statistical significance. As shown in Table 2, there is a difference of only .03 in the chi-square ($p = .86$) obtained when the path between Economic Pressure and Depression is constrained to be equal as opposed to when it is allowed to vary between the two groups of fathers. Similarly, there is a difference in chi-square of only 1.05 ($p = .31$) when the path between Depression and Supportive Parenting is constrained to be equal as opposed to when it is free to differ between groups.

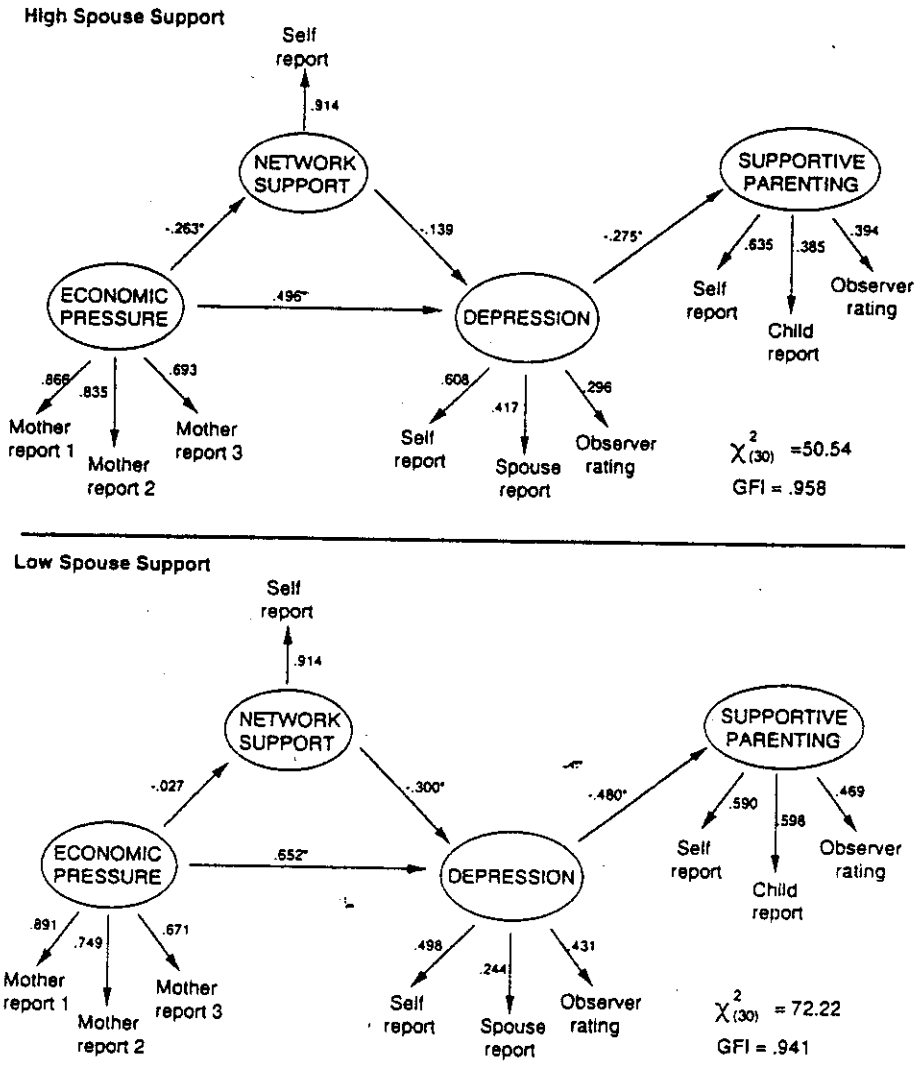

Figure 3. The impact of economic pressure, network support, and depression on supportive parenting of mothers high and low on spouse support. (Asterisks indicate significance at $p < .05$. GFI = Goodness of Fit Index.)

To test for the potentially moderating influence of Social Network Support, we divided both mothers and fathers into two groups depending on whether they were above or below the median on Social Network Support. The associations among Economic Pressure, Spouse Support, Depression, and Supportive Parenting were then compared for parents high and low on Social Network Support. Figure 4 presents the results for mothers. There is evidence of a buffering effect, because the

Table 2
Change in Chi-Square Obtained by Freeing Paths to Differ Between Groups High and Low on Spouse Support

Group	Path	Change in chi-square[a]	*p* value with 1 *df*
Mothers	Economic pressure to depression	2.02	.16
	Depression to supportive parenting	4.02	.04
	Social network support to depression	1.57	.21
Fathers	Economic pressure to depression	0.03	.86
	Depression to supportive parenting	1.05	.31

[a] Change in 1 degree of freedom.

