

Support from Spouse as Mediator and Moderator of the Disruptive Influence of Economic Strain on Parenting

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SIMONS, RONALD L.; LORENZ, FREDERICK O.; CONGER, RAND D.; and WU, CHYI-IN. *Support from Spouse as Mediator and Moderator of the Disruptive Influence of Economic Strain on Parenting*. CHILD DEVELOPMENT, 1992, 63, 1282-1301. A model is presented regarding associations between economic strain, support from spouse, and quality of parenting. The model was tested using a sample of 451 2-parent families, each of which included a seventh grader (age 12-13). Parent and adolescent reports, as well as observational ratings, were used as indicators of constructs. Analysis using structural equation modeling procedures indicated that level of spouse support was positively related to supportive parenting, whereas economic strain operated to undermine parental involvement. As posited, economic strain produced its effect through a direct relation with parenting and indirectly through its association with spouse support. These findings held for mothers and fathers, regardless of the gender of the child. Spouse support moderated the impact of economic strain on supportive parenting for mothers but not fathers. Possible explanations for this gender difference are presented.

Although a profusion of studies have documented the impact of parenting practices on child psychosocial development (Maccoby & Martin, 1983), it has only been within the past few years that researchers have begun to devote significant attention to the causes of variations in parenting. In constructing models of the determinants of parenting, investigators have tended to build on concepts and assumptions from either the ecological framework (e.g., Belsky, 1980, 1984) or social learning/exchange theory (e.g., Simons, Whitbeck, Conger, & Melby, 1990). Regardless of the theoretical perspective employed, however, models of parenting emphasize the effect of contextual factors on parental behavior. Thus, in addition to the personal characteristics of the parent and child, events external to their relationship are seen as influencing the parent's behavior toward the child. The present study investigates the impact of two contextual factors—economic strain and spouse support. More specifically, the study examines the extent to which support from the marital partner mediates and moderates the effect of economic strain on parenting.

There is strong evidence indicating that economic strain exerts a disruptive influence on parenting. Studies using data collected during the Great Depression have reported a relation between income loss and the tendency for fathers to be less nurturant and more arbitrary and punitive in their parenting (Elder, 1974; Elder, Liker, & Cross, 1984; Elder, Van Nguyen, & Caspi, 1985). A recent study using a more contemporary sample found this association to hold for both mothers and fathers (Lempers, Clark-Lempers, & Simons, 1989). Several surveys concerned with abusive parenting have also reported an inverse relation between family income and parents' use of harsh discipline (Gelles, 1978; Gelles & Hargreaves, 1981; Gil, 1970; Parke & Collmer, 1975; Straus, Gelles, & Steinmetz, 1980).

This relation between economic strain and disrupted parenting is to be expected given recent findings from studies of the consequences of aversive events. Evidence from both laboratory and survey research indicates that unpleasant occurrences promote hostility, negative thoughts and memories,

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psychomotor tension, and a tendency to behave aggressively toward others (Berkowitz, 1989). Thus, in general, the frustration produced by economic hardship should foster an irritable, aggressive psychological state that operates to decrease warmth and increase hostility displayed toward others, including one's children. Consistent with this contention, two recent studies found that the effect of economic strain on parenting was mediated by parents' level of emotional distress and perceptions of the child as troublesome and difficult (Conger, McCarty, Yang, Lahey, & Kropp, 1984; Simons et al., 1990).

Whereas economic strain is thought to disrupt parenting, social support is usually assumed to be a coping resource that serves to foster competent parenting. Belsky (1981, 1984; Belsky & Vondra, 1989) has argued that although friends, relatives, and neighbors may operate as a secondary support network, the principal support system for parents is their spouse. Individuals typically invest much time and emotional energy in their marriage compared to other relationships. When the marital relationship is positive, the spouse is a source of advice, assistance, and emotional support. Such a relationship should foster psychological well-being and increase the probability of supportive parenting. A tense, conflictual relationship, on the other hand, would be expected to function as an aversive event, serving to increase hostility and poor parenting.

Consistent with this view, a variety of studies have reported a positive association between quality of the marital relationship and quality of parenting (Belsky, Gilstrap, & Rovine, 1984; Easterbrooks & Emde, 1988; Engfer, 1988; Feldman, Nash, & Aschenbrenner, 1983; Meyer, 1988; Pederson,

1982). This relation has been shown to hold for both mothers and fathers, in various countries, and for parents of infants, toddlers, and preschoolers (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. Studies that have examined the relative importance of marital versus other kinds of support consistently 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).

While these studies suggest that parenting behavior is influenced by the quality of the marital relationship, past research indicates that economic strain often creates marital tensions (Conger et al., 1990; Liker & Elder, 1983). As noted earlier, aversive events such as financial hardship tend to foster irritable, aggressive behavior. Thus, as a consequence of economic strain, individuals are likely to display hostile behavior toward both their spouse and children. This suggests that in addition to any direct effect, economic hardship may influence parenting indirectly through its deleterious impact on marital interaction.

This pattern of effects is illustrated in Figure 1. The figure indicates that economic hardship (e.g., income, ratio of debts to assets, employment instability) increases the probability of perceived economic strain (i.e., the perception that the family does not have enough money to buy necessities and pay bills). Economic strain, in turn, is depicted as influencing parenting both directly

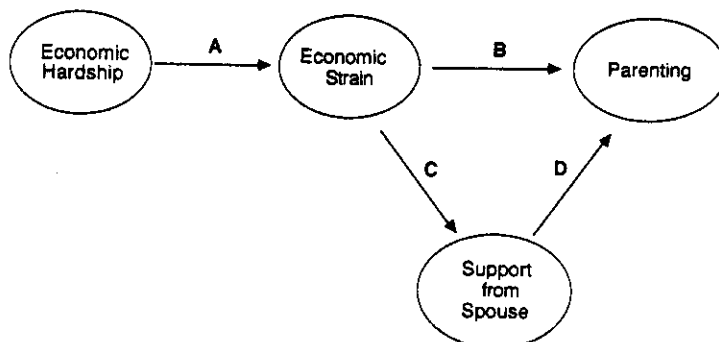


FIG. 1.—Model to be tested

(path A) and indirectly through its negative impact on the marital relationship (paths B and C). The model indicates that it is only through its impact on perceptions of economic strain that economic circumstances and events operate to disrupt spouse support and quality of parenting. Stated differently, the model suggests that economic conditions interrupt the marital relationship and parental behavior to the extent that spouses experience the distress of perceiving that family resources are not adequate to maintain an expected or desired standard of living (see Kessler, Turner, Blake, & House, 1988, for a discussion of the importance of perceptions of economic strain as a mediator between economic circumstances and emotional distress).

