

RASHMITA S. MISTRY *University of California-Los Angeles*

EDWARD D. LOWE *Soka University of America**

APRILE D. BENNER AND NINA CHIEN *University of California-Los Angeles***

Expanding the Family Economic Stress Model: Insights From a Mixed-Methods Approach

The current study used a mixed-methods approach to examine how low-income mothers managed their household economies, their experiences of economic pressure, and the consequences for family and child functioning. Qualitative analyses (N = 32 families) revealed that experiences of economic pressure were associated with an inability to afford both basic needs and some modest but highly valued "extras." To meet demands, mothers reported using a variety of strategies, including instrumental support from friends and family members and other financial strategies. Results from the quantitative analyses (N = 516 families; 800 children, ages 6 – 15) were generally consistent with patterns observed in the qualitative analyses and extended the findings to include effects on parenting practices and children's behavioral functioning.

Approximately 13 million children live in households with incomes at or below the federal poverty threshold (\$19,304 for a family of four in 2004, DeNavas-Walt, Proctor, & Lee, 2005). An additional 29 million children live in households designated as *low-income* (incomes up to two times the poverty threshold; Douglas-Hall, & Koball, 2006). Low material resources have consistently been shown to exact a significant toll on family functioning and child well-being (for reviews, see McLoyd, 1998; Seccombe, 2000).

In this study, we investigate how low-income mothers describe the management of their household economies, including securing enough resources to meet their family's needs, the ensuing economic pressure they face when they are unable to do so, and the consequences of both resources and perceived economic pressure for family and child well-being. We use the family economic stress model (Conger & Elder, 1994; McLoyd, 1990) as a framework for understanding the *processes* by which economic hardship and pressure influence children's social behavioral outcomes. We test whether perceptions of financial inadequacy go beyond parental concerns over meeting essential family needs (e.g., rent, utilities) to include more discretionary purchases (e.g., birthday gifts, an evening out). We also examine whether these discretionary items might be qualitatively different in value and meaning from basic necessities. If the psychological ramifications of such purchases are, at times, as important to families as meeting their more basic needs, it is essential

Department of Education, University of California-Los Angeles, Los Angeles, CA 90095-1521 (mistry@gseis.ucla.edu).

*Social and Behavioral Sciences, Soka University of America, Aliso Viejo, CA 92656.

**Department of Education, University of California-Los Angeles, Los Angeles, CA 90095-1521.

Key Words: ethnography, family processes, parent-child relations, poverty, structural equation modeling.

to understand (a) the strategies parents might use to ensure that money is available to secure discretionary items and (b) the ensuing consequences for both parents' and children's well-being of failure to meet these demands.

We use a sequential mixed-methods approach (Creswell, 2003) to bridge the qualitative and quantitative data available for this study. A small sample of families participated in a 3-year ethnographic study from which extensive field notes were available. In addition, survey data were available for a larger sample of families from which the ethnographic sample was randomly drawn. Combining these two data sources enabled us to (a) expand upon previously tested associations among economic hardship, economic pressure, and parents' mental health; (b) replicate findings from the ethnographic sample; and (c) test whether the relations among resources, an expanded notion of economic pressure (assessing both needs and wants), and maternal psychological well-being were systematically associated with parenting practices and children's behavioral adjustment.

FAMILY ECONOMIC STRESS MODEL: BACKGROUND AND EXTENSIONS

Our theoretical orientation draws from the family economic stress model (Conger & Elder, 1994; McLoyd, 1990), which posits that, more than *absolute* levels of income and economic resources, it is parents' *perceived* financial inadequacy that significantly affects children's behavioral adjustment. More specifically, the model links income and child adjustment through a chain of mediating variables: Low family income and negative financial events create economic pressure (i.e., the psychological experience associated with not being able to afford goods and services); increases in economic pressure are associated with deteriorating parental mental health and increased levels of parental conflict; poorer parental mood and increased adult conflict lead to lower levels of involved, nurturing parenting and elevated levels of punitive and coercive parenting, which in turn lead to poorer socioemotional adjustment among children. Empirical tests of the family economic stress model have reliably demonstrated the mediated relationship of income to family and child well-being (Gershoff, Aber, Raver, & Lennon, 2007; Mistry, Biesanz, Taylor, Burchinal, & Cox, 2004; Yeung, Linver, & Brooks-Gunn, 2002).

The family economic stress model defines economic pressure as the perceived inability to adequately pay for basic needs such as food, rent, household bills, and clothing. A recent study (Mistry & Lowe, 2006), however, suggests that this focus on basic needs may not completely represent the links between financial inadequacy and parental and child well-being. Mistry and Lowe identified three types of household expenditures, as reported by a sample of low-income mothers—the “basics,” “extras,” and big-ticket durable items such as a car, furniture, or household appliances to which women attributed different subjective meanings and exhibited distinctly different affective responses. Whereas keeping abreast of monthly bills was associated with feeling “okay,” affording some, even very modest, extras and purchasing bigger ticket items were associated with feelings of pride and accomplishment. The findings were an important first step in documenting that mother's emotional well-being is not simply a product of having a family's basic needs met; having enough income for some modest nonessential wants is also important. We build on these findings by examining explicitly the link between different expenditure demands (i.e., basics vs. extras) and mother's experience of economic pressure. Furthermore, we include more expansive measures of maternal psychological well-being (i.e., depression, stress, efficacy) as mediators of the relations of economic pressure to parenting practices and child outcomes.

In response to these two distinct types of expenditure demands, parents may be motivated to find ways to secure their family's basic needs while also being able to afford some modest extra spending. Consequently, they might develop strategies beyond earnings from employment to make ends meet. As Edin and Lein (1997) observed in their study of low-income mothers' budgeting decisions, it is nearly impossible to achieve a sustainable family income without readily available aid from sources other than employment and government supports. These sources include family members, friends, additional “off-the-books” jobs, and community resources (e.g., charities). In an early formulation of the family economic stress model, McLoyd (1990) highlighted the significance of social support as moderating the influence of economic hardship on parental well-being. We take a slightly different view of such strategies, instead focusing on how the women in our

sample adapt to inadequate income by developing alternative *resource pools* that allow them to secure both their essential and desired purchases. For low-income mothers, a proactive pooling of resources across multiple sources, rather than in reaction to particular events, may be more typical (Edin & Lein, 1997).

