

Economic Well-Being and Children's Social Adjustment: The Role of Family Process in an Ethnically Diverse Low-Income Sample

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Using latent variable structural equation modeling, a family economic stress model that links economic well-being to child well-being in an ethnically diverse, low-income sample of 419 elementary school-age children was evaluated. The sample was 57% African American and 28% Hispanic, and most families were headed by single mothers. The results provided support for the position that family process is a critical mediator of the effects of economic hardship on children's social adjustment. Lower levels of economic well-being, and the corollary elevated perceptions of economic pressure indirectly affected parenting behavior through an adverse impact on parental psychological well-being. Distressed parents reported feeling less effective and capable in disciplinary interactions with their child and were observed to be less affectionate in parent-child interactions. In turn, less than optimal parenting predicted lower teacher ratings of children's positive social behavior and higher ratings of behavior problems. Multiple-group analyses revealed that the pathways by which economic hardship influences children's behavior appear to operate similarly for boys and girls, and for African American and Hispanic families.

INTRODUCTION

The past 2 decades have witnessed a proliferation of research that has examined the effects of poverty on children's development (Brooks-Gunn, Duncan, & Maritato, 1997; Hill & Sandfort, 1995; Huston, 1991; Huston, McLoyd, & Garcia Coll, 1994; McLoyd, 1998a). An extensive body of literature documents the adverse consequences of poverty for children and families. Low income is associated with low academic achievement, juvenile delinquency, and teenage pregnancy (Brody et al., 1994; McLeod & Shanahan, 1993; Sameroff, Seifer, Baldwin, & Baldwin, 1993; Sampson & Laub, 1994). Children from low-income families are also more likely than those from more affluent families to suffer from such socioemotional problems as anxiety and depression, and such behavioral problems as peer conflict and conduct disorders (Bank, Forgratch, Patterson, & Fetrow, 1993; Bolger, Patterson, Thompson, & Kupersmidt, 1995; Dodge, Pettit, & Bates, 1994; McLoyd, Jayaratne, Ceballo, & Borquez, 1994).

Recently, researchers have started to move beyond descriptive studies of poverty and child functioning and focus on understanding the processes by which low income affects children's well-being (McLoyd, 1998a). There is mounting evidence that such family processes as the quality of the marital relationship and the parent-child relationship are important mediators of the influence of economic hardship on children's emotional and social development (Brody et al., 1994; Conger & Elder, 1994; Conger, Ge, Elder, Lorenz, & Simons, 1994; Conger, McCarty, Yang, Lahey, & Kropp, 1984; Elder, 1974/1999; Elder, Eccles, Ardelt, & Lord, 1995; McLoyd, 1998a). McLoyd (1990) has

proposed a model that examines specifically the effects of poverty on minority children's socioemotional well-being. Using an ecological framework, McLoyd describes the impact of economic hardship on family processes as a function of the personal characteristics of individual family members, including the parent and child. The model posits parent psychological distress as an important mediator between economic hardship and parenting. For low-income parents, such chronic stressors as single parenthood, life stress, financial worries, and the constant struggle to make ends meet are proposed to take a toll on their mental health, in turn, diminishing their capacity to be sensitive and supportive parents.

The results of numerous studies converge in showing that economic hardship indirectly affects children's well-being through its impact on parenting behavior (Conger, Conger, & Elder, 1997; Conger, et al., 1992; Elder, Liker, & Cross, 1984; Elder, Nguyen, & Caspi, 1985; Jackson, Brooks-Gunn, Huang, & Glassman, 2000; McLeod & Shanahan, 1993; McLoyd et al., 1994; McLoyd & Wilson, 1990). Lempers, Clark-Lempers, and Simons (1989) observed that under conditions of economic hardship, parenting was likely to be less child centered and nurturant, and more parent centered, rejecting, and inconsistent. They found evidence for an indirect effect of economic hardship on adolescents' depression and loneliness scores through parental nurturance (the lack thereof) and inconsistent parental discipline. Inconsistent parental discipline also mediated the effect of economic hardship

on the occurrence of delinquent behavior and reported drug use. Along the same lines, research has also indicated that warm, supportive, and noncoercive parental practices buffer children from some of the adverse consequences of economic hardship (Hanson, McLanahan, & Thomson, 1997).

Despite strong empirical support for the family economic stress model, there remain important gaps in the literature. The work of Conger and colleagues (see Conger & Elder, 1994) has informed much of our understanding about the interactions between economic hardship, family process, and children's well-being. Their findings, however, are restricted to a particular segment of the population; namely, predominantly European American, lower to middle-class, rural families, many of whom endured severe economic losses during the 1980s. Only a handful of studies have tested directly the mediational model proposed by McLoyd (1990) with samples of low-income minority families (see Jackson et al., 2000; McLeod, Kruttschnitt, & Dornfeld, 1994; McLeod & Shanahan, 1993; McLoyd et al., 1994; McLoyd & Wilson, 1990). As McLoyd (1990) pointed out, there are reasons to expect that the impact of economic hardship on family and child functioning might be different for persistently low-income, minority families living in an urban city than for rural, middle-class European American families who have recently experienced economic loss. Such differences as limited personal and community resources (e.g., a lack of savings, low wages, absence of a spouse or partner, low social support, an intermittent work history, and concern for neighborhood safety) may serve to heighten the effect of economic hardship on low-income families, particularly for those families consistently on the brink of poverty. The sample for the current study was comprised of families whose income levels were no more than 150% of the federal poverty threshold at the time that they were recruited. They are representative of a segment of the population for whom economic hardship is an immediate and pressing problem, and of parents, who in the face of constant struggles to make ends meet, encounter significant challenges to optimal parenting.

Although the number of children living in poverty has been steadily declining in recent years, the percentages for all children, and for minority children in particular, continue to be sobering (Green Book, 2000; National Center for Children in Poverty, 2000). During the height of the U.S. economic boom during the 1990s, 40 percent of all African-American and Hispanic children were officially classified as living in poverty (Federal Interagency Forum on Child and Family Statistics, 1998). The comparable figure for European American

non-Hispanic children was 10% (Federal Interagency Forum on Child and Family Statistics, 1998). Given the disproportionately high rates of minority families who experience poverty (Dalaker & Naifeh, 1998; Duncan & Rodgers, 1988; Green Book, 2000), it is imperative that researchers develop and test models of economic hardship using minority populations. Moreover, in response to the changing demographic landscape in the United States, it is necessary for researchers to examine whether similar familial processes apply to non-European American samples, or whether the combination of immigration and cultural histories combine to produce a different pattern of outcomes for children of various ethnicities (McLoyd, 1998b).

The current study assessed whether the mediational processes by which economic hardship are proposed to affect child well-being held true for a sample of predominantly African American and Hispanic families. Despite a steadily increasing number of studies that examine the impact of economic hardship on family process among African American families and children, there remains a dearth of studies that examine such processes among low-income Hispanic families. A unique feature of the present study was the inclusion of a significant number of Hispanic families. Hispanic Americans are one of the fastest growing immigrant groups in the United States; a pattern that is expected to continue into the next decade (Leyendecker & Lamb, 1999; U.S. Department of Health and Human Services, 1999). Moreover, as previously mentioned, federal statistics point to segments of the Hispanic community, particularly recent immigrants of Mexican and Puerto Rican descent, as especially vulnerable to facing the perils of low income and poverty (Leyendecker & Lamb, 1999).

Additionally, the link between economic hardship, family process, and child well-being was investigated for a sample of preadolescent children, a group that has received substantially less attention than both younger (less than age 5) and older (adolescent) children (Brooks-Gunn et al., 1997). In general, far less is known about the adaptation of families with elementary school-age children to poverty and economic hardship. The elementary school years mark a period of transition in children's lives during which economic resources and family dynamics might be important mediators in children's social adjustment. In recent work, Brody and colleagues (Brody & Flor, 1997, 1998; Brody, Flor, & Gibson, 1999) examined the influence of such factors as religiosity and maternal efficacy in the link between economic hardship and the developmental outcomes of 6- to 9-year-old children from rural, single-parent, low-income African American families. The current study sought to fur-

ther enhance the emergent research that examines the developmental trajectories of economically disadvantaged children during the middle childhood years.

