

## *Parental Factors Correlated With Developmental Outcome in the Migrant Head Start Child*

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This study examined parental correlates of developmental outcomes among Mexican American migrant farmworker children. Sixty children, their parents, and their current teacher were interviewed. Parents were interviewed to assess psychological state (mastery, self-esteem, depression), family stress, social support, parenting behavior, and the children's developmental outcomes (behavioral problems, a general cognitive index, and peer acceptance). Teachers' reports were secured regarding child behavioral problems and peer acceptance. Regression analysis revealed that maternal parenting style accounted for a significant amount of the variance in child behavior problems reported by the mothers, while maternal social support helped to explain the variance in peer acceptance reported by the children. The more rejecting the maternal parenting style, the more child behavior problems were reported by the mother. Children of mothers who experienced social support reported more peer acceptance. Father parenting style and social support also helped to predict a significant amount of the variance in mother report of child behavior problems and teacher rating of child behavior problems. Unexpectedly, the more social support reported by the father, the more rejecting the parenting style, the more child behavior problems were reported by the mother, but fewer were the child behavior problems reported by the teacher.

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Migrant children are at risk for developmental problems due to the extreme poverty, high mobility, living conditions, limited education, and lifestyle of migrant families. Long term stress associated with poverty has been found to negatively impact on the behavior of parents and their children (McLoyd & Wilson, 1991). In the presence of chronic financial problems and other stressors, parents have been found to be less nurturing and less responsive to the social emotional needs of their children and more reliant on physical control and coercion to achieve compliance (Conger, McCarty, Yang, Lahey, & Kropp, 1984). Such parental behavior has been associated with an increased risk of lower social emotional functioning as well as behavior problems in school and with peers (Hashima & Amato, 1994; McLoyd, 1990; Schorr, 1991).

Conversely, parenting behavior that is sensitive to a child's personality, capabilities, and to the developmental tasks they face encourages a variety of highly valued developmental outcomes which include social competence, intellectual achievement, and emotional security (Belsky, 1984; Rutter, 1990). During the preschool years high levels of nurturance and control encourage the ability to engage peers and adults in a friendly and cooperative manner (Baumrind, 1971; Belsky, 1984; Luther & Zigler, 1991). This trend continues into the school age period with parental use of induction or reasoning, consistent discipline, and expressions of warmth (Belsky, 1984; Luther and Zigler, 1991; McCall, Appelbaum, & Hagerly, 1973). While longitudinal studies have investigated the effects of parental characteristics on development, generalizations are limited to English speaking children from middle-class homes. Hispanic families especially value their families and prize their children, a traditional value which has helped the family survive in spite of difficult life circumstances (Zuniga, 1992). Yet, little is known about Hispanic families, especially developmental outcome and the effects of parental characteristics among Mexican American migrant farmworker families.

It is estimated that there are approximately 4.2 million migrant and seasonal farmworkers in the United States. About 25% are less than six years of age (Dever, 1990). The number of Hispanics, particularly Mexican American, has increased compared to the numbers of other ethnic groups. Mexican American migrant farmworkers prefer traveling in family units (Reyes, 1980; Siantz, 1990).

Parental characteristics that have been associated with positive developmental outcome include psychological state, social support, and parenting style (Belsky, 1984; Colletta & Lee, 1983; Luther & Zigler, 1991; Mondell & Tyler, 1981). Previous research has not examined the impact of such maternal and paternal characteristics on a migrant child's development. In general, migrant farmworker parents and their children have been overlooked in research. In order to address this lacunae, the present study was

designed to investigate parental factors (psychological state, social support, family stress, parenting style) associated with a migrant child's behavior, social competence, and cognitive development.

*Psychological State.* Parental psychological state (mastery, self esteem, and level of depression) has been found to influence developmental outcome in children (Colletta, 1983). Parents who experience a strong sense of mastery are more likely to be warm and accepting with low levels of disapproval when interacting with their children (Mondell & Tyler, 1981).

Depressed mothers have been found to be less accepting, hostile, and indifferent to their children with little understanding of their developmental needs. Mothers who experience even moderate levels of depression have been found to increase physical, verbal, and symbolic aggression toward their children (Zuravin, 1989). Others have reported that depressed mothers are inconsistent in their parenting (Stoneman, Brody, & Burke, 1989) and perceive their children as maladjusted (Cox, 1988; Weissman, Warner, Wickramaratne, & Prusoff, 1988). Migrant mothers have been found to be at risk for depression (Siantz, 1990b). However, the impact of the psychological state of both parents on the developmental outcomes of migrant Head Start children has not been investigated.

*Family Stress.* Behavior problems in children have also been found to be related to maternal everyday stressors (Belsky, 1984; Hauenstein, 1992) and stress in the family environment (Billings & Moos, 1983; Hirsch, Moos, & Reischl, 1985). Some studies have shown that such stress may contribute to decreased maternal sensitivity to children (Crinic, Greenberg, Ragozin, Robinson, & Basham, 1983; Pianta, Sroufe, & Egeland, 1989) while increasing risk for maternal depression, especially among poor mothers (Belle, 1982; Siantz, 1990b). The combination of both stress and depression have been found to predict behavioral problems in children and problems in peer relationships (Gerner, Jones, & Miner, 1994; Hammen et al., 1987).