Families may employ additional strategies to proactively secure financial resources. For example, the careful management of current income through planned budgeting, the use of savings and credit accounts, and careful price-comparison shopping are important means of better securing a family's needed and desired expenditures. These financial management strategies may also serve an important role in coping with the experiences of economic pressure. In the current investigation we build on the work of Edin and Lein (1997) by demonstrating the importance of financial management strategies in addition to the resource pooling strategies documented in their study.

THE CURRENT STUDY

Below, we first present an overview of the larger project from which data for the current study are drawn. Next, we discuss our analytical approach to the ethnographic data and provide summaries of our major findings, followed by a description of the methodology and results from our analysis of the survey data. We end with a general discussion of the most significant findings across this project and suggestions for future directions.

THE NEW HOPE PROJECT

Data come from a larger evaluation of the New Hope Project, a 3-year antipoverty demonstration program implemented in Milwaukee, Wisconsin, that began in late 1994 (see Bos et al., 1999; Huston et al., 2003). All adults in the larger New Hope sample who had at least one dependent child between the ages of 1 and 10 at baseline ($N = 745$) were eligible to participate in the Child and Family Study designed to assess program effects on families with children in early and middle childhood.

At baseline, when they applied for New Hope, the Child and Family Study parents' average age was 29.4 years; slightly over half (55%) were African American, and 29% were Hispanic. About half had a high school diploma or GED. The majority had a history of employment, but

most had earnings of less than \$5,000 in the previous year. About 80% were receiving public assistance (i.e., Aid to Families with Dependent Children, Medicaid, food stamps, or a combination of these).

To date, evaluations of the program's effectiveness have been conducted 2, 5, and 8 years after random assignment (see Huston et al., 2001, 2005). At each assessment point, multiple sources provided data. One parent (the primary caregiver, most of whom were mothers) and all school-age focal children participated in interview-based surveys. Children's teachers provided information about school-related experiences. The state of Wisconsin provided data on employment, earnings, earnings supplements, food stamps, and cash welfare receipt. At each assessment point, there were approximately equal numbers of program and control group families, and there was no evidence of differential attrition for program and control families (see Huston et al., 2003).

In addition to the survey-based assessments, a subsample of Child and Family Study families participated in an ethnography spanning 3 years (roughly the period between the 2-year and 5-year follow-up survey assessments). The ethnographic study targeted 60 randomly drawn families. Of these, 46 (77%) agreed to participate; two families dropped out early, leaving a final sample of 44 (73%) families (see Gibson & Weisner, 2002, for comparison of the two samples). The qualitative analyses began with case materials for 40 (67%) families. Two were excluded because they began the ethnography a year late and had less complete materials. We also excluded two male-headed households because of our focus on women's experiences.

QUALITATIVE STUDY

One goal of the qualitative study was to understand how basic as well as discretionary (i.e., extra) expenditures contributed to mothers' experiences of economic pressure and psychological well-being. A second was to understand how women pooled resources and employed financial management strategies in order to mitigate economic pressure.

METHOD

Field workers observed families and interviewed study participants roughly every 10 weeks, most often in families' homes, but also in a variety of

community settings. To avoid missing topics that were important to families, the fieldworkers did not use a structured protocol. Instead, the fieldwork team developed a common set of topics as a guide for the interviews and would probe for these topics if not volunteered by participants. Topics included work-related experiences; parenting practices; management of income, debt, and expenditures; child care; relationships with partners; social supports and conflicts; and community and state agencies. Immediately after each visit, fieldworkers wrote brief visit summaries and more extensive descriptive field notes from tape recordings and written notes made during the visit. Fieldworkers coded the notes for themes that reflected the shared topics used to guide the interviews. One theme was *money, bills, and budgeting*, which specifically related to families' experiences with income and expenditures, from which we extracted field note segments. The second author systematically examined these segments for experiences of inability to afford household needs (e.g., paying rent/mortgage, bills, groceries) or desired extra expenditures (e.g., special treats for children; more expensive durable items such as houses, cars, furniture). Next, the entire research team systematically examined these field note segments, developed a coding scheme that reflected the content given our two research goals, and coded the data using a consensus approach. We used codes for expenditures associated with reports of economic pressure, reports of mood associated with economic pressure, and resource pooling and financial management strategies employed to mitigate economic pressure to filter the data further, yielding segments for 32 of the 40 participants (80%).

The final step took an interpretive turn (e.g., Geertz, 1973). Although consensus coding with high interrater reliability produces valid descriptions of the data, it is much more difficult to produce results that are interpretively or theoretically meaningful (Maxwell, 1992). It is, for example, difficult for teams to see collectively the meanings people attach to their experiences or share the scholarly frames that shape theoretical interpretations. Therefore, the second author completed the final step because of his familiarity with the extant research literature and intimate knowledge of the ethnographic materials. He used triangulation (Fetterman, 1998) to increase the interpretive and theoretical validity of this analysis by comparing the material for a theme

from one participant against the material for all other participants with the goal of eliminating alternative explanations. Interpretive methods do sacrifice some objectivity, and we include verbatim segments so readers can independently evaluate our claims (Erickson, 1986).

QUALITATIVE RESULTS

Experiences of Economic Pressure

Experiences of economic pressure involved basic needs and modest extras as the following vignette demonstrates. Heather, a divorced mother of three, recounted a period of economic pressure, "Last summer, I had only worked one job, but it was hard. Man it was hard. I had my rent. I had my car note. I had the kids' expenses. And I had my expenses." She stated that she likes to treat her children to pizza at a restaurant with games or to buy something extra when shopping. She continued:

I just like to be comfortable in knowing that if I need anything or if my kids need anything and I'm just sitting there with no money at all. That's just like the worst feeling to me. ... I don't consider myself in poverty or you know, low class or middle class or high class, I'm just doing what I have to do, legally, to survive. ... I want to take care of my kids, take care of my family, whatever I have to do that's right!

This vignette and those of others reflect the women's struggle to pay for their needs and wants. These women describe economic pressure as being driven by basic needs associated with housing, food, and clothing for the children. Heather describes not only the family's basic needs but also her desire to afford something more from time to time.