Few studies within the family economic stress paradigm have examined both positive and problematic behavioral indices within the same sample (for exceptions, see Conger et al., 1993; Conger et al., 1992; Hanson et al., 1997). To address this limitation, the present study investigated whether parent socialization processes account for the influence of economic hardship on both children's positive and problematic social adjustment. Specifically, we focused on indices of behavioral adjustment that are relevant to children's adaptation and success in school. The existing research has tended to focus only on the relation between economic hardship and such negative child adjustment indicators as externalizing (Conger et al., 1992; Conger et al., 1994; Lempers et al., 1989; Skinner, Elder, & Conger, 1992) and internalizing behavior problems (Conger et al., 1993; McLoyd et al., 1994). Both positive and problem social behaviors, however, are indicators of mental health that have consequences for later adjustment. Social competence with peers and adults, such as the ability to get along with peers, follow directions and instructions, and work independently, also contribute to a successful school experience (Brooks-Gunn et al., 1997).

In summary, the present study aimed to expand upon previous research on a family economic stress

model that links economic hardship to children's well-being (Conger et al., 1994; Elder, 1974/1999; McLoyd, 1990) by evaluating whether the model (1) applied to a sample of urban low-income, predominantly minority families; (2) generalized to families with preadolescent children; and, (3) accounted for variations in children's positive and problematic social adjustment. Furthermore, this study explored whether the pathways by which economic hardship influences child outcomes operate similarly or differentially for African American and Hispanic families, and for boys and girls. Based on previous theory and research, we expected that economic hardship would directly affect parents' perceptions of economic pressure. Economic pressure would, in turn, indirectly influence children's social adjustment through its direct impact on parent psychological distress and less than optimal parenting behavior (see Figure 1).

METHOD

Data Source

Data for this study were obtained from an evaluation of a demonstration program, the New Hope Project, that provided income supplements, job-search assistance, subsidized health care, and subsidized child care to low-income adults who worked a minimum of 30 hours a week. Although the designers

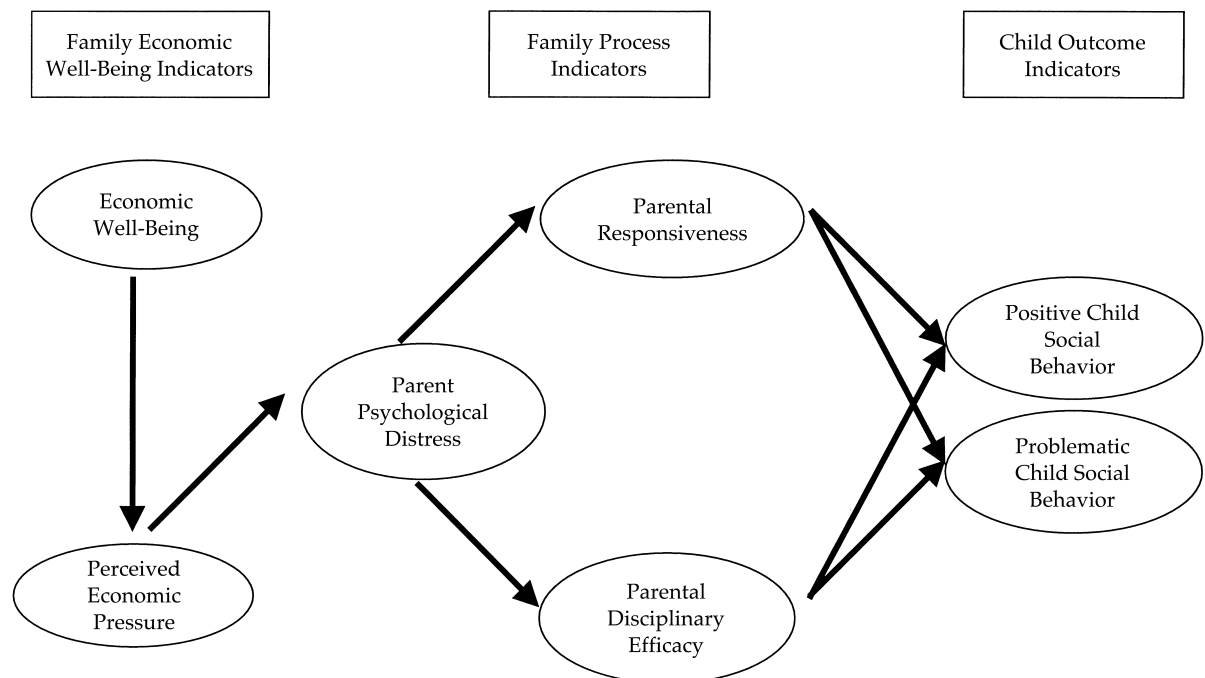


Figure 1 The conceptual model.

of New Hope had intended the program to be available to eligible low-income families for as long as they demonstrated a need, budgetary constraints limited availability of the program services to a maximum of 3 years. It was designed and implemented during an era marked by substantial experimentation with existing welfare policies, and during a period of rapid job growth and declining unemployment. The program represented an alternative strategy for improving the lives of the working poor, and the program benefits were designed to raise annual household incomes above the poverty line for families with at least one adult employed full time.

The New Hope Project was implemented in Milwaukee, Wisconsin, a midsize, traditionally industrial/manufacturing city that has shifted recently to more of a service-sector economy. Recruitment was constrained to two primary zip codes (each containing approximately 40,000 residents) that, according to census data, had particularly high concentrations of poverty and an ethnically diverse population; either predominantly African American or Hispanic (for detailed summaries of program design, implementation, and sample characteristics, see Bos, Huston, Granger, Duncan, Brock, & McLoyd, 1999; Brock, Doolittle, Fellerath, & Wiseman, 1997). Between August 1994 and December 1995, a total of 1,357 program enrollees were randomly assigned to either a program group whose participants were eligible for New Hope benefits, or a control group whose participants were not eligible. Eligibility requirements for the program included living in one of the two targeted service areas, being age 18 or over, having a willingness and ability to work at least 30 hrs a week, and having a household income at or below 150% of the federally defined poverty level (Brock et al., 1997).

Of the 1,357 sample members, 745 (program group, $n = 366$; control group, $n = 379$) were identified for inclusion in a study of the program effects on families and children (the Child and Family Study; CFS) because they had at least 1 child between the ages of 1 and 10 at baseline. Up to 2 children per family were selected. These children were between the ages of 3 and 12 at the time of the evaluation conducted 24 months after random assignment. Data were collected for 578 of the CFS families (913 children). There were four data sources: parent reports, child interviews, teacher reports, and administrative data. Parents and children were interviewed individually at home by trained interviewers. A group of ethnically diverse interviewers underwent an extensive training and certification process prior to interviewing family members, and were monitored thereafter to ensure a high degree of accuracy and proficiency

throughout the entire interviewing process. Wherever possible, interviewers and families were matched on the basis of race and ethnicity. Spanish-speaking participants were offered the option of having the interview conducted in Spanish using a translated version of the survey, but the majority elected to be interviewed in English. Teacher reports were obtained by questionnaires mailed to the child's school. The parent-, child-, and teacher-report data were collected only at the 24-month survey, whereas the administrative data on employment, earnings, receipt of public assistance benefits, and the Earned Income Tax Credit were gathered longitudinally from State of Wisconsin Tax Records (detailed methodological information is included in the main report by Bos et al., 1999).

Sample

The present study focused only on children age 5 to 12 for whom both parent and teacher report data were available ($N = 419$). A majority of the children had no missing data ($n = 389$). Analyses that assessed potential bias in this sample were conducted on all variables in the analysis. These analyses did not reveal systematic differences between participants with complete data records and those with some missing data; therefore, the final sample comprised all 419 children eligible for inclusion in the study.