Figure 1 portrays the manner in which spouse support is assumed to *mediate* the impact of economic difficulties on parental behavior. In addition to this mediating function, support from a spouse might be expected to *moderate* the relation between economic strain and parenting. Recently, Belsky and Vondra (1989) have argued that a strong marital relationship might serve as a coping resource that reduces the damaging influence of life stress on parenting. Supportive spouses are likely to provide high levels of encouragement, advice, and assistance when they perceive their mate to be under intense stress. This warmth and understanding might be expected to buffer the individual's parenting against the disruptive threat posed by economic hardship. Consequently, economic strain would have less of an effect on the emotional well-being and parenting practices of persons high compared to those low on spouse support.

Although several studies have investigated the association between quality of the marital relationship and parental behavior, little consideration has been given to the possibility that spouse support may serve to moderate the disruptive influence of stressors such as economic strain. An exception is a study by Elder et al. (1984) that found that income loss had a less detrimental impact on the parenting of fathers when they had a positive relationship with their wife. This study, which utilized data collected during the Great Depression, indicates that support from a spouse may serve to buffer an individual's parenting against the disruptive influence of economic strain.

The present study uses structural equation modeling (SEM) to test for the mediat-

ing function of marital support posited in Figure 1. The moderating influence of marital support is then examined by comparing the association between economic strain and quality of parenting for parents high versus low on spouse support. If a buffering effect exists, the impact of economic strain on parenting should be significantly lower for parents high on spouse support.

Level of involved, supportive parenting is the dimension of parenting used as an outcome in the analysis. Rutter (1985a, 1985b) has contended that competent parenting involves the provision of an environment conducive to children's cognitive and social development. This suggests that parenting, in addition to being a set of techniques and skills, functions as a special kind of social relationship (Quinton & Rutter, 1988). Consistent with this view, several theorists have argued that a fundamental feature of effective parenting is the extent to which parents establish an involved, supportive relationship with their children (Maccoby & Martin, 1983; Rollins & Thomas, 1979). This involvement and support can be expressed in a variety of ways: "Supportive parents express interest in children's activities, talk with them a good deal, take them on outings or play games with them, provide help with everyday problems and schoolwork, express enthusiasm and praise over accomplishments, and show affection and love" (Amato, 1990, p. 613). Past research has established that involved, supportive parenting is related to a number of child developmental outcomes. 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 psychosocial development (Rutter, 1985a, 1985b), the evidence indicates that level of parental support is a fundamental feature of such an environment.

Certainly one can identify other important dimensions of parenting (e.g., type of discipline, consistency). It appears to be the case, however, that no other dimension is related to such a broad range of developmental outcomes, plus these other dimensions have been shown to be rather highly

correlated with supportive parenting (Macoby & Martin, 1983; Rollins & Thomas, 1979). Compared to distant or rejecting parents, supportive parents are more likely, for example, to be consistent and to use inductive rather than coercive disciplinary techniques.

In addition to considering both the mediating and moderating effects of marital quality, there are several other ways in which the present study differs from most previous research concerning the impact of economic strain or marital quality on parenting. First, this study focuses on families with adolescents, while prior investigations of the association between marital quality and parenting have concentrated almost exclusively on the parents of infants and preschoolers. Consideration of older children is important, as the relation between spouse support and parenting practices may vary by developmental level of the child (Easterbrooks & Emde, 1988). Although studies that focus on families with infants and preschoolers have reported a positive association between marital quality and parenting, Brody, Pellegrini, and Sigel (1986) found a negative relation between spouse support and positive parenting for mothers of school-aged children. Perhaps spouse support enhances parenting during infancy, whereas parents of older children may compensate for an unsatisfactory marital relationship by forming a warm, supportive relationship with their child.

Second, whereas much of the research on parenting has focused on mothers, fathers are also included in the present study. It is essential that both mothers and fathers be considered, as the effect of either economic strain or spouse support may differ by gender of parent. Elder (1974), for example, found that economic hardship affected the parenting of fathers but not mothers, and there is evidence that marital quality may influence the parenting of fathers more than mothers (Goldberg & Easterbrooks, 1984).

Third, the effects of economic strain and spousal support are analyzed separately by gender of the child. This is significant, as some studies have found that a child's gender affects the relation between marriage quality and parenting (Cox et al., 1989; Goldberg & Easterbrooks, 1984). It might be, for instance, that in response to low support from their spouse parents become less supportive and involved with children of the opposite sex, but seek support and involvement with same-sex children. Should this be

the case, the effect of social support on parenting would differ in direction depending on the gender of the parent and child.

Finally, the present study contrasts with much of the previous research on stress, marital quality, and parenting in that multiple sources are used to form indicators for the constructs in the model. Most studies have collected data concerning level of stress, the marital relationship, and parenting practices from a single source. Measuring all study variables through reports from a single source may yield inflated estimates of associations between constructs because of the respondent's overarching personality dispositions, attributional style, or emotional state (Baucom, Sayers, & Duhe, 1989; Lorenz, Conger, Simons, Whitbeck, & Elder, 1991; Watson & Clark, 1984). Such dispositions or traits may color the respondent's judgments about conceptually distinct ideas. Individuals who are depressed, for example, are apt to display a negative bias in their view of the family's economic situation, their parenting skills, and the behavior of their spouse and children. Consequently, there is the danger that one might obtain correlations between these variables that are a function of respondent bias rather than substantive relations between constructs (Bank, Dishion, Skinner, & Patterson, 1989; Patterson, 1982). In an attempt to circumvent this problem, self, spouse, and child reports, as well as observational ratings, were used as indicators of constructs.