Basic Family Needs and Beyond

Mothers commonly described feeling "stressed" or the "worst feeling" when their income was inadequate to meet their needed and desired expenditures; altogether 22 women described feeling financially challenged in trying to pay all their bills or buy groceries or needed clothing for their children. Of these, 14 women specifically mentioned difficulties with housing costs (i.e., rent, household bills), and 10 noted expenditures such as food and clothing. Other basic expenditures included transportation costs (e.g., fuel, car

loan payments, bus tickets; six women), health insurance premiums (three women), and child care or private school tuition (three women).

Twelve women described experiences of economic pressure associated with expenditures that went beyond meeting the family's basic needs. The field notes specifically described some of these as "not necessary" or as things that the women or their children "wanted." Eight women described their economic troubles involving the purchase of little things that they or their children wanted or their desire to treat their children to an evening out for fast food or a movie. Annual celebrations and special ritual events were particularly prominent. Altogether, 10 women described extra expenditures in connection with celebrations such as birthdays or holidays, but also for summer trips or for ritual life events such as a child's high school graduation. Such events can be symbolically significant and sometimes expenditures for these would take precedence over staying current with more basic needs. For example, a fieldworker who worked with Belinda, a married mother of three, wrote:

Belinda still has some other outstanding bills. She said that she was doing OK but then she decided to buy several poses of Tye's [high school] graduation picture that will cost her \$1,200. She said that she *feels it is such a big event* and wants to make sure that everyone gets a graduation picture [emphasis added].

The Significance of Being a Good Provider

In general, women described their financial issues in a matter-of-fact way, recounting expenditures pertaining to their economic pressure experiences. But eight women provided broader insight into the symbolic value of meeting the two types of expenditures: Affording both needed and wanted expenditures was indicative of the women's sense of self as their children's provider, particularly with regard to children's wants. Of the eight women, four described the importance of meeting their family's basic needs, indicating that providing food, clothing, and shelter to their children was their most important task. For example, during a period of financial stress, Karen, a single mother of two girls, explained to her fieldworker that, "she felt very anxious that she wasn't going to be able to pay [all the bills] but, then, she decided that 'the most important

thing is that my kids have something to eat ... the bills will have to wait."

Five women described occasionally providing some extra things children wanted as an important part of providing for them. As we saw in Heather's quote above, providing a little treat the children wanted was seen as important for taking care of her family and doing "whatever I have to do that's right." Doing so from time to time also made women feel good. The field notes for Nancy, a single mother of three girls, report that she "said she feels better when she could buy little things that her children wanted." Mothers' desire to buy modest extras for their children stemmed from their hope to provide them with goods and experiences that were similar to those of other children. Samantha discussed this sense of fairness and how giving her children some things they really wanted was symbolic of not being poor. Her comments were made in the context of feeling frustrated at being pulled between treating her kids to the summer fair and staying current with her bills. She said,

You can't take the kids to no kind of enjoyment. You used to be able to take the kids to the zoo, now that isn't even free anymore. School trips at school cost six or seven dollars now, so if I am on welfare, my child don't get to go, which is not fair to my child. . . . We just can't do it 'cause we are poor.

Resource Pooling and Financial Management Strategies

The women in the ethnographic sample mentioned common strategies to either generate additional income or to manage current income levels more effectively given emerging needs and wants. Most are similar to those reported by Edin and Lein (1997). For example, 20 women gathered social support resources from close family members or friends, 12 generated additional earnings by increasing their work hours or securing another job, and 16 women used government supports and services including food stamps, Temporary Aid to Needy Families (TANF) payments, SSI, and the Earned Income Tax Credit (EITC).

One method not identified by Edin and Lein (1997) but discussed prominently among our sample was the use of various financial strategies (mentioned by 18 women). These included the calculated use of current income by creating a monthly budget (five women), cutting back on

current expenditures for anticipated future expenses (five women), or carefully shopping for the best prices on current expenditures (seven women). Cutting back on current levels of extra spending to save for anticipated major extra expenditures, such as those surrounding Christmas, was one proactive strategy. For example, Katie, a divorced mother of two, described how she intended to ensure she had enough money for Christmas spending later that year. Katie's fieldworker wrote, "Katie said that she needs to start planning for Christmas soon, and already has begun telling the kids that they have to slow down their spending in order to prepare for Christmas."

Other financial strategies involved saving for future purchases either in a bank account (three women) or through a layaway program for specific purchases from retailers (three women). For example, Nancy described wanting to employ a savings strategy. Her fieldworker wrote, "Nancy wanted to have a savings account but it was hard to keep aside any money after their daily expenses. . . . She wanted to start a Christmas fund so that she could give her daughters nice gifts." Some strategies involved trying to borrow against future income. The most common form of borrowing was to take out a bank loan (four women). Additionally, two women reported taking an advance on their employment earnings, and one woman reported using a credit card.

These women used resource pooling and financial management strategies to meet *both* perceived needs and family wants. A total of 26 women reported either drawing on additional resource pools or employing financial management strategies to secure basic needs such as rent, utility bills, or children's clothing; 22 women reported using resource pools or financial management to secure wants for their children or for themselves.

QUANTITATIVE STUDY

Findings from the qualitative study inform the family economic stress model in key ways, which our quantitative study sought to test. First, the qualitative material highlighted that families with inadequate household income and earnings regularly drew upon alternative resource pools or employed varying financial strategies to better meet expenditure demands. Second, women placed a high value on meeting basic needs *and* affording modest extras. Experiences of economic pressure and any associated feelings of

stress or disappointment often resulted from the inability to afford both types of expenditure demands (see also Mistry & Lowe, 2006). The ability to meet children's needs and wants was important for women's sense of being a successful provider.

Building on these results, our final research question focused on the extent to which economic pressure and the financial management strategies mothers used to alleviate some of this pressure mattered for family and child functioning. We focus explicitly on children's behavioral outcomes because of the family economic stress model's emphasis on relations among economic pressure and family socialization processes (i.e., parent psychological well-being, parenting practices). These processes, in turn, are hypothesized to exert a stronger influence on children's behavioral adjustment than cognitive and academic outcomes. Indeed, results from several recent studies confirm that when the effects of family income on child well-being are traced through socialization processes, evidence of mediation is stronger for behavioral than cognitive outcomes (Gershoff et al., 2007; Mistry et al., 2004; Yeung et al., 2002).