The final sample (age: $M = 8.26$ years; $SD = 2.33$) included approximately equal numbers of boys ($n = 209$) and girls ($n = 210$). The sample did not differ significantly from the overall CFS sample on a number of characteristics, including race and ethnicity, and parents' age, gender, and marital status. A majority were either African American (57%) or Hispanic (28%), and 13% were non-Hispanic European American (the remaining 2% of the sample were Native American/Alaskan Native). The adults were overwhelmingly female (95%) and single heads of households (83%). At random assignment, a majority had at least a high school education (61%), had worked full time at some point during the past 2 years (87%), and were receiving some form of public assistance (84%). Finally, there were approximately equal numbers of New Hope participants (48%) and control group members (52%).

Measures

The description of the measures is organized by the constructs outlined in Figure 1. To minimize biases in estimates of path coefficients produced by a single source of information (e.g., parent report), as well as spurious high associations between constructs

(e.g., parenting behavior and child behavior), reports from multiple sources were included wherever possible (Bank, Dishion, Skinner, & Patterson, 1989; Conger et al., 1994). For example, the parental behavior constructs included measures based on both parent and observer report. This multi-informant index of parenting behavior was included to predict children's social competence as rated by teachers. As noted by Conger et al. (1994, p. 548) such procedures ensure that "... significant relations would not be obtained between the predictor and outcome variables simply as a result of shared method variance in the measures."

Control variables. A prominent objective of the New Hope program was to raise working families' incomes above the poverty threshold, and there is some indication that the program was successful in this regard (see Bos et al., 1999). Moreover, the results indicated that for those in the CFS subsample, New Hope participants had greater earnings and fewer periods without employment, and reported being less stressed and more efficacious than control group members. Contrary to expectations, however, these effects did not translate into meaningful differences in parenting behavior between parents in the program group and those in the control group (see Bos et al., 1999; Huston et al., 2001; Mistry, Crosby, Huston, Casey, & Ripke, 2001).

Although we were not interested in systematic differences attributable to the New Hope program in the current study, assignment to the program versus control group was included in the model as a covariate (1 = New Hope participant). To ensure that the influence of the experimental condition assignment was controlled throughout the entire model, direct paths to each latent construct were included in the model. This approach was followed for all covariates included in the analyses. Child gender (1 = boy) was also included as a covariate in these analyses, as were two ethnicity covariates: dichotomous variables indicating whether the family was African American (1 = yes) and whether the family was Hispanic (1 = yes).

Economic well-being/hardship. Annual income since random assignment was included as an indicator of a family's level of economic well-being. Annual income included all income obtained from (1) earned income, (2) Earned Income Tax Credit, (3) Aid to Families with Dependent Children (AFDC) cash benefits, (4) food stamps, and (5) Earnings Supplement for New Hope participants. The income data were collected from administrative records. Average annual income since baseline was \$15,280 ($SD = \$5,584$). As evident by the large SD , however, average annual income varied greatly among participants, and ranged from \$1,276 to \$30,723.

Perceived economic pressure. Three indicators of economic pressure were included: parents' perceptions of financial strain and material hardship, and food insufficiency. All measures were based on parent self-report. Financial strain (two-items), $r = .37$, was a summary measure based on how often the family had to borrow money from friends or family to help pay bills and how often they decided not to buy something that was really needed to make ends meet.

The material hardship measure was a summary measure of six items assessing whether participants or any immediate family members had experienced any of the following hardships in the past 12 months: (1) been without telephone service, (2) unable to pay the full amount of the rent or mortgage, (3) been evicted from home or apartment for not paying rent or mortgage, (4) had service turned off by the gas or electric company, (5) had someone who needed to see a doctor or go to the hospital but didn't go, and (6) had someone who needed to see a dentist but didn't go. Although, on average, the participants in this sample reported experiencing few material hardships (see Table 1), there was considerable variation in the number of hardships experienced by individual participants ($range = 0-5$). Participants also indicated their perception of food insufficiency on a 4-point scale (1 = enough of the kinds of food we want; 2 = enough, but not always the kinds of food we want to eat; 3 = sometimes not enough to eat; 4 = often not enough to eat).

Parent psychological distress. Three measures of distress were used: financial worry, efficacy, and depression. Financial worries (five items), $\alpha = .82$, was measured by averaging across how much participants worried about (1) paying bills, (2) getting or keeping a job, (3) not being able to get medical care if self or family member got sick, (4) not having enough money to buy food, and (5) not being able to afford adequate housing.

The Hope Scale (Synder et al., 1996) was used as a measure of parental efficacy. The measure is intended to assess agency (e.g., "belief in one's capacity to initiate and sustain actions") and pathways (e.g., "belief in one's capacity to generate routes") to achieve goals. Parents indicated their agreement with six items, $\alpha = .83$ (e.g., "I am meeting the goals I have set for myself").

The Center for Epidemiological Studies Depression Scale (CES-D; Radloff, 1977) was used as a measure of the parents' depressive state. The CES-D is a widely used measure of depressive symptomatology, with an emphasis on depressed affect or mood. It consists of 20 items, $\alpha = .90$ (e.g., "I did not feel like eating," "I could not get going," "I felt hopeful about the future") that are summed to create a total score.

Table 1 Means and SDs for Family Economic Well-Being, Family Process, and Child Outcome Indicators

Variable	M	SD
Family economic well-being indicators		
Economic well-being		
Annual income, Year 1	\$14,956.25	\$5,892.12
Annual income, Year 2	\$15,604.47	\$6,374.87
Perceived economic pressure		
Financial strain (1–4) ^a	2.47	.89
Material hardship (no/yes) ^b	1.25	1.39
Food insufficiency (1–4) ^c	1.75	.68
Family process indicators		
Parent psychological distress		
Financial worries (1–5) ^d	2.93	1.22
Efficacy (1–4) ^e	2.90	.56
Depressive symptoms (1–4) ^f	16.86	11.32
Parental responsiveness (1–3) ^g		
Item 1: Observed warmth	2.09	.68
Item 2: Observed praise	1.97	.84
Parental disciplinary efficacy (1–6) ^h		
Item 1: Child ignores punishment (r) ⁱ	3.57	1.54
Item 2: Repeatedly punish child (r)	3.16	1.47
Item 3: Angry when punish (r)	3.01	1.26
Item 4: Problems managing child (r)	3.65	1.42
Child outcome indicators		
Positive child social behavior (1–5) ^j		
Social competence	3.62	.69
Compliance	3.58	.76
Autonomy	3.54	.70
Problematic child social behavior (1–5) ^k		
Externalizing problems	2.12	.85
Hyperactivity	2.54	.81
Disciplinary problems	2.64	1.42

Note: $N = 419$. (r) = reflected item.

^a Financial strain scores range from 1 (not at all) to 4 (a lot).

^b Material hardship measure is a sum of 6 No (not experienced) and Yes (experienced) items.

^c Food insufficiency scores range from 1 (enough of the kinds of food we want) to 4 (often not enough to eat).

^d Financial worries scores range from 1 (not at all) to 4 (a great deal).

^e Efficacy scores range from 1 (strongly disagree) to 4 (strongly agree).

^f Depressive symptoms scores range from 1 (rarely or none of the time) to 4 (most or all of the time).

^g Parental responsiveness scores range from 1 (not at all) to 3 (extremely).

^h Parental disciplinary efficacy scores range from 1 (never) to 6 (all of the time).

ⁱ (r) = item reflected to indicate positive parenting.

^j Positive social behavior scores range from 1 (never) to 5 (all of the time).

^k Problematic social behavior scores range from 1 (never) to 5 (all of the time).