Methods and Procedures

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 (ages 12–13), male and female, 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. However, analysis for the present study focused only on parenting practices directed toward the seventh grader, thereby controlling for the age of the child that was the focus of the parents' behavior.

Slightly less than half of the cohort of seventh graders had families who met these criteria. Seventy-seven percent of the eligi-

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ble families agreed to participate in the study. This is comparable to the response rates reported by other studies that attempt to recruit multiple family members (Capaldi & Patterson, 1987). Substantial remuneration appears to be a requisite for obtaining the participation of multiple family members in studies involving intensive assessment procedures (Capaldi & Patterson, 1987). 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, while for mothers the range was from 8 to 18 years with a mean of 13.4 years. The fathers ranged in age from 31 to 68 with a median of 40 years; mothers' ages ranged from 29 to 53 with a median of 38 years. Since families of less than four were excluded from the sampling frame, the families were larger on average than what would be expected from a general population survey. Families ranged from 4 to 13 members with an average of 4.9 members.

Procedures

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 hours to complete the first visit. Between the first and second visits, family members completed questionnaires left with them by the first interviewer. These questionnaires dealt with information concerning the parents' parents, beliefs about parenting, and plans for the future. Each family member was instructed to place his or her completed questionnaire in an envelope, seal it, and give it to the interviewer at the time of the second visit.

During the second visit, the family was videotaped while engaging in several different structured interaction tasks. The visit began by having each individual complete a short questionnaire designed to identify issues of concern or disagreements within the family (e.g., chores, recreation, money, etc.). The family members were then gathered around a table and given a set of cards to read and discuss. All four family members

were asked to discuss among themselves each of the items listed on the cards and to continue talking until the interviewer returned. The family members were given 30 min to complete this task. The second task, 15 min in length, also involved all four family members. For this task, the family was asked to discuss and try to resolve the issues and disagreements that they had cited in the questionnaires they had completed earlier in the visit. The third task involved only the two youth and was 15 min in length. The youth were given a set of cards listing questions related to the way they got along, the manner in which their parents treated them, their friends, and their future plans. The fourth task involved the married couple and lasted for 30 min. Spouses were asked to discuss issues related to aspects of their relationship, areas of agreement and disagreement (e.g., parenting, finances), and their plans for the future.

The family's interaction around these four tasks was videotaped. Interviewers explained each task and then left the room while the family members discussed issues raised by the task cards. During the time family members were not involved in a videotaped interaction task, each family member completed an additional questionnaire asking about significant life events, attitudes toward sexuality, and personal characteristics. The second visit lasted approximately 2 hours.

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. Before observing tapes, coders had to independently rate precoded interaction tasks and achieve at least 90% agreement with that standard. For purposes of assessing interobserver reliability, 12% of the tasks were randomly selected to be observed and rated by a second observer. Reliability between observers was determined by calculating a generalizability coefficient. In the case of two independent observers, this coefficient is an intraclass correlation and provides an estimate of true score variance relative to error variance (Suen & Ary, 1989). The magnitude of this coefficient varied by rating scale, but on average ranged between .60 and .70.

Measures

Economic conditions.—Although economic strain (i.e., the judgment that family resources are not adequate to meet family needs) is posited to be the mechanism through which economic conditions exert their influence on family processes, indicators of economic difficulties were included as exogenous variables in the model to demonstrate that perceptions of economic strain are not merely subjective assessments but are largely determined by the actual financial and occupational circumstances faced by the family. Toward this end, four economic hardship constructs were selected. Each was based on a single indicator. *Family per capita income* includes total income from all sources (e.g., wages, interest, business profits, etc.) divided by the number of family members. This measure correlates highly ($r = .977$) with family income divided by family need (the poverty line for a family of a particular size) and therefore appears to adjust for economies of scale achieved with larger family sizes. Both parents responded to four items (1 = yes, 0 = no) that assessed *unstable work*: (a) changing jobs for a worse one, (b) trouble at work such as demotions, (c) being laid off or fired, and (d) other involuntary losses of work. Mother and father responses were summed to create a single index for the family.

A *debt-to-asset ratio* score was computed for each family. The estimated value of all debts was divided by total family assets. Because of skewness in the resulting distribution of ratios, natural log transformations of the original scores were used in the analysis. Each parent also provided an independent estimate of whether family income increased, decreased, or stayed about the same during the preceding year. The nine possible responses ranged from "increased more than 30%" to "decreased more than 30%." Scores for the couple were summed and averaged to provide an estimate of *income loss*.

Economic strain.—Mothers and fathers completed a five-item Economic Strain Scale adapted from the Financial Strain Scale (Pearlin, Lieberman, Meneghan, & Mullen, 1981). The scale items focus on the extent to which the family has enough money for clothing, food, and medical care, and to pay bills. Responses to each item range from 1 (no difficulty at all) to 5 (a great deal of difficulty). Coefficient alpha for this scale was .88 for mothers and .89 for fathers. Each of the parents also completed an Eco-

nomie Adjustment Scale that asked respondents to indicate which of 23 strategies they had used in an attempt to cope with economic hardship. The strategies included behaviors such as cashing in life insurance, changing residence, eliminating medical insurance, borrowing money, selling property, and receiving government assistance. The five items from the Economic Strain Scale and the score from the Economic Adjustment Scale were standardized and summed to form a composite measure of economic pressure.

Spouse support.—Measures of social support are often criticized for relying exclusively on self-report instruments. Such measures are problematic in that perceptions of social support, whether from a spouse or a friend, may be colored by the respondent's level of self-esteem, mood, or other personality characteristics. Thus, studies that find a relation between self-reports of spouse support and parenting practices leave open the possibility that the association between the two is spurious, explainable by the personal dispositions of the respondent. In an attempt to reduce this problem, 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, 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, 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, as 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 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, eye contact), emotional expression (e.g., smiling, laughing), supportiveness (e.g., showing concern for the other's welfare, offering encouragement), and responsiveness (e.g., asking questions to show interest, head nods). 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, while for the Hostility Scale the coefficients 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, that is, 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. A composite measure of spouse support was formed for each of the parents by standardizing and then summing their self-report and

observation scores. A composite measure was constructed, rather than utilizing the measures as two separate indicators of a latent construct, to facilitate testing for the moderating influence of spouse support.