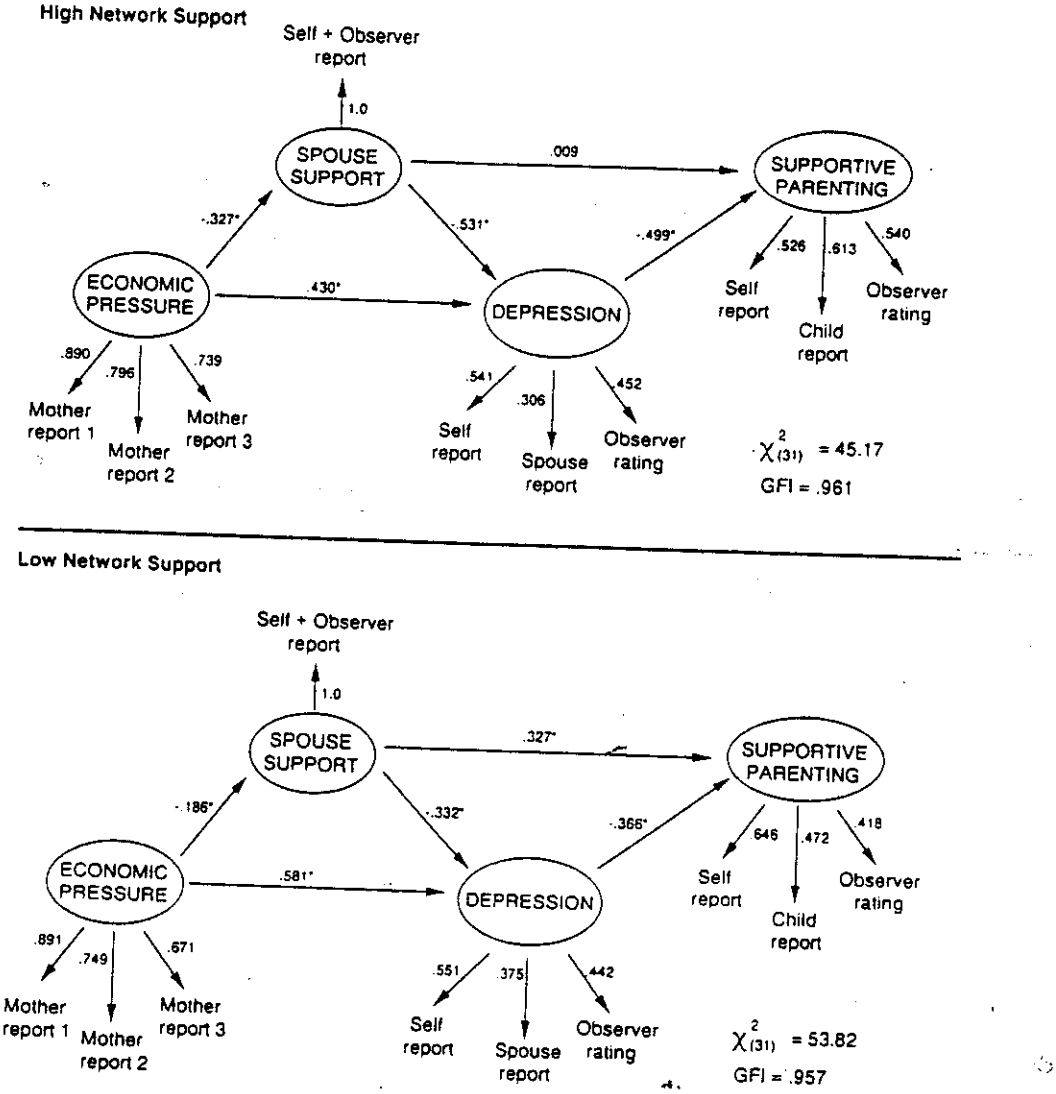

Figure 4. The impact of economic pressure, spouse support, and depression on supportive parenting of mothers high and low on network support. (Asterisks indicate significance at $p < .05$. GFI = Goodness of Fit Index.)

path between Economic Pressure and Depression is larger for women low compared with those high on network support (.581 and .430, respectively). However, as shown in Table 3, model comparisons indicated that this difference is not statistically significant. The 1.37 change in chi-square produced by allowing this path to differ between mothers high and low on Social Network Support has a p value of .24.

The coefficients for the paths between Spouse Support and Depression and between Depression and Supportive Parenting are somewhat larger for mothers high on Social Network Support than for those low on such support. Although this finding is contrary to the idea of buffering, Table 3 shows that the differences are not statistically significant. The p value associated with the change in chi-square obtained by allowing the path between Spouse Support and Depression to differ between groups is .47, whereas the p value for the chi-square change resulting from freeing the path between Depression and Supportive Parenting to differ between groups is .20.