Parenting behavior. Research on parenting has found consistent support for two primary dimensions of parenting behavior: one focusing on the affective components of the parent–child relationship such as acceptance, sensitivity, and nurturance; and the other pertaining to parental control (both behavioral and psy-

chological) and child management strategies (Baumrind, 1978; Cummings, Davies, & Campbell, 2000; MacCoby, 1992; Parke & Buriel, 1998). As shown in Figure 1, assessments of both dimensions were included in the model: an observational measure of parental warmth and a parent-report measure of disciplinary strategies. Interviewers completed the observational measure of warmth. Based on brief interactions between parent and child, the interviewer indicated on a 3-point scale (1 = not at all, 2 = moderately, 3 = extremely) whether the parent's voice conveyed positive feelings about their child, and whether the parent spontaneously praised the child or talked about the child's good qualities or behavior, $r = .64$. The items were taken from the Home Observation for Measurement of the Environment Scale (HOME; Caldwell & Bradley, 1984).

This study's measure of parental discipline assessed parents' efficacy with regard to disciplining their child. Four items addressed how effective and capable parents feel when disciplining their child: (1) How often, when you discipline [child] does he/she ignore the punishment?; (2) How often do you have to discipline [child] repeatedly for the same thing?; (3) How often do you get angry when you punish [child]?; and (4) How often do you feel you are having problems managing [child] in general? For model consistency and interpretation purposes, the items were reverse coded so that higher scores indicated more positive parenting; that is, the parents perceived that they were effective when disciplining their child. The items were selected from a scale developed for an evaluation of the Self-Sufficiency Project (SSP), an antipoverty demonstration program conducted across multiple Canadian provinces during the early 1990s (Morris & Michalopoulos, 2000; Statistics Canada, 1995). The ecological validity of the measure for the present sample was bolstered by the demographic similarities between the SSP and the New Hope samples. Specifically, like New Hope, eligible SSP participants had low incomes, were overwhelmingly female heads of households, and had a history of welfare receipt. In the SSP evaluation, the parent discipline scale used demonstrated good internal reliability, and a principal components factor analysis indicated that all of the items loaded satisfactorily on a single factor (for more details, see Morris & Michalopoulos, 2000). Likewise, the measure demonstrated adequate reliability in the present study's sample, $\alpha = .78$, and good construct validity when examined in relation to the other indicators of parenting behavior assessed as part of the New Hope evaluation (for discussion, see Bos et al., 1999).

It is important to acknowledge a potential limitation of this measure of disciplinary efficacy. The measure is child specific; that is the questions ask about

the parent's perceived effectiveness in disciplining the focal child. As is true for most self-report measures of parental behavior, the responses to these four items most accurately reflect a combination of parent and child behavior (Cummings et al., 2000)—a distinction that is impossible to tease apart with cross-sectional data. For this analysis, attempts to minimize this bias were made by using the disciplinary efficacy measure to predict child outcomes as reported by someone other than the parent; namely, a teacher's report of the child's behavior at school. It is important, however, to bear this caveat in mind when interpreting the results of the present study's analyses.

Child social competence. Subscale scores from teacher reports on the Positive Behavior Scale were used. The Positive Behavior Scale was developed for the New Chance Survey (Quint, Bos, & Polit, 1997), a study of over 2,000 low-income mothers and their children. It consists of 25 items that comprise three subscales: (1) social competence and sensitivity (e.g., "gets along well with other children," "shows concern for other people's feelings"), (2) compliance/self control (e.g., "thinks before he/she acts," "usually does what I tell him/her"), and (3) autonomy (e.g., "tries to do things for him/herself," "is self-reliant"). The subscales had adequate reliability, α s ranged from .78 to .92.

Child conduct problems. Three indicators of conduct problems were included: externalizing problems, hyperactivity, and frequency of disciplinary action. All measures were based on teacher reports of children's behavior at school. Externalizing problems and hyperactivity were assessed using subscales from the Problem Behavior Scale of the Social Skills Rating System (Gresham & Elliott, 1990). Externalizing problems include aggression and lack of behavior control ("is aggressive toward people or objects," "has temper tantrums"). The hyperactivity items assess impulse control and concentration problems ("is easily distracted," "acts impulsively"). Each subscale consists of six items. Both subscales had adequate reliability, externalizing, $\alpha = .92$; hyperactivity, $\alpha = .88$. Teachers also reported, on a 5-point scale (1 = never; 5 = several times a week) how often they had to discipline the child for misbehavior.

Data Analysis and Model Testing

The proposed model was assessed using latent variable structural equation modeling (SEM). The model was estimated using Amos 4.0 (Arbuckle & Wothke, 1999) with direct maximum likelihood using all available data, thereby allowing for the ability to maximize the sample size for the study. Given that each of the various goodness-of-fit indices operates

on differing assumptions, it is suggested that multiple indexes of overall fit, conveying a consistent evaluation, be included (Hoyle & Panter, 1995). Therefore, the comparative fit index (CFI; Bentler, 1989, 1990) and the root mean square error of approximation (RMSEA; Browne & Cudek, 1993) were used in the present study. The CFI ranges from 0 to 1 with 0 indicating the absence of model fit and 1 indicating perfect model fit. Values of approximately .9 or above are usually interpreted as evidence of good model fit (Bollen, 1989; Hoyle & Panter, 1995). Root mean square error of approximation values of less than .05 are generally accepted as indicators of good model fit in the social sciences; those between .05 and .08 are indicative of an adequate model fit (Browne & Cudek, 1993). In addition, because the χ^2 statistic is sensitive to both sample size and model complexity, the χ^2 ratio (χ^2/df), which adjusts for model complexity is reported. Although the cutoffs for interpreting this statistic vary, in general a χ^2 ratio between 1 and 3 indicates good fit (Arbuckle & Wothke, 1999).

RESULTS

The means, *SD*, and correlations among all variables used in the study are shown in Tables 1 and 2. On the whole, indicators within constructs (shown in bold-face in Table 2) were modestly related to each other. The patterns of intercorrelations also indicated preliminary support for the hypothesis that economic hardship, and the subsequent increased economic pressure, influence parenting behavior indirectly through parent psychological distress (see Table 2). Family income was significantly related to the economic pressure indicators: greater hardship was associated with elevated perceptions of both material hardship and food insufficiency, but not perceptions of financial strain. In turn, each of the economic pressure indicators was moderately correlated with the psychological distress measures. Indicators of economic pressure were also associated, albeit not very strongly, with the parental disciplinary efficacy items, but not with the indicators of either parental warmth or the child outcomes. On the other hand, the psychological distress measures were significantly correlated, in the expected direction, with each of the parenting measures, which, in turn, were significantly related to the set of child behavioral indicators.

Child Gender and Ethnic Group Comparisons

The first step in the latent-variable SEM analyses was to determine whether the relations among the various constructs in the model operated similarly for girls and boys, and for African American and His-