When multiple regression procedures are employed, 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 SEM is employed 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). However, 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.

Supportive parenting.—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 (e.g., concern, assistance, communication, etc.). The scale items are presented in Appendix A. 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, interaction task 1 (family interaction) and task 4 (marital interaction) were coded by different raters, thereby reducing 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

The mean, standard deviation, and range for each of the study variables is presented in Appendix B. The correlation matrices used for the structural equation modeling are displayed in Tables 1 and 2. Four matrices are presented, as analyses were performed separately for mothers and fathers by gender of child. Overall, the indicators for any particular constructs tend to correlate more strongly with each other than with those of other constructs, indicating good convergent and discriminant validity. The four matrices show associations between self-report, child report, and observer ratings of supportive parenting ranging from .18 to .38. The magnitude of these coefficients is similar to those reported by other researchers who have employed multiple sources to measure family processes (e.g., Furman, Jones, Buhrmester, & Alder, 1989). The correlations between father and mother reports of economic strain were more robust, ranging from .63 to .66. As expected, the matrices show mother and father reports of economic strain to be negatively correlated with both support from spouse and the measures of supportive parenting, whereas support from spouse is positively related to the supportive parenting measures. The four measures of economic hardship tend to be associated with economic strain but not with either spouse support or quality of parenting, consistent with the hypothesis that the impact of economic circumstances on family

processes is mediated by perceived financial strain.

The results from fitting the data to the proposed model are shown separately for mothers (Fig. 2) and fathers (Fig. 3) by gender of child. The coefficients in the figures are maximum likelihood estimates obtained using LISREL VII (Joreskog & Sorbom, 1989). No residuals were correlated in these analyses, and in no case did the modification indices indicate that any set of residuals should be correlated. As can be seen in the figures, the factor loadings for the indicators of the various constructs are in the acceptable range and are relatively stable across groups.

Model A in Figure 2 shows the results for mothers of boys. The hypothesized model produced a small chi-square relative to degrees of freedom ($p = .39$) and a goodness-of-fit coefficient of .973. Thus the model fits the data well. Three of the economic hardship constructs—Unstable Work, Debt-to-Asset Ratio, and Income—show significant paths to Economic Strain. Together, these constructs explain 45% of the variance in Economic Strain. No significant paths were found between any of the economic hardship constructs and either Spouse Support or Supportive Parenting, and including any such paths served to significantly increase the value of chi-square. There are significant paths between Economic Strain and Supportive Parenting ($\beta_{31} = -.31$), Spouse Support and Supportive Parenting ($\beta_{32} = .29$), and Economic Strain and Spouse Support ($\beta_{21} = -.21$). In addition to being statistically significant, Table 3 shows that deleting any one of these paths results in a significant increase in chi-square. Thus for mothers of boys, the best-fitting model is one where Economic Strain influences Supportive Parenting both directly, and indirectly through its impact on Spouse Support.

Model B shows the results for mothers of girls. The chi-square with 27 degrees of freedom and the goodness-of-fit index indicate that the model provides a good fit of the data. All four of the economic hardship constructs demonstrate significant associations with Economic Strain, combining to explain 51% of the variance. As was the case for mothers of boys, no significant paths were found between any of the economic hardship constructs and either Spouse Support or Supportive Parenting. Thus, as was the case for mothers of boys, difficult eco-

TABLE 1

CORRELATION MATRICES FOR MOTHERS

Variable	1	2	3	4	5	6	7	8	9	10
Support from husband .....	.22*	.29*	.24*	.25*	-.20*	-.26*	-.09	-.13	-.05	.11
Self-report of parenting .....	.17	.31*	.31*	.30*	-.04	-.08	-.12	-.07	-.08	.03
Child report of parenting .....	.17	.30*	.21*	.26*	-.15	-.12	-.18*	-.17	-.03	.01
Observation of parenting .....	.16	.30*	.21*	.26*	-.11	-.16	-.17	-.07	-.12	.09
Father report of economic strain .....	.22*	.18	-.12	.14	.63*	.63*	.25*	.49*	.18*	-.40*
Mother report of economic strain	-.05	-.24*	-.12	-.17	.66*	.66*	.21*	.32*	.29*	-.40*
Unstable work	-.14	-.11	-.05	-.08	.24*	.24*	.17	.20*	.07	-.14
Debt	-.07	-.05	-.17	-.11	.34*	.28*	.07	.05	-.04	-.20*
Income loss .....	.06	.11	-.05	-.01	.13	.12	.13	.05	.05	-.10
Income .....			.01	.24*	-.51*	-.45*	-.13	-.25*	-.18*	.00

NOTE.—Coefficients above the diagonal are for mothers whose child is female ($N = 222$); coefficients below the diagonal are for mothers whose child is male ($N = 205$).

* Significant at the .05 level.

TABLE 2

CORRELATION MATRICES FOR FATHERS

Variable	1	2	3	4	5	6	7	8	9	10
Support from wife .....	.29*	.24*	.09	.20*	-.22*	-.30*	-.09	-.09	-.13	.08
Self-report of parenting .....	.16	.19*	.32*	.38*	-.22*	-.15	-.08	-.17*	-.04	.09
Child report of parenting .....	.28*	.22*	.24*	.30*	-.21*	-.17*	-.18*	-.09	-.04	.04
Observation of parenting .....	.19	.25*	.24*	.24*	-.17	-.22*	-.17	-.17	-.07	.11
Father report of economic strain .....	.23*	.05	-.08	-.19*	.64*	.64*	.24*	.49*	.20*	-.40*
Mother report of economic strain	-.03	-.10	-.12	-.18	.66*	.66*	.20*	.32*	.30*	-.40*
Unstable work	-.10	-.07	-.06	-.17	.24*	.24*	.17	.19*	.07	-.14
Debt	-.03	-.02	-.15	-.07	.34*	.28*	.17	.05	-.03	-.20*
Income loss .....	.09	.03	-.02	-.03	.13	.12	.07	.05	.05	-.10
Income .....			.08	.22*	-.51*	-.45*	-.13	-.25*	-.18*	.00

NOTE.—Coefficients above the diagonal are for fathers whose child is female ($N = 223$); coefficients below the diagonal are for fathers whose child is male ($N = 208$).