Because little research incorporates measures of income and additional financial resources used by low-income families to make ends meet and distinguishes among sources of economic pressure, we did not specify explicit hypotheses. Based on the qualitative findings, we expected that mothers would rely on multiple resource streams to make ends meet in relation to meeting both basic needs and desired extras. Failure to do so would result in heightened economic pressure across these two distinct domains, with repercussions for maternal mental health, parenting practices, and children's behavioral outcomes. The more downstream linkages are well established in the extant literature: Lower levels of maternal psychological well-being were expected to be associated with less optimal parenting practices, which would be related to poorer behavioral adjustment among children.

METHOD

Sample for Quantitative Analyses

The quantitative analyses focused on Child and Family Study families with 5-year follow-up data. Consistent with the qualitative study, the sample was restricted to families in which the

mother was the primary caregiver and survey respondent. This criterion resulted in the inclusion of 516 (94%) of the 547 Child and Family Study families who participated in the 5-year follow-up ($N = 800$ children, ages 6 – 15). Sample demographic information is presented in Table 1. Table 2 presents descriptive statistics for all measures.

Measures

Economic resources. The State of Wisconsin provided administrative data for reported income and government assistance to the New Hope evaluators on a quarterly basis. Using these data, total income was computed for each quarter by summing each family's total earnings, food stamps, welfare cash payments, EITC, and New Hope income supplements (for program participants). We used the *total income* for the year of the fifth-year follow-up. We also used the

Table 1. *Descriptive Statistics of Covariates in Survey-Based Analyses (Family/Maternal N = 516, Child N = 800)*

	<i>n</i>	%	<i>M</i>	<i>SD</i>
Experimental status				
Intervention group	256	49.6	—	—
Control group	260	50.4	—	—
Parent race/ethnicity				
African American	293	56.8	—	—
Hispanic	140	27.1	—	—
Non-Hispanic White	83	16.1	—	—
Parent education				
High school graduate/GED	312	60.5	—	—
Less than high school graduate	204	39.5	—	—
Child gender ^a				
Male	411	47.8	—	—
Female	377	52.2	—	—
Maternal age	516	—	29.1	6.8
Child age ^a	792	—	10.8	2.9
Family size	515	—	7.9	1.6
Household status				
Single-parent household	452	87.6	—	—
Non-single-parent household	64	12.4	—	—
Child health problems ^a				
Yes	246	30.7	—	—
No	554	69.3	—	—

Note: All variables measured at baseline except child age, family size, household status, and child's health (measured at 5-year follow-up).

^aChild level variables. All other variables measured at the family level.

administrative data to create a sum variable that identified the number of *government supports* (i.e., food stamps, welfare cash payments, EITC) the family received any time during the fifth-year follow-up.

For *instrumental support*, mothers rated their ability to count on three sources (family members, neighbors, friends) to help them out if they were in a jam on a scale from 1 (*not true at all*) to 5 (*always true*). They also rated one additional item, "There are adults I am close to who would help me financially in a pinch," on an identical scale. Mean scores for the four items were computed, with higher scores indicating greater instrumental support ($\alpha = .69$). Finally, for *financial management resources*, mothers' affirmative responses to questions about whether they currently had a checking or savings account or both at a bank or credit union, received a loan from a bank or credit union, emergency money set aside, a credit card, and a monthly budget for money management were summed to create an index of the family's financial resources (range: 0 to 5).

Perceived economic pressure. *Difficulty meeting financial needs* was assessed with a single item: "These days I can generally afford to buy the things we need." Ratings were on a 5-point scale from 1 (*not at all true*) to 5 (*very true*); the item was reverse coded such that higher scores reflected more difficulty meeting financial needs. For *difficulty meeting financial wants*, mothers responded to the item: "We never seem to have enough money to buy something we'd like to have or go somewhere just for fun," on a 5-point scale from 1 (*not at all true*) to 5 (*very true*).

Maternal psychological well-being. Mothers' *general stress* was assessed using one item: "How much time in the past month have you felt stressed?" Ratings ranged from 1 (*none of the time*) to 4 (*almost all of the time*). For *depressive symptoms*, mothers completed the 20-item Center for Epidemiological Studies-Depression (CES-D) scale (Radloff, 1977). For each item, mothers offered ratings from 1 (*rarely or none: less than 1 day*) to 4 (*most or all: 5 – 7 days*). Higher mean scores reflected more depressive symptoms ($\alpha = .82$). Finally, *efficacy* was assessed through the 6-item State Hope Scale (Snyder et al., 1996), which examined mothers' sense of hope in relation to both agency and pathways for future success. Each

Table 2. Descriptive Statistics of Predictor and Dependent Variables Included in Survey-Based Analyses (Family/Maternal N = 516, Child N = 800)

	<i>n</i>	<i>M</i>	<i>SD</i>	Min.	Max.
Indicators of economic resources					
Total family income	511	\$15,310	\$9,210	\$0	\$40,743
Government supports received	511	1.27	0.87	1.00	3.00
Instrumental support	492	3.11	0.92	1.00	5.00
Financial resources	493	2.31	1.47	0.00	5.00
Indicators of perceived economic pressure					
Meeting financial needs	509	2.65	1.27	1.00	5.00
Meeting financial wants	509	2.89	1.40	1.00	5.00
Indicators of maternal psychological well-being					
General stress	513	2.50	0.88	1.00	4.00
Depressive symptoms	505	15.35	10.86	0.00	52.00
Efficacy	502	3.00	0.54	1.00	46.00
Indicators of parenting practices ^a					
Lack of control	741	2.25	0.97	1.00	6.00
Frequency of discipline	739	1.97	0.62	1.00	4.00
Child-specific parenting stress	733	1.77	0.76	1.00	5.00
Warmth	755	3.85	0.96	1.11	4.98
Monitoring	745	4.80	0.84	1.57	6.00
Confidence in protecting from harm	741	3.70	0.86	1.00	5.00
Indicators of parent reports of child outcomes ^a					
Positive behavior	761	3.85	0.52	2.12	5.00
Problem behavior	742	2.36	0.56	1.00	4.91

^aChild-level variables. All other variables measured at the family level.

item was rated on a 4-point scale ranging from 1 (*strongly disagree*) to 4 (*strongly agree*). Higher mean scores reflected greater efficacy ($\alpha = .85$).