Table 2 Correlation Matrices for Study Variables

Variables	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
Control variables																									
1. New Hope participant																									
2. African American	.08																								
3. Hispanic	-.04	-.71*																							
4. Gender: Boy	.12*	.07	-.06																						
Family economic well-being indicators																									
5. Annual income, Year 1	.16**	.06	-.02	.01																					
6. Annual income, Year 2	.06	.04	.01	-.04	.66**																				
7. Financial strain	-.05	.05	-.15*	.02	-.02	-.07																			
8. Material hardship	-.06	-.01	-.08	-.01	-.10*	-.15**	.42**																		
9. Food insufficiency	-.01	.06	-.01	.06	-.10*	-.14**	.45**	.37**																	
Family process indicators																									
10. Financial worries	-.03	-.18*	.15*	-.03	-.20**	-.28**	.37**	.41**	.35**																
11. Efficacy	.18*	-.03	.08	.04	.10*	.05	-.24**	-.22**	-.24**	-.34*															
12. Depression	-.10*	.08	-.06	.06	-.06	-.11*	.26**	.31**	.21**	.38*	-.44**														
13. Observed warmth	.09	-.08	.13*	-.12*	.03	.04	-.11*	-.09	.01	-.09	.16**	-.14*													
14. Observed praise	.04	-.12*	.07	-.12*	-.06	-.01	-.08	.02	.04	-.06	.14**	-.13*	.64**												
15. Parental discipline, Item 1	.04	-.07	.10	-.13*	.07	.07	-.18**	-.14**	-.14**	-.10*	.16**	-.23*	.12*	.15**											
16. Parental discipline, Item 2	.06	-.05	.09	-.14*	.07	-.00	-.18**	-.26**	-.11*	-.21*	.23**	-.37*	.13**	.11*	.40**										
17. Parental discipline, Item 3	.13*	-.02	.05	-.03	.08	-.01	-.15**	-.17**	-.15**	-.13*	.22**	-.28*	.15**	.09	.35**	.55**									
18. Parental discipline, Item 4	.06	-.08	.10	-.13*	.03	-.02	-.14**	-.13**	-.04	-.05	.19**	-.26*	.14**	.08	.38**	.50**	.62**								
Child outcome indicators																									
19. Social competence	.06	-.13*	.14*	-.19*	-.09	-.06	-.04	.01	.01	.04	.04	-.01	.18**	.18**	.13*	.21**	.24**	.27**							
20. Compliance	.06	-.15*	.13*	-.28*	-.06	-.04	-.02	.00	.03	.01	.03	-.04	.21**	.19**	.15**	.18**	.20**	.29**	.83**						
21. Autonomy	.09	-.01	-.00	-.06	-.01	.00	.02	.07	.01	-.04	.05	.01	.12*	.13*	.06	.11*	.18**	.11*	.64**	.61**					
22. Externalizing problems	-.02	.18*	-.17*	.20*	.05	.08	-.02	.02	-.03	-.04	-.05	.03	-.15**	-.12*	-.09	-.20**	-.19**	-.29**	-.71**	-.72**	-.24**				
23. Hyperactivity	.01	.12*	-.10*	.32*	.04	.08	-.05	-.03	-.10	-.05	.00	.03	-.12*	-.13*	-.13**	-.17**	-.15**	-.26**	-.65**	-.81**	-.36**	.77**			
24. Disciplinary problems	.06	.20*	-.17**	.31*	.03	.02	-.07	-.01	-.06	-.07	-.03	.01	-.10*	-.13*	-.15**	-.11*	-.09	-.24**	-.55**	-.66**	-.20**	.71**	.70**		

Note: Indicators within constructs are boldfaced.

* $p < .05$; ** $p < .01$ (two-tailed).

panic families. To test explicitly whether child gender and ethnicity status moderated the relations among economic hardship and pressure, family process indicators, and the child outcomes included in the present study, multiple-group comparisons were conducted for the structural equations. A total of six multiple-group models were analyzed. Separate analyses were conducted for each child outcome (positive and problematic child social behavior) by group membership (i.e., child gender, African American ethnic status, Hispanic ethnic status). For each multiple-group analysis conducted, the applicable covariate was removed (e.g., child gender was removed when examining the model fit for boys as compared with girls), but the remaining covariates were retained in the model (e.g., for the previous example this would be the dummy variables for African American and Hispanic ethnicity, and for New Hope participation status).

The ability to interpret multiple-group analyses with latent variables requires that relations among measures in a study and their corresponding latent variables are identical across the groups, an assumption formally known as measurement invariance (Meredith, 1993; Widaman & Reise, 1997). To examine this assumption, intercepts, factor loadings, and uniquenesses for measures of all of the latent constructs in the SEM were constrained to be identical across the groups (results not shown). These restrictions resulted in extremely well-fitting models for all six multiple-group analyses completed, all CFIs $\geq .986$, all RMSEAs $\leq .042$; and χ^2 ratios ≤ 1.70 .

Having met the assumption of measurement invariance across groups, we next examined whether there were systematic group-related differences in the processes by which economic hardship affects children's social behavior. To determine if the relations among the latent constructs differed by group membership all of the latent paths identified in Figure 1 (e.g., the path from economic pressure to parent psychological distress) were constrained to be equal across the groups. Separate analyses were conducted for each child outcome (positive and problematic child social behavior) by child's gender, African American families versus non-African American families, and Hispanic families versus non-Hispanic families. The results (not shown) indicated that these models also fit the data relatively well, all CFIs $\geq .984$, all RMSEAs $\leq .045$; and χ^2 ratios ≤ 1.84).

Comparing the fit statistics obtained for the latent path invariance model to those observed for the measurement invariance model made it possible to ascertain whether child's gender and ethnicity status moderated the relations among the latent constructs in the model. Constraining the latent constructs to be equal

did not result in a significant decrease in model fit for child gender for either positive social behavior or problematic social behavior, $\Delta\chi^2(8) = 11.8$, *ns*, for both. Similarly, there were no significant differences across the two models for either African American families compared with non-African American families, positive social behavior: $\Delta\chi^2(8) = 12.6$, *ns*; problematic social behavior: $\Delta\chi^2(8) = 11.1$, *ns*, or Hispanic versus non-Hispanic families, positive social behavior: $\Delta\chi^2(8) = 13.5$, *ns*; problematic social behavior: $\Delta\chi^2(8) = 13.3$, *ns*. In summary, the results of the multiple-group analyses suggest that for this sample of ethnically diverse low-income families, the family processes by which economic hardship influenced children's outcomes did not differ by the gender of the child or by ethnicity.

Theoretical Model

Because the multiple-group analyses revealed no significant differences based on either ethnicity status or child's gender, all subsequent analyses were performed using the full sample. Figures 2 and 3 present the results of the SEM analysis for the proposed model, including the standardized path coefficients and the values of the *z* test associated with each parameter estimate. Figure 2 depicts the results of the proposed theoretical model predicting children's positive social behavior, and Figure 3 shows the results for children's problematic behavior. For both models, most of the paths were significantly different from 0.

As expected, the covariate for assignment to the New Hope program group was significantly related to economic well-being, $\beta = .13$, $p < .05$, and the path coefficients from both child gender to parent behavior and child gender to child outcomes were significant. Mothers of boys were observed to be less affectionate toward their child, Model 1: $\beta = -.15$, $p < .01$; Model 2: $\beta = -.14$, $p < .01$, and reported less effective disciplinary practices, $\beta = -.13$, $p < .05$ for both models, than did parents of girls, and boys were consistently reported by their teachers as being less socially competent, $\beta = -.19$, $p < .01$, and as having more behavior problems, $\beta = -.23$, $p < .01$, than were girls. Few path coefficients for the two ethnicity covariates were significant. Hispanic parents reported experiencing less economic pressure, $\beta = -.21$, $p < .05$, but more psychological distress, $\beta = .16$, $p < .05$ than did non-Hispanic parents. The only significant path coefficient for African American ethnicity status was to children's social adjustment; teachers rated African American children lower on social competence, $\beta = -.10$, $p < .05$, and higher on problem behaviors, $\beta = .14$, $p < .01$, as compared with non-African American children.