* Significant at the .05 level.

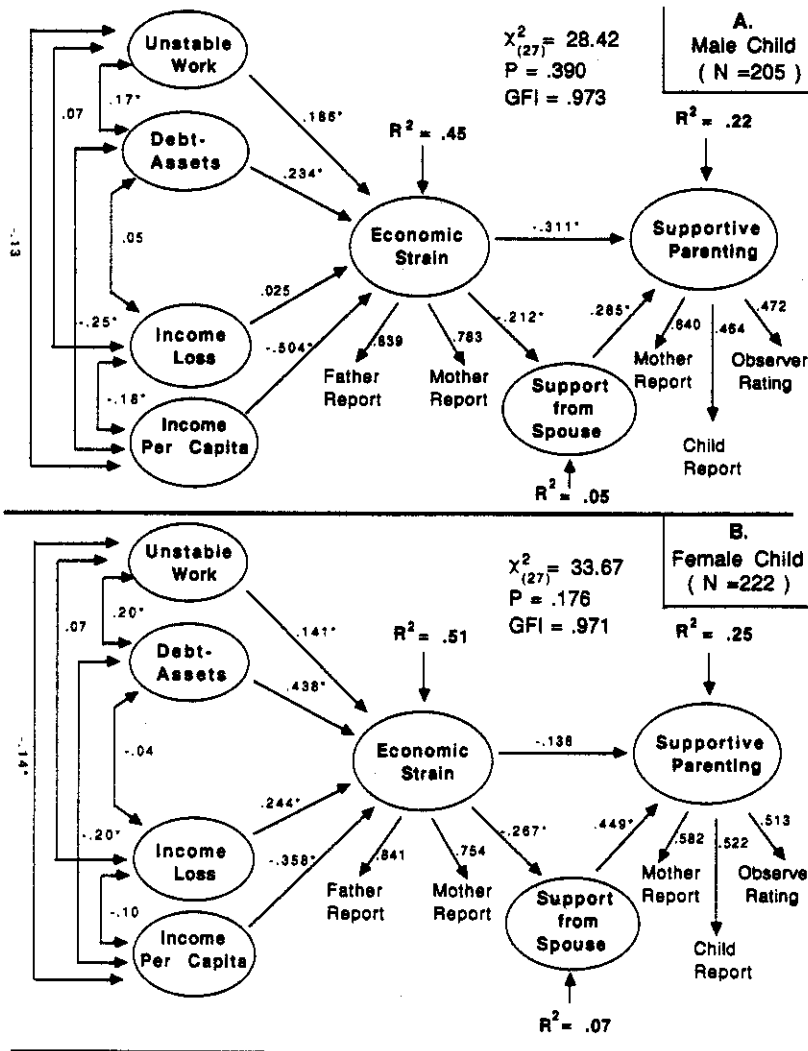


FIG. 2.—The effect of economic strain and support from husband on parenting of mother (* $p < .05$).

economic circumstances influence the marital relationship and quality of parenting for mothers of girls indirectly by fostering the perception that family resources are not adequate to maintain an expected or desired standard of living.

There is a significant path between Economic Strain and Spouse Support ($\beta_{21} = -.27$) and between Spouse Support and Supportive Parenting ($\beta_{32} = .45$), but the path between Economic Strain and Supportive Parenting (β_{31}) only approaches significance ($t = 1.45$). Consonant with these findings, Table 3 shows that deleting either β_{21} or β_{32} significantly increases chi-square,

whereas the change in chi-square obtained by deleting β_{31} only approaches significance with a probability level of .16. This indicates that for mothers of adolescent daughters a model that specifies the influence of Economic Strain on Supportive Parenting as indirect through Spouse Support provides a marginally better fit of the data than a model that provides for a direct effect of Economic Strain on Supportive Parenting in addition to an indirect effect through Spouse Support.

This suggests that the impact of economic strain on quality of parenting may differ for mothers of boys versus mothers of girls; that is, there is a direct effect for boys