Parenting practices. Composite variables assessing the degree of maternal responsiveness and control were included. The composite variables were formed using a three-step analysis process examining the parenting measures available in the survey data. All analyses were conducted on the full study sample ($N = 800$) using the structural equation modeling software Mplus 4.2 (Muthen & Muthen, 2006). First, we conducted an exploratory factor analysis (EFA), using promax rotation, of all parenting variables. Overall model fit was adequate, $\chi^2(785, 8) = 17.470$, $p < .01$, RMSEA = .039, and yielded a two-factor solution, with eigenvalues above 1. The factors were correlated with each other ($r = .58$). The first factor, *maternal ineffective control*, was comprised of maternal reports of lack of control in managing their child's behavior, frequency of disciplinary actions used, and child-specific parenting stress. The second fac-

tor, *maternal responsiveness*, consisted of maternal reports of warmth, monitoring of child's activities, and confidence in protecting their child from harm. All factor loadings were above .35, and the indicators did not cross-load across the two factors, with one notable exception. Observer reports of maternal praise and affection loaded equally low on both factors (i.e., $< .15$) and consequently was dropped from further analyses. Next, we conducted a confirmatory factor analysis (CFA), imposing the factor structure implied by the EFA. Results indicated that the specified factor structure pattern fit the data well, $\chi^2(775, 8) = 14.52$, *ns*, CFI = .990, RMSEA = .032. All standardized factor loadings were statistically significant and above .30. As expected, the latent constructs were strongly correlated ($r = -.67$, $p < .001$). As a final check, we confirmed that the two-factor solution better represented the data than did a single factor solution. (Results available upon request.) The final step was to create the two composite variables for analysis purposes. Individual indicators were first standardized and then summed to create the two composites.

The *maternal ineffective control composite* includes three variables: mother's lack of control, frequency of discipline, and parenting stress. Mothers' lack of control was measured with a 5-item scale describing frequency with which the child ignores or fails to obey the mother (e.g., how often the child ignores parent's threat of punishment; $\alpha = .80$) (Statistics Canada, 1995). The frequency of discipline was measured with six items assessing the frequency, in the past week, with which mothers had punished the child by grounding, taking away privileges, spanking, and threats ($\alpha = .82$; Statistics Canada, 1995). Parenting stress was measured with five questions concerning the degree of difficulty mothers experienced interacting with and caring for their child (e.g., "My child seems to be much harder to care for than most"; $\alpha = .80$). For the composite, all scores were coded so that higher scores reflected less effective control and disciplinary use ($\alpha = .88$).

The *maternal responsiveness composite* includes three variables: maternal reports of warmth, monitoring, and confidence in protecting their child from harm. Mothers completed three items from the Canadian Evaluation of the Self-Sufficiency Project Warmth Scale, which centered on praise, communication, and shared activities (Statistics Canada, 1995). Ratings ranged from 1 (*never*) to 6 (*many times a day*). Higher scores reflected greater parent warmth ($\alpha = .83$). For monitoring, mothers completed six items from the parent and child assessments 5-year follow-up in the Job Opportunities and Basic Skills training program (U.S. Department of Health and Human Services, <http://www.acf.dhhs.gov/programs/JOBS>). These items assessed how aware mothers were of their child's whereabouts and how closely they monitored their child's activities (e.g., watching TV). Mothers also completed two items assessing their familiarity with their child's friends. In addition, for children ages 12 and older, mothers answered three additional items about curfews. Ratings ranged from 1 (*never*) to 6 (*always*). Higher scores indicated greater parental monitoring ($\alpha = .84$). Finally, a single item ("How confident are you that you will be able to prevent your child from getting into trouble?") assessed parental confidence in preventing harm. For the composite, all scores were coded so that higher scores reflected more maternal responsiveness ($\alpha = .82$).

Child outcomes. To assess *positive behavior*, mothers completed the 25-item Positive Behavior Scale, originally adapted for the New Chance survey and standardized on a multiethnic sample of low-income mothers (Quint, Bos, & Polit, 1997). Items assessed children's compliance/self control (e.g., thinks before acts), social competence and sensitivity (e.g., gets along with other children), and autonomy (e.g., is self-reliant). Mothers rated items on a 5-point scale from 1 (*never*) to 5 (*all of the time*), with higher mean scores reflecting more positive behaviors ($\alpha = .91$).

For *problem behavior*, mothers completed items from the Social Skills Rating System to assess children's negative social behaviors (Gresham & Elliot, 1990). Specifically, mothers completed the externalizing (e.g., aggression, lack of control) and internalizing items (e.g., appears lonely, shows anxiety in groups) as well as items related to children's hyperactivity (e.g., easily distracted, disturbs ongoing activities), and provided ratings of 1 (*never*) to 5 (*all of the time*). Higher mean scores reflect more problematic social behaviors ($\alpha = .77$).

Sociodemographic covariates. All analyses included a set of 10 covariates. Six were assessed at baseline: experimental status (1 = *intervention group*, 0 = *control*), mother ethnicity (dummy variables for African American, Hispanic; White as reference group), mother education (1 = *high school graduate or GED*, 0 = *< high school*), mother age (in years), and focal child gender (1 = *male*, 0 = *female*). The four remaining covariates were assessed at the 5-year follow-up: child age, family size, single-parent household status, and child health (i.e., whether child had a health condition, problem, or disability). Covariates reflect the factors shown in prior studies to influence children and mother's mental health and well-being, parents' ability to secure sufficient resources to meet their family's needs, and engagement in responsive parenting practices (see Amato, 2000; Bornstein & Bradley, 2003; Downey, 1995; McLoyd, 1990).

Data Analysis Strategy for Quantitative Study

Structural equation modeling (SEM), specifically path analysis, was used to test relations among the study constructs. All analyses were conducted using the SEM software *Mplus* 4.2 (Muthen &

Muthen, 2006), including the *Mplus* estimation procedure to handle missing data through full-information maximum likelihood (FIML) imputation. *Mplus* also enabled us to account for sibs/clusters within families.