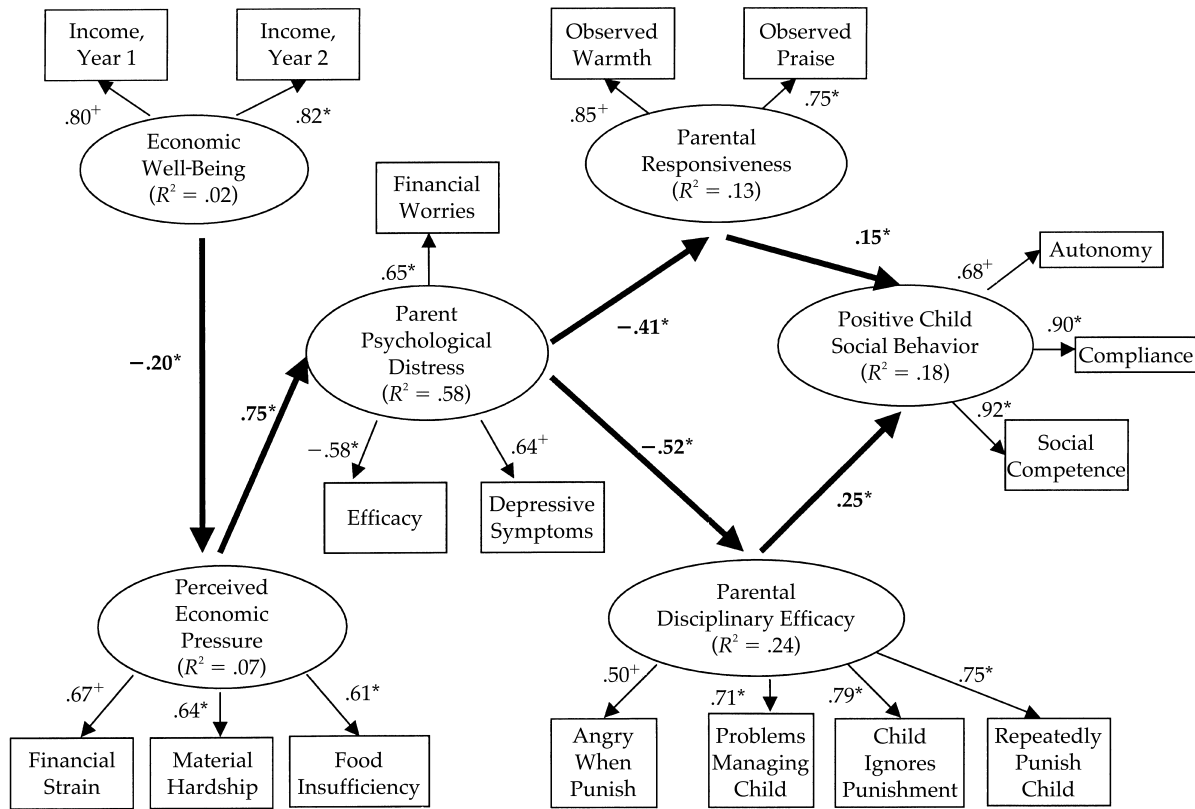


Figure 2 Model 1: Maximum likelihood estimation of the model for children’s positive social behavior. Model fit statistics: $\chi^2(155, N = 419) = 330.94, p < .001$; Comparative fit index = .99; Root Mean Square Error of Approximation = .05; $\chi^2/df = 2.14$. R^2 s are reported in circles. Model includes the following covariates: New Hope participation (0 = control group; 1 = program group), child gender (0 = girl; 1 = boy), and ethnicity (0 = non-African American, 1 = African American; 0 = non-Hispanic, 1 = Hispanic). Paths from perceived economic pressure to parental responsiveness and disciplinary efficacy are not shown, but were estimated. *Significant path loading; +variables used to set the scale for the latent construct.

The results shown in both Figures 2 and 3 were consistent with the proposed model that economic hardship and pressure affect children’s social behavior indirectly through the impact on parent psychological distress and parenting behavior. As expected, lower levels of family economic well-being significantly predicted increased levels of economic pressure. Economic pressure, in turn, exerted only an indirect influence on parenting behavior, through its impact on parent’s feelings of distress (for a summary of the indirect effects, see Table 3). The direct relation between economic pressure and parental responsiveness, Model 1: $\beta = .26, ns$; Model 2: $\beta = .24, ns$ and disciplinary efficacy, Model 1: $\beta = .11, ns$; Model 2: $\beta = .12, ns$ was also examined, but was not observed to be significant in either model (not shown in Figures 2 and 3). The direction of these coefficients are counterintuitive, intimating that heightened economic pressure predicted more optimal parenting. Furthermore, the sign of the coefficients were in the opposite

direction to those observed for the zero-order correlations between the indicators of economic pressure and the indicators of parental responsiveness and disciplinary efficacy (see Table 2). On further investigation, evidence was found suggesting that in addition to mediating the relation between economic pressure and parenting behavior, parent psychological distress also appeared to be suppressing the influence of economic pressure on parenting. To determine whether this was indeed the case, the guidelines proposed by Tabachnick and Fidell (1996) and by Bollen (1989) were followed. Without an intervening variable, the link between economic pressure and parental responsiveness was nonsignificant; economic pressure was, however, significantly related to disciplinary efficacy. Adding parent psychological distress had the effect of reducing the impact of economic pressure on disciplinary effectiveness to nonsignificance, and consistent with a suppressor effect model, switched the signs of the regression coefficients between economic pres-

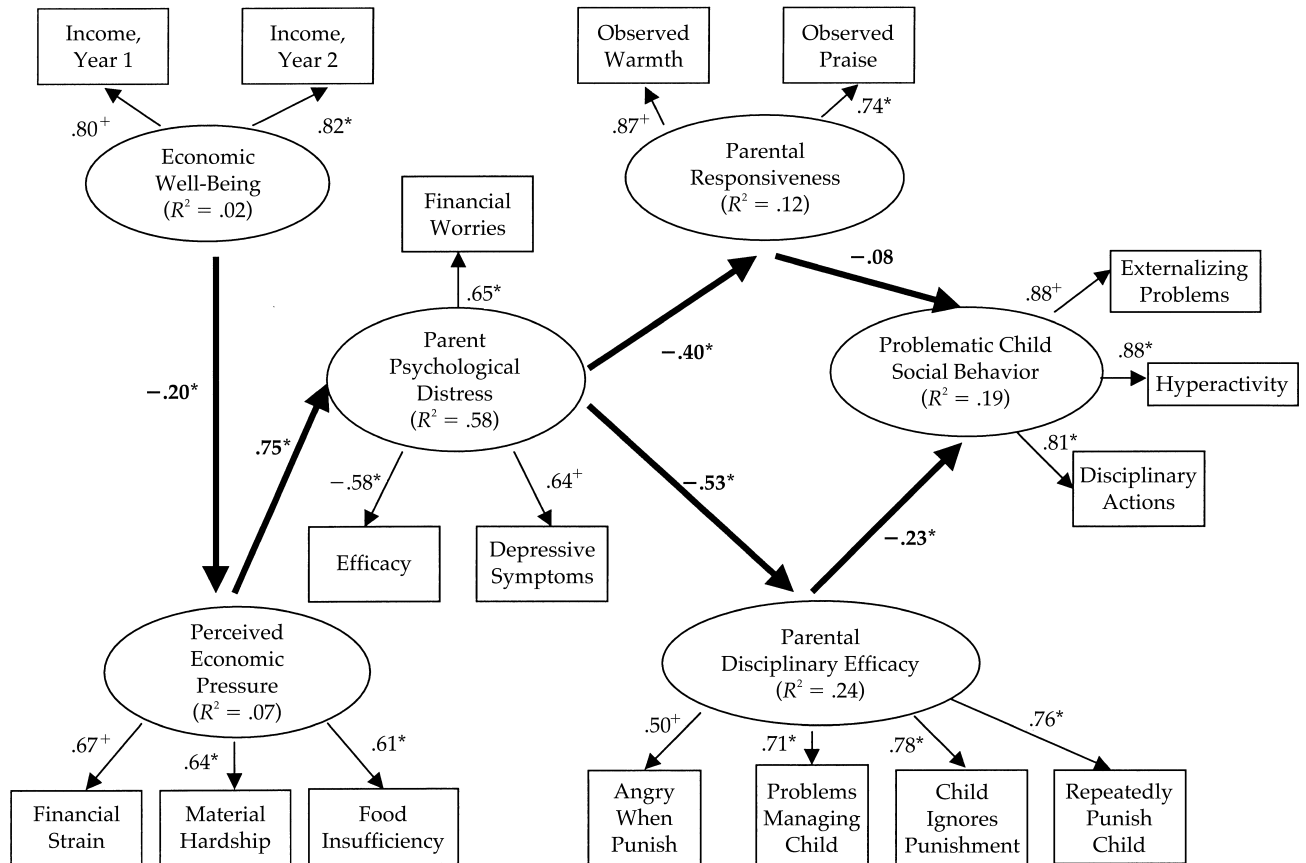


Figure 3 Model 2: Maximum likelihood estimation of the model for children's conduct problem behavior. Model fit statistics: $\chi^2(155, N = 419) = 334.51, p < .001$; comparative fit index = .99; Root Mean Square Error of Approximation = .05; $\chi^2/df = 2.16$. R^2 s are reported in circles. Model includes the following covariates: New Hope participation (0 = control group; 1 = program group), child gender (0 = girl; 1 = boy), and ethnicity (0 = non-African American, 1 = African American; 0 = non-Hispanic, 1 = Hispanic). Paths from perceived economic pressure to parental responsiveness and disciplinary efficacy are not shown, but were estimated. *A significant path loading; +variables used to set the scale for the latent construct.

sure and both of the parenting constructs. Given the nonsignificance of the relations between economic pressure and the parenting constructs, we do not believe that this pattern of associations detracted from the study's main findings.