Consonant with the notion that Spouse Support may become more important or compensate under conditions of diminished support from nonfamily members, the path coefficient between Spouse Support and Supportive Parenting is larger for mothers low on Social Network Support than for those high on such support. Table 3 shows that when this path is allowed to differ between groups of mothers, there is 2.79 improvement in chi-square. This chi-square change approaches significance, with a p value of .09.

There were few differences between fathers high versus those low on Social Network Support, and hence a figure depicting the findings is not included. The coefficient for the path between Spouse Support and Supportive Parenting was stronger for fathers low compared with those high on network support (.374 and .198, respectively). Although this pattern is consistent with the compensation hypothesis, the difference does not approach statistical significance. The 1.79 change in chi-square obtained by freeing this path to vary between groups of fathers

Table 3
Change in Chi-Square Obtained by Freeing Paths to Differ Between Groups High and Low on Social Network Support

Group	Path	Change in chi-square[a]	*p* value with 1 *df*
Mothers	Economic pressure to depression	1.37	.24
	Spouse support to depression	0.53	.47
	Depression to supportive parenting	1.66	.20
	Spouse support to supportive parenting	2.79	.09
Fathers	Economic pressure to depression	0.98	.32
	Spouse support to depression	0.21	.65
	Depression to supportive parenting	0.43	.51
	Spouse support to supportive parenting	1.79	.18

[a] Change in 1 degree of freedom.

has a *p* value of .18. The remaining paths were very similar for fathers high versus those low on Social Network Support and, hence, offer no evidence of either buffering or compensation. Table 3 presents the changes in chi-square produced by freeing each of these paths to vary by level of fathers' Social Network Support. None of the chi-square values even approached statistical significance.

Finally, it should be noted that there was no evidence that the pattern of findings reported here varies by gender of child. Although coefficients differed slightly in some cases, the overall configuration of effects was similar whether parental behavior was directed toward sons or daughters.

Discussion

Drawing heavily on Belsky's conceptual framework (Belsky, 1984; Belsky & Vondra, 1989), we constructed a model regarding the manner in which social support operates to mediate and moderate the impact of economic pressure on parenting. Although the findings largely supported the model, the data used in the analyses were cross-sectional. Thus, although causal assumptions were made in the path analytic procedures used to perform the analyses, the reader is reminded that the relationships found only represent covariations between variables. Although cross-sectional data can verify whether a relationship exists between two constructs, it cannot establish the causal priority that exists between them. This caveat should be kept in mind as the various findings are discussed.

Consonant with the proposed model, the results indicated that economic pressure disrupts competent parenting by increasing psychological distress and undermining access to supportive relationships with others. For both mothers and fathers, economic pressure was strongly associated with depression, and depression, in turn, was negatively related to supportive parenting. In addition, economic pressure affected depression indirectly by decreasing spouse support. Spouse support exerted a direct influence on supportive parenting, plus it had an indirect influence through depression. There was no evidence that these relationships differed by gender of child.

Spouse Support

As expected, spouse support exerted more influence on parental behavior than did social network support. Whereas spouse support showed both a direct effect on parenting and an indirect effect through depression, the impact of social network support was limited to a small indirect effect through depression. And, for both mothers and fathers, the indirect effect through depression was larger for spouse support than for social network support.

The results were also in a direction consonant with the expectation that spouse support would moderate the disruptive influence of economic pressure on quality of parenting. For both mothers and fathers, the association between economic pressure and depression and between depression and supportive parenting was stronger for persons low compared with those high on spouse support. With one exception, however, these differences did not achieve statistical significance. The exception was the relationship between depression and supportive parenting for mothers.

Thus, the findings indicate that any buffering effect that spouse support has on the relationship between economic pressure and depression, for either mothers or fathers, is probably rather modest and requires a larger sample to achieve statistical significance. This conclusion is consistent with findings from prior studies, some of which find that social support from a significant other moderates the relationship between life events and depression, whereas others fail to find this effect (Kessler et al., 1985).

Rather than operating on the relationship between economic pressure and depression, the primary buffering effect of spouse support appears to be for the association between depression and quality of parenting. And, this buffering effect only holds for mothers. This finding is in keeping with results reported by Simons, Whitbeck, Melby, and Wu (in press). Using the same data set as that used in the present investigation, they found that economic pressure increased hostility and, in turn, harsh parenting. Furthermore, their analysis indicated that although spouse support did not moderate the impact of economic pressure on hostility, it did significantly reduce the association between hostility and harsh parenting. As in the present study, this buffering effect held only for mothers. Thus, it appears that in addition to its direct and indirect effects on parental behavior, spouse support serves to decrease the probability that stress-induced negative emotions will subvert the quality of mothers' parenting practices.