QUANTITATIVE RESULTS

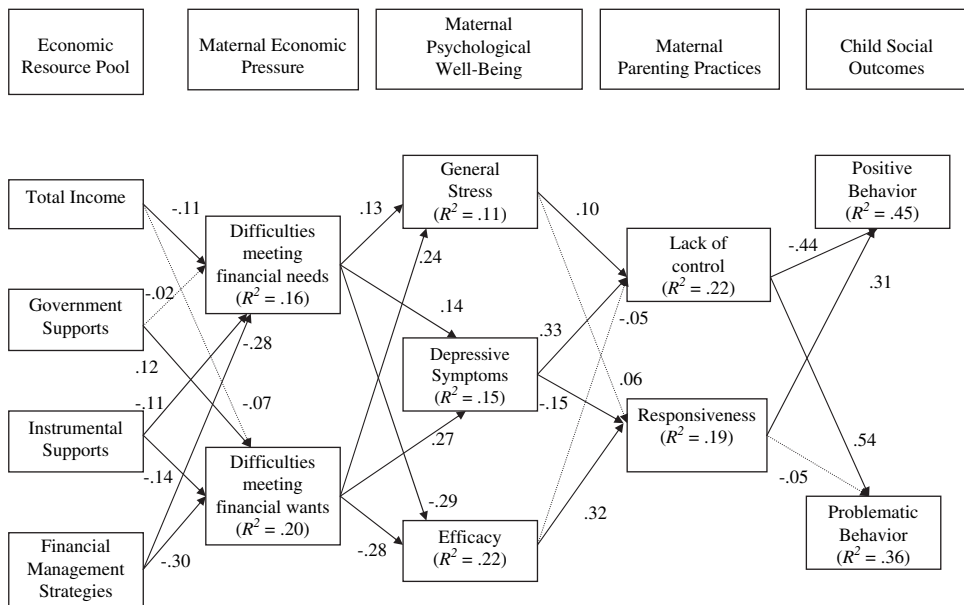
Figure 1 presents the results of the final model. (Direct effects of economic resources not shown. Only two economic resources—instrumental support ($\beta = .11, p < .05$) and government supports ($\beta = .08, p < .05$)—predicted children’s positive behavioral outcomes. All other direct paths were nonsignificant.) Overall model fit was good, and the set of modeled associations accounted for a respectable amount of explained variance in the major constructs of interest (see Figure 1). The coefficients shown represent *partial* coefficients, after accounting for the influence of the covariates (not shown) and all other modeled relations.

Relations Among Economic Resources and Economic Pressure

We expected all sources of economic resources to be predictive of mothers’ reports of economic pressure. Although this was the case overall, as shown in Figure 1, the associations between the type of resource and source of economic pressure differed. Higher household incomes predicted lower levels of economic pressure pertaining to meeting basic needs but not modest extras. Conversely, the index of government supports was modestly related to pressure from modest extras, but was not related to pressure from needs. To the extent that this reflects the inclusion of receipt of EITC as a form of government assistance, these findings are consistent with those reported by Romich and Weisner (2001).

Higher levels of instrumental support and greater access to financial management strategies were associated with reduced economic pressure in terms of meeting both basic needs and desired

FIGURE 1. ASSOCIATIONS AMONG FAMILY ECONOMIC RESOURCE POOLS, SOCIALIZATION PROCESSES, AND CHILDREN’S PROBLEMATIC BEHAVIORAL OUTCOMES.



Note: Model fit statistics: $\chi^2(800, 34) = 106.518, p < .001$; CFI = .955; RMSEA = .052. *N* (maximum) = 516 families; 800 children, ages 6 – 15. All reported coefficients are standardized values and represent partial coefficients, adjusting for the influence of covariates and other modeled associations. Within level covariances and influence of covariates on all modeled variables are estimated but not shown. Direct paths from indicators of family economic resources to child outcomes are estimated but not shown. Solid lines are significant at $p \leq .05$; dashed lines are nonsignificant.

extras. Mothers' use of financial management strategies was the most consistent and strongest predictor of maternal reports of economic pressure (both needs and wants). The coefficients are at least twice the size of those for the other economic resources.

Relations Among Economic Pressure and Maternal Psychological Well-Being

The second set of modeled associations in Figure 1 shows that mothers who reported greater pressure to meet basic needs also reported elevated levels of general life stress and depressive symptoms and lower levels of efficacy. New to our analysis is the measured association between perceived pressure in meeting desired wants and the indicators of psychological well-being. The results suggest that mothers who felt more pressure affording desired extras also reported feeling more stressed and depressed and less efficacious. Consistent with our qualitative analyses, this indicates meaningful differences in experiences of economic pressure from an inability to afford both basics and modest extras and the implications for mothers' psychological well-being.

Maternal Psychological Well-Being, Parenting Practices, and Child Behavioral Outcomes

Consistent with the family economic stress perspective, we expected that higher levels of maternal stress and depressive symptoms and lower levels of efficacy would result in lower levels of maternal responsiveness and less effective strategies in controlling and disciplining children's behavior. But, as shown in Figure 1, the results indicated greater domain specificity in the observed relations. On the one hand, mothers who reported feeling more stressed and depressed also noted greater difficulties with managing their children's behaviors and activities. On the other hand, mothers who reported feeling more efficacious reported displaying more affection toward their children as well as being better able and confident in monitoring their children's activities and protecting them from harm. Finally, we observed the expected pattern of interactions between the indicators of parenting practices and children's behavioral adjustment. More controlling parenting practices coupled with lower levels of parental warmth and perceived confidence predicted higher levels of child behavior problems and lower levels of positive behavioral adjustment

among children (for controlling parenting practices only; see Figure 1).

Tests of Mediation

After accounting for the covariates and the mediating processes, we observed little evidence of any remaining direct effects of economic resources on children's behavioral outcomes. To more formally test evidence of mediation, we used the INDIRECT command in *Mplus* to estimate the value and significance of the product of the indirect pathways by which economic resources influenced child outcomes. Results for income and government supports are not reported because they were largely inconsistent and non-significant. Net the influence of covariates and other modeled associations, the total indirect effect of financial management strategies on children's behavioral outcomes was significant (Indirect $\beta = .05$, $p < .05$ for positive behavior; Indirect $\beta = -.04$, $p < .05$ for problem behavior). Similarly, the total indirect effect of instrumental support on children's behavioral outcomes was also significant (Indirect $\beta = .02$, $p < .05$ for positive behavior; Indirect $\beta = -.02$, $p < .05$ for problem behavior). Although modest in magnitude, these results confirm that both desired extras and the source of economic resources utilized by mothers to make ends meet and manage their experience of economic pressure for meeting basic needs have repercussions throughout the family system, including children's behavioral adjustment.