Parents who reported experiencing economic pressure also reported being worried about their finances, feeling depressed, and having low personal efficacy. In turn, parent psychological distress was significantly and inversely related to parental responsiveness and effective disciplinary strategies. Finally, as expected, parenting behavior characterized as low in responsiveness and disciplinary efficacy predicted low levels of positive social behavior and high levels of behavioral problems for children. These children were rated by teachers as being less socially competent, autonomous, and compliant, and as being more aggressive, impulsive, and more likely to be disci-

plined than children whose parents were responsive and believed themselves to be effective disciplinarians. This overall pattern of effects was observed for all relations except one: the link between parental responsiveness and problematic child social behavior. The direction of the association was in the expected direction, $\beta = -.08$, but the path coefficient was not statistically significant.

The covariates (New Hope treatment, child gender, ethnicity) and economic well-being accounted for 7% of the variance in parents' perceptions of economic pressure. A combination of the indirect effect of economic hardship and the direct effect of perceived economic pressure accounted for 58% of the variance in parent psychological distress (see Figures 2 and 3, and Table 3). Direct effects of parent psychological distress and child gender, coupled with indirect effects of economic well-being (for disciplin-

Table 3 Decomposition of Effects for Latent Variable Structural Equation Models Predicting Child Behavioral Outcomes

Predictor	Dependent Variable	Model 1: Predicting Child Positive Social Behavior			Model 2: Predicting Child Problematic Social Behavior		
		Total Effect	Direct Effect	Indirect Effect	Total Effect	Direct Effect	Indirect Effect
Child's gender (boy) ^a	Economic well-being	-.04	-.04	—	-.04	-.04	—
	Perceived economic pressure	.04	.03	.01	.04	.03	.01
	Parent psychological distress	.01	-.02	.03	.01	-.02	.03
	Parental responsiveness	-.15**	-.15**	.00	-.14**	-.15**	.00
	Parental disciplinary efficacy	-.15**	-.15*	-.00	-.15	-.15**	-.00
	Positive child social behavior	-.25**	-.20**	-.06***	—	—	—
	Problematic child social behavior	—	—	—	.30**	.25**	.05**
Economic well-being	Perceived economic pressure	-.17 ⁺	-.17 ⁺	—	-.17	-.17	—
	Parent psychological distress	-.13 ⁺	—	-.13 ⁺	-.13	—	-.13
	Parental responsiveness	.01	—	.01	.01	—	.01
	Parental disciplinary efficacy	.05*	—	.05*	.05 ⁺	—	.05 ⁺
	Positive child social behavior	.01*	—	.01*	—	—	—
	Problematic child social behavior	—	—	—	-.01 ⁺	—	-.01 ⁺
Perceived economic pressure	Parent psychological distress	.77**	.77**	—	.77**	.77**	—
	Parental responsiveness	-.07	.22	-.29*	-.07	.22	-.29*
	Parental disciplinary efficacy	-.29**	.11	-.39**	-.28**	.12	-.40**
	Positive child social behavior	-.08***	—	-.08***	—	—	—
	Problematic child social behavior	—	—	—	.08***	—	.08***
Parent psychological distress	Parental responsiveness	-.37*	-.37*	—	-.37*	-.37*	—
	Parental disciplinary efficacy	-.51**	-.51**	—	-.52**	-.52**	—
	Positive child social behavior	-.19**	—	-.19**	—	—	—
	Problematic child social behavior	—	—	—	.16**	—	.16**
Parental responsiveness	Positive child social behavior	.14**	.14**	—	.14**	.14**	—
	Problematic child social behavior	—	—	—	-.08	-.08	—
Parental disciplinary efficacy	Positive child social behavior	.26**	.26**	—	—	—	—
	Problematic child social behavior	—	—	—	-.24**	-.24**	—

Note: $N = 389$. Tests of significance of total and indirect (mediated) effects were conducted using Amos 4.0 (Arbuckle & Wothke, 1999). The program uses a bootstrapping procedure (a bootstrap sample of 1,000 was specified) to derive the approximate standard errors, and a bias-corrected percentile method to estimate significance of the effects. The bootstrapping procedure cannot be performed in conjunction with the missing data imputation function in Amos. Consequently, a second dataset was generated that included only those cases with complete (i.e., no missing) data. This resulted in the loss of 30 cases, and an overall sample size of 389 (see Method section for a discussion of the differences in the analysis variables between participants with and without missing data). Slight fluctuations between the standardized parameter estimates presented here and those provided for the final models (Figures 2 and 3) are due to the listwise deletion of cases with any missing data across the set of analysis variables.

^a Because of the negligible association between the predictor variables and the ethnicity and New Hope participation covariates, and between the child outcomes and these same covariates, these estimates were omitted from the table and only the decomposition of effects information based on child's gender was included.

⁺ $p < .10$; * $p < .05$; ** $p < .01$; *** $p < .001$.

ary efficacy) and economic pressure accounted for roughly 12% of the variance in parental responsiveness, and 24% of the variance in disciplinary efficacy in the two respective models (see Table 3). A combination of direct and indirect effects accounted for 18% of the variance in children's social competence, and 19% of the variance in children's behavior problems. Both dimensions of parenting behavior were related to children's social behavioral outcomes. Being male was related negatively to social competence ratings and positively related to problem behavioral ratings. Moreover, as shown in Table 3, the indirect effect of

child's gender through the set of intervening variables was also observed to be significant. Finally, the indirect effects of the three remaining predictor variables—economic well-being, economic pressure, and psychological distress—were also observed to be significantly related to both aspects of children's behavioral outcomes (see Table 3).

Both models fit the data exceptionally well, as indicated by a CFI of .99, an RMSEA of .05, and a χ^2 ratio of less than 3. Releasing additional paths, such as a direct path from economic hardship to child social competence and behavior problems, did not significantly

improve the overall fit of the model; thus, the proposed model was accepted as the most parsimonious representation of the relations among the constructs. As shown in Figures 2 and 3, the path coefficients between the latent constructs and indicators also demonstrated a reasonable degree of association between indicators and constructs (all were significant).

DISCUSSION

This study extended existing research on the impact of economic hardship and stress on family and child functioning by focusing on a predominantly low-income, ethnically diverse sample of families with preadolescent children, and by assessing whether the proposed pathways accounted for variations in children's positive and problematic social adjustment. The results indicated support for a family economic stress model hypothesizing that one pathway by which economic hardship influences child well-being is through its negative impact on parents' psychological well-being and less than optimal parenting behavior. By extending the research paradigm to a sample of predominantly minority, urban, low-income families, the majority of which were mother-only families, the current study augmented the robustness of the family economic stress model in accounting for the impact of economic hardship on a broader range of families and children.

As expected, economic hardship had only an indirect effect on parenting behavior that was mediated by parents' perception of economic pressure and psychological well-being. The impact of the economic pressure that parents reported as a consequence of lowered financial resources accounted for a substantial amount of the variance in parents' reports of psychological distress. Low income, coupled with financial strain and the likelihood of having experienced recent material hardship contributed to parents' lowered feelings of efficacy and elevated perceptions of depression. In addition, economically distressed parents worried about making ends meet for family members. Distressed parents felt less efficacious in their ability to effectively discipline their children; and reported having to repeatedly discipline their children, becoming angry while disciplining their children, and having problems managing their children. Moreover, distressed parents were observed by interviewers as showing less warmth and affection in their interactions with their children than did nondistressed parents. In turn, teachers judged children of distressed parents as less socially competent and exhibiting more problem behaviors. Consistent with the

extant economic stress literature, an indirect link was observed between economic hardship and children's social adjustment, through its impact on parent well-being and parenting behavior.