Although it is not clear why this buffering effect should be exhibited for mothers but not fathers, one possibility relates to differences between men and women regarding marital interaction and the role of parent. Most couples continue to view parenting as fundamentally the domain of the wife (LaRossa, 1986). Men are usually much less involved than their wives in the daily care and supervision of the children (Clarke-Stewart, 1980; Ehrensaft, 1983; Lamb, 1977; Parke, 1981; Simons, Whitbeck, Conger, & Melby, 1990). Thus most of the burdens of child care fall on the mother, who is expected to discharge her parenting responsibilities regardless of the stressors or emotional distractions that may be operating in her life. Studies of husband and wife interaction indicate that, although spouses often reciprocate aversive behaviors, husbands sometimes respond to their wife's depressed and complaining behaviors by reducing the extent to which they engage in actions aversive to their mate (Biglan et al., 1985; Hops et al., 1987). Thus, it seems likely that a supportive husband is sensitive to his wife's emotional state and provides increased assistance with parenting during times of stress. This assistance might be expected to lessen the probability that the wife's negative emotional state will disrupt her parenting.

Whereas the wife's involvement in parenting is normatively obligated, the husband's level of participation is more a matter of choice. To the extent that fathers are involved in parenting, their behavior tends to center on playing with the child and enforcing discipline (Simons, Beaman, Conger, & Chao, 1992). Hence, during times of emotional distress, the husband might be expected to withdraw from parenting. Given the culturally prescribed voluntary nature of the husband's involvement in parenting, this is a choice that the supportive wife is likely to allow. Thus, whereas the supportive husband assists his stressed wife with culturally obligated parenting tasks, thereby reducing the impact of her emotional state on her parenting behaviors, the supportive wife may permit her stressed husband to retreat from parental involvement until he feels better. To test the validity of this contention, future research needs to investigate the processes through which stressors and spouse support influence parenting, rather than limiting concern to the associations that exist among stress, the marital relationship, and parenting.

Social Network Support

Although social network support is often cited as an important resource for parents, results from the present study indicate that it only influences parenting behaviors indirectly through its effect on parents' emotional well-being. Most previous studies that have linked social network support to quality of parenting have not controlled for emotional well-being. As expected, the present study found no evidence that social network support has a direct effect on parental behavior or that such support serves to buffer parental behavior against the deleterious impact of economic pressure. Overall, the findings indicate that Belsky and Vondra (1989) are correct in asserting that the marital relationship is the primary support system for parenting, with the social network support operating in a less influential capacity.

Belsky and Vondra (1989) suggested that the social network may become more central when marital support is absent. Findings from the present study, however, provided no evidence of such substitution. Social network support did not show a direct effect on parenting when spouse support was low, nor was the association between network support and depression stronger under conditions of low social support. Rather, the only indication of substitution or compensation involved marital support, because the relationship between spouse support and quality of parenting was stronger when social network support was low compared with when it was high. This finding is consistent with the idea that low social network support makes individuals more dependent on, and hence more responsive to, the suggestions and assistance provided by their spouse.

One might speculate that social network support would be more consequential for parenting in the absence of a spouse, rather than simply under conditions of low spouse support. Whereas all of the parents in the present study were married, perhaps social network support is most influential in the case of single parents. It seems probable that social network support would have a greater impact on psychological well-being in the absence of a spouse, because the individual would be more dependent on friends and relatives for rewards. Albeit, it seems unlikely that friends and relatives would exert much direct influence on the quality of parenting displayed by a single parent unless they spend a large amount of time in the household. Thus, even in the case of single parents, any substantial influence of social network on quality of parenting is apt to be limited to relatives, friends, and lovers who reside in the same household as the parent.

Presumably, the primary reason for studying causes of variations in parental behavior is that parenting practices have been shown to have a strong impact on child developmental outcomes (Maccoby & Martin, 1983). Although social network support may exert little direct influence on parenting practices or serve to buffer parental behavior against the disruptive impact of stressors such as economic strain, social network support may still play a critical role in the development of the child. Rather than exerting a strong indirect effect on child development through its effect on parenting, social network support may influence child development more directly. Friends and relatives may provide children with cognitive and social stimulation, emotional support, or material assistance (Cochran & Brassard, 1979). As a result, social network support may serve to counteract or buffer children against the unhealthy consequences of inept parental behavior.

Overall, results from this study indicate that economic pressure and quality of relationships with others have a strong impact on parental behavior. In addition, it appears that much of the effect of economic pressure on parenting practices is indirect through its despoiling effect on parents' relationships with others, especially their spouse. Thus, the findings are consistent with a social ecological perspective on parental behavior and indicate that the influence of stressors on behavior is expressed, at least in part, through its negative bearing on an individual's closest social ties (Conger et al., 1992; Coyne & Downey, 1991).

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Received October 1, 1991
Revision received July 2, 1992
Accepted July 21, 1992 ■