GENERAL DISCUSSION

The goals of the current study were threefold: to (a) examine low-income mothers' experience of economic pressure in terms of affording both basic needs and modest extra expenditures; (b) assess the strategies low-income mothers use to pool resources in an attempt to minimize their experiences of economic pressure; and (c) test a respecification of the family economic stress model, incorporating a more expansive view of family economic resource pools and economic pressure and the implications for family and child well-being. To achieve these objectives we relied on a sequential mixed-methods approach (Creswell, 2003) using two data sources: in-depth qualitative interviews with a small sample of mothers drawn randomly from a larger survey sample and quantitative data from survey, interview, and administrative sources

for a larger sample of mothers and their school-aged children. The findings indicate that inclusion of a measure of economic pressure around desired "extras" as well as basic needs and inclusion of additional sources of economic resources, beyond income and government supports, are useful contributions to understanding the mechanisms by which economic resources matter for children's behavioral outcomes.

Economic Pressure: Distinguishing Between Basic Needs and Wants

Mothers in the ethnographic sample meaningfully distinguished between two types of economic pressure, one indexed by not meeting their family's basic needs (i.e., food, shelter, bills, clothing) and the other by not being able to afford modest "extras" or wants, such as eating out or doing something fun with their children. We believe this distinction is an important contribution to the literature. Prior studies have focused on a family's experience of economic pressure around meeting basic needs or have asked about economic pressure in general. Our findings suggest that assessments of economic pressure should distinguish between needs and wants, recognizing and allowing for definitions of basic needs versus modest wants to vary across individuals. Future directions include examining the degree to which the inability to afford both needs and wants, however defined, is related to family and child functioning across family types (e.g., poor vs. nonpoor). Our data show that, among lower-income families, affording even a few modest wants is important for mothers' psychological well-being, especially with regard to feelings of adequacy as providers.

In the current study, the distinction between economic pressure related to meeting basic needs versus affording wants aided understanding of the mediated influence of economic resources on children's behavioral adjustment. Consistent with prior research, we observed that difficulties in meeting basic needs affect children's behavioral adjustment when they leave mothers feeling depressed and less efficacious, which in turn makes it more challenging for them to parent effectively and responsively. We observed similar pathways when mothers felt unable to meet their family's wants. Such findings highlight the need for research to focus explicitly on the link between affording discretionary items and child well-being. Both are important considerations

for understanding how and why economic hardship matters for child well-being.

Resource Pools in Low-Income Ecologies

Collectively, findings from the qualitative and quantitative studies highlight the importance of access to financial resources and instrumental support for relieving some of the economic pressure experienced by low-income mothers. Future studies that assess the influence of economic well-being on family and child outcomes should expand their focus to include not only household income but also financial assets and instrumental support as additional indicators of a family's total household economy (see also Conley, 1999).

Contrary to earlier studies, we observed little evidence of either direct or indirect (i.e., mediated) effects of income and government assistance on the indicators of child well-being in our quantitative analyses. Our inclusion of resource indicators beyond income and government supports may have diminished the influence of the more formal economic resources on children's behavioral outcomes. The null findings observed in the current study, however, may have resulted, in part, from features of the sample. The limited range of incomes in these low-income families may have attenuated the relations between income and the other study variables.

By their very nature, the indicators of economic resources included in the current investigation are intertwined. As shown convincingly by Edin and Lein (1997) and more recently by Scott, Edin, London, and Kissane (2004), low levels of formal income necessitate greater reliance on additional financial management strategies and support from family members and friends. It is, conceivable, therefore, that families with the least amount of formal income are the least likely to have access to other financial management strategies and the most likely to rely heavily on instrumental support from family members and friends. In our sample, the intercorrelations among the various indicators of economic resources were quite modest. The strongest association was between mothers' reports of financial management strategies and income ($r = .23, p < .05$), suggesting that families were not simply trading one economic resource for another. It remains to be seen whether the findings observed in our sample of low-income families are evident in a more economically diverse sample.

*Strengths, Limitations, and
Caveats to the Current Study*

The current study should be interpreted in light of its strengths and its limitations. A key strength is the use of a mixed-methods approach to unpack relations among the constructs of interest. In this regard, the current investigation benefited greatly from the interdisciplinary team approach that has been a defining characteristic of the larger New Hope evaluation (see Duncan, Huston, & Weisner, 2006; Yoshikawa, Weisner, & Lowe, 2006). The complementary nature of the data sources, including that the ethnographic families were randomly drawn from the same set of families comprising the larger New Hope Child and Family Study sample and that the ethnographic study preceded the 5-year follow-up, were key assets to the current investigation. Indeed, inclusion of items in the 5-year survey assessing parent's perceived adequacy regarding needs versus wants and the additional financial resources were based, in part, on observations by members of the ethnographic fieldwork team.

One limitation of the qualitative data is that they are based on fieldworker notes rather than verbatim interview transcriptions. Consequently, some inadvertent bias was introduced both by the fieldworkers accounts of the women's stories and in our analysis of their fieldnotes. Whenever possible, however, we relied upon verbatim quotations of the women from the notes in making our interpretations. A second caveat is that the variables in the quantitative analyses rely almost exclusively upon maternal reports of resources, family socialization processes, and children's behavioral outcomes. Consequently, respondent bias is a potential issue. As a check, we ran an alternate specification of the model, using teacher reports of children's social behavior ($n = 499$; results not shown but available from the first author). The overall pattern of results was consistent with those reported above.

The findings from the current study highlight the significance of the composition of and reliance on economic resource pools of low-income mothers and their subsequent influences on perceptions of economic pressure in meeting both basic needs and affording modest wants on maternal psychosocial functioning, parenting practices, and children's behavioral outcomes. Results inform a family economic stress perspective of the processes by which families' adapta-

tions to economic hardship matter for children's development.

NOTE

The New Hope Child and Family Study was conducted in collaboration with the MacArthur Network on Successful Pathways Through Middle Childhood. The larger program evaluation was conducted by the Manpower Demonstration Research Corporation under a contract with the New Hope Project, Inc. Grant R01 HD 36038 from the National Institute of Child Health and Human Development to the University of Texas at Austin supported the 5-year follow-up study. We thank Aletha Huston for her comments on earlier drafts of this article. We also thank the participating families and children for their time and interest.