This study contributes to a growing body of research that has documented the need to assess the immediate and direct impact of economic hardship and, broadly speaking, poverty on children's physical health and cognitive development, as well as on their socio-emotional development (see also Conger et al., 1993; Conger et al., 1992; Hanson et al., 1997). Success in school and beyond hinges not only on academic ability, but also on being able to navigate successfully in social situations, conform to rules, and work independently. As children advance through the school system, skills such as the ability to attend to the task at hand, listen and follow instructions, and get along with peers become increasingly critical for success in school and in social relationships. By testing a model that included both socially competent as well as problem behaviors, the present study investigated more completely the relations among economic hardship, family processes, and child well-being.

Several design features contributed to the strength of the current study. The measurement model included both multidimensional and multi-informant methods (Conger et al., 1994). Both positive and negative indicators were included to achieve balance, and to increase the representativeness of the various latent constructs in the model. For example, the measures of parent distress included assessments of depression as well as efficacy, and the indicators of parenting behavior included both responsiveness and perceived disciplinary effectiveness. The measurement model also included multiple informants—administrative records for assessing families' economic resources, self-reports of the parents' behavior, interviewer observations, and teachers' reports of children's behavior. Using parent and observer reports of parenting behavior to predict teacher reports of children's behavior made it possible to minimize some of the method bias in child outcomes, which added to the ecological validity of the tested model (Bank et al., 1989).

Although we believe that the current study makes a significant contribution to the existing research on the impact of economic stress on child well-being in minority families, certain restrictions limit the overall generalization of the results. First, as is the case with much of the research in this area, the present study was cross-sectional in design, and cannot speak to the causal pathways by which economic hardship influences family and child functioning. This remains the purview of longitudinal studies designed to capture

more completely the dynamic interplay between contextual factors and development. Although we recognize the limits of specifying directional relations with cross-sectional data, it remains the case that the present study's results are consistent with the proposition of the family economic stress model that economic hardship influences children in part through its impact on parent's sense of psychological well-being and parenting behaviors. Social science researchers are becoming more appreciative of the fact that parenting is a complex and reciprocal construct, which is both multidimensional and multidetermined, and they are beginning to move toward more process-oriented models of parenting (Belsky, 1984; Holden & Miller, 1999; Parke & Buriel, 1999). However, although it may be recognized, and firmly believed, that ". . . the interplay between parenting and child functioning reflects a reciprocal process unfolding over time" (Cummings et al., 2000, p. 160), the empirical models, at present, often reflect a more static and imperfect version of this theoretical ideal.

A related point has to do with the limitations of using SEM to model and test relations among often complex and multidetermined aspects of human behavior. When applied to cross-sectional data, the results obtained from analyses involving SEM, at best, support the proposition that the pattern of associations are an adequate representation of the data (which was the case in this study); they do not provide confirmation of a causal relation between two constructs. This caveat is important when interpreting the results of any SEM analysis of cross-sectional data. Moreover, as is the case for most statistical procedures, SEM cannot rule out the problem of omitted variables.

A third caveat to the cross-sectional nature of this study is that it represents only a snapshot of the families' economic resources and economic strain. The link between economic hardship and child well-being is fairly well established, but there remains a much larger gap in the literature with regard to understanding the cumulative impact of chronic economic hardship on children's socioemotional functioning, particularly during the elementary school years (Brooks-Gunn et al., 1997). Exceptions include Elder et al.'s (1984) report on family functioning during the Great Depression and more recent work by Bolger and colleagues (see Bolger et al., 1995). Using archival longitudinal data from the Berkeley Guidance Study, Elder et al. (1984) traced the impact of economic loss, experienced during the Great Depression, on children's development, both concurrently and into young adulthood. Not only was economic loss observed to indirectly influence children's problematic behavior through fathers' arbitrary and punitive parenting behavior but, perhaps more in-

triguing, there appeared to be enduring negative repercussions of these effects in areas such as work, marriage, and parenthood across the life course.

Poverty also exhibits a cyclical pattern—that is, families transition in and out of poverty over time (Duncan & Rodgers, 1988). The turbulence created by falling into and out of poverty may create serious stress for parents that impacts children's development over time. Gaining an understanding of the implications of such turbulence on family functioning is a task for future research.

Related to this, more attention needs to be paid to the heterogeneous characteristics of poor families, and to ascertain whether the processes by which economic hardship influences child well-being are similar across various pockets of the poor, or whether important between-group differences exist. The present study focused on a particularly vulnerable group of poor families—predominantly minority families overwhelmingly headed by single mothers, all of whom lived in a northern city in a state with reasonably strong social programs and a booming economy. To understand fully the impact of economic hardship and poverty on children, research with a diverse population of poor families in rural and urban settings and in various economic conditions would be particularly useful. It is encouraging to observe that researchers are beginning to test tenets of a family economic stress model with divergent populations. The work of Jackson and colleagues (Jackson et al., 2000) with former welfare recipient, employed, single-parent African American mothers of preschool-age children is a good example.

In addition, there is a need to determine whether family economic stress models operate similarly among families of differing ethnicities. Research that is sensitive to the unique characteristics of the sample being evaluated in terms of cultural norms (e.g., social networks and family structure), the acculturation process, and language barriers is needed. Whereas the economic plight of African American families has been investigated for some time now, Hispanic families, on the whole, remain largely ignored in the research literature. Given the rapidly increasing numbers of Hispanic residents living in the United States, particularly those living near or below the poverty threshold (U.S. Dept of Health and Human Services, 1999), it is important that researchers begin to focus on some of the issues that pose similar as well as distinct (e.g., immigration status, persistence of family members living overseas) challenges to the low-income Hispanic population. Characteristics specific to a particular group may contribute to differences in terms of process as well as child outcomes.

Toward this end, a series of analyses were conducted to determine whether ethnicity, as well as child gen-

der, moderated the impact of economic hardship on children's development. Due to the sizable number of Hispanic families in the present study's sample, it was possible to test models that compared not only African American versus non-African American families but also Hispanic versus non-Hispanic families. No between-group differences linking economic hardship, family process, and children's development were observed. The models predicted equally well for both African American/Hispanic, and non-African American/non-Hispanic families. This study's families were initially recruited because of their low-income status and, as such, represent a fairly narrow range of the economic continuum. Given the economic comparability of the groups being evaluated, the results suggest that the economic contexts that families live in may be more important than ethnicity per se in determining the impact of economic hardship on family process and children's development. Additional support for this assertion comes from the work of Gutman and Eccles (1999). They tested the equivalence of a model of parenting behavior that linked financial strain to adolescents' academic achievement for an economically diverse sample of African American and European American families, and also observed no ethnic differences. Together, such findings bolster the argument that despite differences across a host of sociodemographic factors, financial hardship affects the functioning and well-being of economically distressed families and children through similar pathways.

The results of the current study indicate that the impact of economic hardship on children's socioemotional development is evident by the elementary school years. It cannot, however, speak to whether the developmental processes by which poverty influences child functioning are qualitatively different for younger children as compared with older children. The relations among economic hardship, family process, and child well-being are likely to become more varied and interactive for older children than for younger children. With age, children are in a position to both influence patterns of relations and be influenced by them. Child-specific indicators such as youth self-regulation (Brody, Stoneman, & Flor, 1995; Brody et al., 1994) and adolescents' perceptions of the parent-child relationship (McLoyd et al., 1994; McLoyd & Wilson, 1990), as well as family-level indicators such as finance-related parent-child conflict (Conger et al., 1994), have been identified as mediators of the impact of economic hardship and family process on adolescents' academic and socioemotional adjustment. Future research needs to continue to extend efforts to identify developmental processes and the developmental differences in those processes.

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