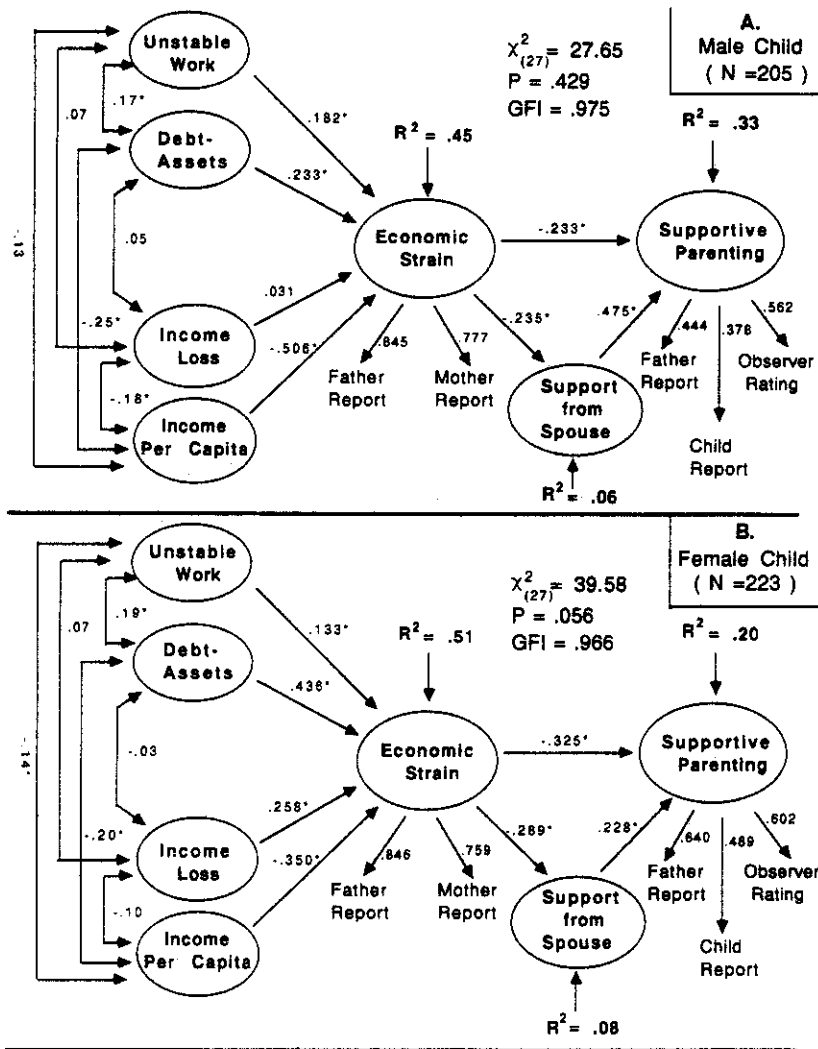


FIG. 3.—The effect of economic strain and support from wife on parenting of fathers (* $p < .05$)

but not for girls. This hypothesis was tested by using the group comparison option available in LISREL VII. Using this procedure, the chi-square obtained when all parameters in model B (the model for boys) were constrained to be equal to those in model A (the model for girls) was compared with the chi-square obtained when all parameters in the two models were constrained to be equal except for the path between Economic Strain and Supportive Parenting (β_{31}). The resulting difference in chi-square was .62 with 1 degree of freedom. The p value for a chi-square of this magnitude is .43, suggesting that this seeming difference by gender of child in the impact of economic strain

on the parenting of mothers may be due to random error.

The models in Figure 2 indicate that there may be a difference by gender of child regarding the impact of support from spouse on the parenting of mothers. The path between Spouse Support and Supportive Parenting is .29 for mothers of boys and .45 for mothers of girls. Using the group comparison option available in LISREL VII, the chi-square obtained when all parameters in model B were constrained to equal those in model A was compared with the chi-square obtained when all parameters in the two models were constrained to be equal except

TABLE 3
COMPARISON OF ALTERNATIVE MODELS FOR MOTHERS AND FATHERS BY GENDER OF CHILD

Model	Description	χ^2	df	$\Delta\chi^2(1)$	p Value for $\Delta\chi^2(1)$
Supportive parenting of mothers:					
Male child:					
Baseline	all β 's free	28.42	27	...	...
Alternative model 1	fix β_{31} ES→Par	37.72	28	9.30	.002
Alternative model 2	fix β_{21} ES→Sp Sup	36.09	28	7.67	.006
Alternative model 3	fix β_{32} Sp Sup→Par	37.93	28	9.51	.002
Female child:					
Baseline	all β 's free	33.67	27	...	...
Alternative model 1	fix β_{31} ES→Par	35.62	28	1.95	.163
Alternative model 2	fix β_{21} ES→Sp Sup	46.97	28	13.30	.000
Alternative model 3	fix β_{32} Sp Sup→Par	58.17	28	22.55	.000
Supportive parenting of father:					
Male child:					
Baseline	all β 's free	27.65	27	...	...
Alternative model 1	fix β_{31} ES→Par	31.99	28	4.34	.037
Alternative model 2	fix β_{21} ES→Sp Sup	37.12	28	9.47	.002
Alternative model 3	fix β_{32} Sp Sup→Par	48.81	28	21.16	.000
Female child:					
Baseline	all β 's free	39.58	27	...	...
Alternative model 1	fix β_{31} ES→Par	51.24	28	11.66	.001
Alternative model 2	fix β_{21} ES→Sp Sup	55.31	28	15.73	.000
Alternative model 3	fix β_{32} Sp Sup→Par	46.38	28	6.80	.009

NOTE.—ES = Economic Strain, Par = Parenting, Sp Sup = Spouse Support.

for the path linking support from spouse to quality of parenting. The difference in chi-square was 1.00, which, with 1 degree of freedom, has a nonsignificant probability of .32.

Figure 3 shows the results obtained for fathers. The models are quite similar for fathers of either sons or daughters. For both models, the chi-square and goodness-of-fit index indicate that the hypothesized model fits the data well. As was the case for mothers, models A and B show that the economic hardship measures are associated with Economic Strain, but they are not significantly related to Spouse Support or Supportive Parenting. Thus, for fathers of both boys and girls, the indicators of family economic cir-

cumstances exert their influence on the marital relationship and quality of parenting indirectly through perceptions of financial resources as inadequate to maintain an expected or desired standard of living.

For fathers of both boys and girls, there are significant paths from Economic Strain to Supportive Parenting (-.23 for boys, -.33 for girls), from Spouse Support to Supportive Parenting (.48 for boys, .23 for girls), and from Economic Strain to Spouse Support (-.24 for boys, and -.29 for girls). In addition to being statistically significant, the bottom half of Table 3 shows that deleting any one of these paths results in a significant increase in chi-square. Thus, for fathers of both sons and daughters, the best-fitting

model is one where Economic Strain influences Supportive Parenting both directly, and indirectly through its impact on Spouse Support.

Figure 3 shows the path coefficient between Spouse Support and Supportive Parenting to be larger for fathers of sons (.46) than for fathers of daughters (.28). The groups comparison option of LISREL VII was employed to determine whether this difference was significant. As was the case for mothers, this difference by gender of child did not approach statistical significance (χ^2 difference = 1.18, $p = .28$). The path between Economic Strain and Supportive Parenting is larger for fathers of girls than for fathers of boys ($-.33$ vs. $-.23$, respectively). Again, however, the difference was not significant ($\chi^2 = 1.08$, $p = .30$).

As noted earlier, moderator effects cannot be tested through the use of multiplicative interaction terms when using SEM to evaluate models containing explanatory variables constructed with multiple indicators. Rather, the sample must be separated into groups high and low on the moderator variable, and the paths between constructs compared for the two groups (Bollen, 1989; Jorskog & Sorbom, 1989). Thus, in order to test for the buffering or moderator effect of Spouse Support, both mothers and fathers were divided into two groups depending on whether they were above or below the median on Spouse Support. The path coefficient between Economic Strain and Supportive Parenting was then compared for parents high versus low on Spouse Support using the multiple groups comparison option of LISREL VII. For both mothers and fathers, the pattern of findings did not differ by gender of child. Therefore, in the interest of parsimony, the results are presented for boys and girls combined.