REFERENCES

- Amato, P. R. (2000). The consequences of divorce for adults and children. *Journal of Marriage and the Family*, *62*, 1269 – 1287.
- Bornstein, M. H., & Bradley, R. H. (2003). *Socioeconomic status, parenting, and child development*. Mahwah, NJ: Erlbaum.
- Bos, J. M., Huston, A. C., Granger, R. C., Duncan, G. J., Brock, T. W., & McLoyd, V. C. (1999). *New Hope for people with low incomes: Two-year results of a program to reduce poverty and reform welfare*. New York: Manpower Demonstration Research Corporation.
- Conger, R. D., & Elder, G. H. (1994). *Families in troubled times: Adapting to change in rural America*. New York: Aldine De Gruyter.
- Conley, D. (1999). *Being Black, living in the red*. Berkeley, CA: University of California Press.
- Creswell, J. W. (2003). *Research design: Qualitative, quantitative, and mixed-methods approaches* (2nd ed.). Thousand Oaks, CA: Sage.
- DeNavas-Walt, C., Proctor, B. D., & Lee, C. H. (2005). Income, poverty, and health insurance coverage in the United States: 2004. *Current Population Reports*, P60 – 229. Washington, DC: U.S. Census Bureau.
- Douglas-Hall, A., & Koball, H. (2006). *Basic facts about low-income children: Birth to age 18*. New York: National Center for Children in Poverty.
- Downey, D. B. (1995). When bigger is not better: Family size, parental resources, and children's educational performance. *American Sociological Review*, *60*, 746 – 761.
- Duncan, G. J., Huston, A. C., & Weisner, T. W. (2006). *Higher ground: New Hope for the working poor and their children*. New York: Russell Sage Foundation.

- Edin, K., & Lein, L. (1997). *Making ends meet: How single mothers survive welfare and low-wage work*. New York: Russell Sage Foundation.
- Erickson, F. (1986). Qualitative methods in research on teaching. In M. C. Wittrock (Ed.), *Handbook of research on teaching* (3rd ed., pp. 119 – 161). New York: Macmillan.
- Fetterman, D. M. (1998). *Ethnography* (2nd ed). Applied social science research methods series, 17. Thousand Oaks, CA: Sage.
- Geertz, C. (1973). *Interpretation of cultures*. New York: Basic Books.
- Gershoff, E. T., Aber, J. L., Raver, C. C., & Lennon, M. C. (2007). Income is not enough: Incorporating material hardship into models of income associations with parenting and child development. *Child Development, 78*, 70 – 95.
- Gibson C., & Weisner T. S. (2002) “Rational” and ecocultural circumstances of program take-up among low-income working parents. *Human Organization, 61*, 154 – 166.
- Gresham, F. M. & Elliott, S. N. (1990). *Social Skills Rating System manual*. Circle Pines, MN: American Guidance Service.
- Huston, A. C., Duncan, G. J., Granger, R., Bos, J., McLoyd, V., Mistry, R., Crosby, D., et al. (2001). Work-based antipoverty programs for parents can enhance the school performance and social behavior of children. *Child Development, 72*, 318 – 336.
- Huston, A. C., Duncan, G. J., McLoyd, V. C., Crosby, D. A., Ripke, M. N., Weisner, T. S., et al. (2005). Impacts on children of a policy to promote employment and reduce poverty for low-income parents: New Hope after 5 years. *Developmental Psychology, 41*, 902 – 918.
- Huston, A. C., Miller, C., Richburg-Hayes, L., Duncan, G. J., Eldred, C. A., Weisner, T. S., et al. (2003, June). *New Hope for families and children: Five-year results of a program to reduce poverty and reform welfare*. New York: Manpower Demonstration Research Corporation.
- Maxwell, J. A. (1992). Understanding and validity in qualitative research. *Harvard Educational Review, 62*, 279 – 300.
- McLoyd, V. (1990). The impact of economic hardship on Black families and children: Psychological distress, parenting, and socioemotional development. *Child Development, 61*, 311 – 346.
- McLoyd, V. (1998). Socioeconomic disadvantage and child development. *American Psychologist, 53*, 185 – 204.
- Mistry, R. S., Biesanz, J. C., Taylor, L. C., Burchinal, M., & Cox, M. J. (2004). Family income and its relation to preschool children’s adjustment for families in the NICHD Study of Early Child Care. *Developmental Psychology, 40*, 727 – 745.
- Mistry, R. S., & Lowe, E. D. (2006). What earnings and income buy—The “basics” plus “a little extra”: Implications for family and child well-being. In H. Yoshikawa, T. S. Weisner, & E. D. Lowe (Eds.), *Making it work: Low-wage employment, family life, and child development* (pp. 173 – 205). New York: Russell Sage Foundation.
- Muthen, L. K., & Muthen, B. O. (2003). *Mplus user’s guide* (4th ed.). Los Angeles: Muthen & Muthen.
- Quint, J. C., Bos, J. M., & Polit, D. F. (1997). *New Chance: Final report on a comprehensive program for young mothers in poverty and their children*. New York: Manpower Demonstration Research Corporation.
- Radloff, L. (1977). The CES-D Scale: A self-report depression scale for research in the general population. *Applied Psychological Measurement, 1*, 385 – 401.
- Romich, J. L., & Weisner, T. S. (2001). How families view and use lump-sum payments from the earned income tax credit. In G. J. Duncan & P. L. Chase-Lansdale (Eds.), *For better and for worse: Welfare reform and the well-being of children and families* (pp. 201 – 221). New York: Russell Sage Foundation.
- Scott, E. K., Edin, K., London, A. S., & Kissane, R. J. (2004). Unstable work, unstable income: Implications for family well-being in the era of time-limited welfare. *Journal of Poverty, 8*, 61 – 88.
- Secombe, K. (2000). Families in poverty in the 1990s: Trends, causes, consequences, and lessons learned. *Journal of Marriage and the Family, 62*, 1094 – 1113.
- Snyder, C. R., Simpson, S. C., Ybasco, F. C., Borders, T. F., Babyak, M. A., & Higgins, R. L. (1996). Development and validation of the state Hope scale. *Journal of Personality and Social Psychology, 70*, 321 – 335.
- Statistics Canada. (1995). *Self-Sufficiency Project: Self Complete Questionnaire, Parents*. Montreal: Statistics Canada.
- Yeung, W. J., Linver, M. R., & Brooks-Gunn, J. (2002). How money matters for young children’s development: Parental investment and family processes. *Child Development, 73*, 1861 – 1879.
- Yoshikawa, H., Weisner, T. S., & Lowe, E. D. (Eds.). (2006). *Making it work: Low-wage employment, family life, and child development*. New York: Russell Sage Foundation.