Table 4 provides the results of the group comparison. For mothers, the path coefficient between Economic Strain and Supportive Parenting, γ , equals $-.27$ when it is constrained to be the same for both the group high and the group low on Spouse Support. When the path is free to differ between the two groups, γ is $-.39$ for mothers low on Spouse Support but only $-.15$ for mothers high on Spouse Support. This difference is rather striking, with the path for mothers low on Spouse Support being highly significant ($t = 3.2$) while the path for mothers high on Spouse Support does not approach significance ($t = 1.5$). Table 4

shows that allowing the path to differ between groups improves the chi-square from 13.30 to 10.87. Although this reduction in chi-square has a probability of only .11, chi-square is a two-tailed test, whereas a directional difference in paths between mothers high and low on Spouse Support has been predicted. With 1 degree of freedom, z is the square root of chi-square. Thus, employing a one-tailed z test, the improvement in fit derived by a model that allows the path for mothers low on Spouse Support to be larger than that for mothers high on Spouse Support is significant at the .06 level.

In contrast, there is no evidence of a moderating effect for fathers. Table 4 shows a γ of $-.309$ when the path between Economic Strain and Supportive Parenting is constrained to be equal for both fathers high and low on Spouse Support. When this path is freed to differ between the two groups, γ is $-.306$ for fathers high on Spouse Support and an almost identical $-.313$ for fathers low on Spouse Support. The .01 change in chi-square achieved by freeing the path has a probability of .99. Thus, while the data suggest that a supportive spouse serves to buffer the potentially disruptive influence of economic strain on the parenting of mothers, there is no indication that spouse support exerts this protective effect for fathers.

Discussion

A profusion of studies indicate that aversive events promote hostile feelings, negative thoughts and memories, psychomotor tension, and a tendency to behave aggressively toward others (Berkowitz, 1989). Based on these findings, economic strain was expected to have a direct effect on parenting as well as an indirect effect through its deleterious impact on the marital relationship. Findings from the present study largely corroborated this expectation. The results indicate that economic strain operates to undermine the supportive parenting of mothers and fathers, regardless of the gender of their adolescent child. As posited, economic strain produced this effect through a direct relation with parenting and indirectly through its association with spouse support.

The findings suggest that perceptions of economic strain are determined in large measure by a family's concrete economic situation. Per capita income, ratio of debts to assets, employment stability, and income loss served to predict perceived economic

TABLE 4
COMPARISON OF THE PATH BETWEEN ECONOMIC STRAIN AND PARENTING FOR MOTHERS AND FATHERS HIGH AND LOW ON SPOUSE SUPPORT

Model	Description	γ		χ^2	df	$\Delta\chi^2(1)$	p Value for $\Delta\chi^2(1)$
		High Support	Low Support				
Mothers:							
Baseline	Set γ equal in high & low groups	-.273*	-.273*	13.30	16	...	...
Alternative model	γ free in high & low groups	-.154	-.393*	10.87	15	2.43	.11
Fathers:							
Baseline	Set γ equal in high & low groups	-.309	-.309	11.87	16	...	...
Alternative model	γ free in high & low groups	-.306*	-.313*	11.86	15	.01	.99

* $p < .05$.

strain. Thus, perceptions of economic strain are not merely subjective assessments of financial need produced by a family's lifestyle predilections. Although a sense of economic deprivation is in part a function of the standard of living to which a family aspires, it is also true that this perception is shaped by real economic events and circumstances. Indeed, findings from the present study indicate that economic conditions, such as unemployment or income loss, only influence family processes to the extent that they produce a sense of economic strain. Thus, economic conditions disrupt the marital relationship and parental behavior to the extent that spouses experience the distress of perceiving that family resources are not adequate.

In contrast to the disruptive influence of economic strain, spouse support was expected to facilitate supportive, involved parenting. Such warmth and assistance should foster psychological well-being and increase the probability of supportive parenting. Consistent with this hypothesis, level of spouse support was positively related to supportive parenting for both mothers and fathers, regardless of the gender of the child.

Most of the previous research on marital quality and parenting has focused on families with infants and preschoolers and has found a positive association between spouse support and quality of parenting. In contrast, a study of mothers of school-aged children reported a negative relation between quality of marriage and involved parenting (Brody et al., 1986). This pattern of findings suggests that perhaps spouse support enhances parenting during infancy, but that the reverse takes place for parents of older children as they attempt to compensate for an unsatisfactory marital relationship by forming a warm, supportive relationship with their child. This hypothesis is intriguing, but it was not supported by the findings from the present study. Rather, the effect of the marital relationship on parenting among the parents of adolescents paralleled that reported for parents of infants and preschoolers: spouse support facilitates warm, involved parenting.

In addition to examining the extent to which quality of the marital relationship mediates the disruptive influence of economic circumstances on quality of parenting, the present study tested the possibility that spouse support might serve to moderate the effect of economic strain on parental behavior. Findings from the present study suggest

that this may be the case for mothers but not fathers. Rutter (1990) defines a protective factor as a personal or environmental characteristic that when present eliminates the deleterious consequences of a particular risk factor. Results of the present study indicate that spouse support operates as a protective factor for women by negating the risk of inadequate parenting often associated with financial difficulties.

The finding that spouse support served as a buffer for mothers but not fathers is inconsistent with the results of a study using data collected during the Great Depression. Elder et al. (1984) found that in response to economic hardship husbands were less likely to engage in explosive parenting when they had a supportive relationship with their wife. Perhaps the difference can be explained by the fact that Elder et al. focused on harsh parenting, whereas the present study was concerned with involved, supportive parenting. It may be that a warm, supportive wife is able to restrain her husband from engaging in abusive parenting, but that her support is not able to avert a diminution in his involvement with the child. This possibility underscores the importance of being specific about the parental behaviors that are being used as a criterion in building models of the determinants of parenting. It may well be the case that factors such as economic strain or emotional support vary in effect depending on the dimension of parenting under consideration.

The finding that spouse support fosters involved parenting for both mothers and fathers, but moderates the impact of economic strain on supportive parenting only for mothers, suggests that different processes may be involved regarding the manner in which spouse support influences the supportive parenting of mothers versus fathers. These differences are likely to be related to gender differences in the way men and women approach marriage and parenthood. Past research indicates, for example, that the psychological well-being of women is more strongly affected by the quality of their marital relationship than is the case for men (Campbell, Converse, & Rogers, 1976; Glenn & Weaver, 1981; Lee, 1978). This dissimilarity is probably a function of the fact that women are more interpersonally oriented than men (Coleman, 1974, 1980; Josselson, Greenberger, & McConochie, 1977; Marcia, 1980; Wright & Keple, 1981). Regardless, this gender difference suggests that support provided by husbands is likely to influence the self-esteem, self-efficacy,

and resulting psychological well-being of wives more than support from wives is likely to affect the self-concept and psychological status of husbands. Thus the buffering effect that spouse support provides for women may result from the fact that a supportive husband buoys his wife's self-esteem and life satisfaction, thereby countering the threat to psychological well-being presented by aversive events such as economic strain.

Compared to women, men's psychological well-being is less affected by the quality of their marriage. Thus the impact of the marital relationship on the parenting of fathers may involve a different set of processes. Most couples continue to view parenting as fundamentally the responsibility of the wife (LaRossa, 1986). Men are usually much less involved than their wives in the daily care and supervision of the child, and see themselves as cast in a supporting role where they provide assistance to the primary parent, the mother (Belsky et al., 1984; Clarke-Stewart, 1980; Ehrensaft, 1983; Lamb, 1977; Parke, 1981). It follows that husbands are more likely to become involved in parenting, to provide assistance to the person they see as the primary parent, when they perceive their spouse as a source of warmth and support. Assuming that this is the process whereby spouse support fosters supportive parenting for husbands, one would not expect a buffering effect. Emotional support from a wife would lead to increased involvement in parenting, but there is no reason why this support would serve to protect the husband's self-concept and psychological well-being from the threat of stressors such as economic strain.

In order to test the validity of these contentions, future research needs to focus on the avenues through which economic strain and marital support exert their influence on parenting. Just as researchers have gone beyond simply correlating parenting practices across generations to exploring the mechanisms whereby parental behaviors are transmitted across generations (Burgess & Youngblade, 1988; Simons, Whitbeck, Conger, & Wu, 1991), so studies need to investigate the processes through which stressors and spouse support influence parenting, rather than limiting concern to the associations that exist between stress, marital relationships, and parenting. Presumably these processes involve mediating factors relating to self-concept, psychological well-being, feelings about the spouse, and the like. If the arguments presented earlier are correct, the me-

diating factors may differ by gender of parent.

The fact that findings from the present study indicate that spouse support may serve to moderate the impact of economic strain on the parenting of mothers is interesting given the large number of female-headed households in the United States. Many of these women experience severe financial hardship while lacking access to the coping resource spouse support. Belsky and Vondra (1989) suggest that under circumstances of single parenthood social network support may operate as a primary source of parental support. Future research needs to examine the extent to which various forms of social network support may buffer parenting from the disruptive effect of stressors such as economic strain. While a few studies have examined the association between network support and parenting, they have not gone on to consider the possibility that such support may function as a moderator of the impact of stress on parenting (Crnic et al., 1983; Friedrich, 1979; Wandersman & Unger, 1983). Further, there is a need for studies that investigate the degree to which network support can substitute in the absence of support from a spouse.

Appendix A

Items That Comprise the Supportive Parenting Scale

1. How often do you talk with your seventh grader about what is going on in his/her life?
2. How often does your seventh grader talk to you about things that bother him/her?
3. How often do you ask your seventh grader what he/she thinks before making decisions that affect him/her?
4. When your seventh grader does something you like or approve of, how often do you let him/her know you are pleased about it?
5. When you and your seventh grader have a problem, how often can the two of you figure out how to deal with it?
6. I really trust my seventh grader.
7. How often do you ask your seventh grader what he/she thinks before deciding on family matters that involve him/her?
8. How often do you give reasons to your seventh grader for your decisions?
9. I experience strong feelings of love for him/her.

Response format:

- 1 = never
- 2 = almost never
- 3 = about half of the time
- 4 = almost always
- 5 = always

Appendix B

MEAN, STANDARD DEVIATION, AND RANGE FOR INDICATORS OF STUDY CONSTRUCTS

VARIABLES	MALE CHILD (N = 205)			FEMALE CHILD (N = 223)		
	Mean	SD	Range	Mean	SD	Range
1. Employment scale	.340	.548	0-2	.271	.500	0-2
2. Debt-assets	.439	.296	0-2.325	.405	.258	0-1.712
3. Income loss scale	3.558	1.401	0-8	3.466	1.277	0-8
4. Per capita income	8.146	5.264	-1.467-44	8.083	6.098	-10.25-51.80
5. Father report of economic strain	.262	4.540	-8.25-16.177	-.238	4.552	-8.250-13.944
6. Mother report of economic strain	.240	4.751	-8.705-14.657	-.219	4.534	-8.705-14.657
7. Support from husband	-.089	2.196	-4.779-7.005	.086	2.377	-4.863-9.501
8. Support from wife	-.225	2.171	-5.001-6.758	.206	2.427	-4.821-8.136
9. Mother self-report of parenting	36.191	3.582	26-45	36.614	3.739	21-44
10. Child report of mother parenting	33.112	5.076	11-44	34.458	5.534	15-45
11. Observation of mother parenting	9.269	2.027	5-15	9.304	2.055	4-15
12. Father self-report of parenting	34.330	4.036	20-45	34.428	4.422	13-45
13. Child report of father parenting	33.214	5.821	14-45	32.441	6.428	9-45
14. Observation of father parenting	9.053	2.065	4-14	8.721	2.206	3-5

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