Stress from poverty has also been associated with diminished expression of affection, lesser responsiveness to the socioemotional needs of the child, and more punitive or power-assertive discipline (Conger, McCarty, Yang, Lahey, & Kropp, 1984; McLoyd, 1990; Peterson & Peters, 1985; Portes, Dunham, & Williams, 1986). With decreased positive interaction with the parent, the child has less opportunity to learn and master verbal and instrumental strategies that initiate and maintain positive peer interaction (Downey & Coyne, 1989; Gerner, Jones, & Miner, 1994). Among pre-infrequent maternal verbal interaction has been negatively associated with apprehensiveness, inability to get along with others, and willingness to share (Parke, MacDonald, Beiel, & Bharnagri, 1988). All of these stressors converge on the migrant child and family (Siantz, 1991).

*Social Support.* The importance of social support to mediating the stress of parents has been well documented (Belsky 1984; Colletta, 1983; Hashima & Amato, 1994; McLoyd, 1990). Mothers who are isolated in their childrearing, and who lack others to help provide periods of relief, have been found to be harsh and rejecting of their children (Colletta, 1981; Navarro & Miranda, 1985). Conversely, among single mothers, the presence of close family members of friends and the availability of practical help have been associated with fewer behavioral problems in their children (Norbeck & Siner, 1982).

Other studies have documented the general effect of isolation upon persons belonging to low socioeconomic and minority groups. In general such individuals are more likely to experience stress because they are unlikely to have substitute sources of support in time of need (Keefe & Casas, 1980; McLoyd, 1990; Salgado de Snyder, 1986; Vega & Kolody, 1985; Vega, Kolody, Valle, & Hough, 1986). For low-income mothers in particular, support provided by spouse, relatives, and friends, seems to be negatively associated with maternal restrictiveness and punishment (Colletta, 1981; Crinic et al., 1983; Powell, 1980; Willis, 1985). Previous research among Mexican American migrant mothers has found an association between a mother's access to a variety of supportive persons and her response to her children (Siantz, 1990a). While most studies have focused on mothers, it is assumed that most reported effects are generalizable to fathers as well.

*Parenting Style.* Parenting style that includes warmth and acceptance has been found to foster social competence. This includes an ability to engage peers and adults in a friendly and cooperative manner, and be resourceful and achievement oriented. With less sustained positive parental interaction, the child has fewer opportunities to learn and master verbal and instrumental strategies which will facilitate the initiation and maintenance of positive peer interaction (McLoyd, 1990).

Poverty, in particular, has been associated with diminished expression of affection (Conger, McCarty, Yang, Lahey, & Kropp, 1984; Peterson & Peters, 1985; Portes, Dunham, & Williams, 1986). With stress from persistent financial problems, low income parents may demonstrate less responsiveness toward the socioemotional needs of their children (McLoyd, 1990; Siantz, 1990a). Research has documented that low paternal interaction and involvement with children in combination with infrequent maternal verbal interaction have been negatively associated with peer popularity, helpfulness, leadership, involvement, and communication skills among preschool children. In the presence of a negative parenting style, preschool children are more likely to develop socially incompetent characteristics such as apprehensiveness, inability to get along with others, and an unwillingness to share (Parke, MacDonald, Betel, & Bharnagiti, 1988).

Table 1. Demographic Characteristics of Sample

	<i>M</i>	<i>SD</i>	Range
Age of child (in months)	63.89	11.91	40-99
Mother's age (years)	31.07	7.58	19-60
Father's age (years)	34.51	7.86	19-56
Mother's education	7.59	2.93	0-13
Father's education	7.46	3.01	0-12

## METHOD

### Subjects

Sixty Mexican American migrant 3- to 8-year-old children and their parents who were currently registered with or recent graduates of the Texas Migrant Council's Head Start Program volunteered to participate in the study. The children's current Head Start teacher or elementary school teacher also volunteered to be interviewed. Forty-eight percent of the children were male, and 40% female. All were of Mexican American origin. The majority of the mothers (54.2%) and fathers (64.9%) had been born in Mexico and preferred speaking Spanish. Almost all of the children lived in two-parent households (94.6%). The majority (81.8%) of the households had an income of less than \$10,000, with 34% with an income of less than \$5,000. The number of children in the families ranged from one to eight, with an average of three. Table 1 reports additional demographic characteristics of the sample.

Texas has the largest population of Mexican American migrant farmworkers and is the primary home base for migrants in the United States. Because of this, a sample from this state was thought to be representative of the Mexican American migrant population. The Texas Migrant Council's Head Start program provided access to the farmworker families.

The children and their parents were randomly selected from the lists of families registered at the regional headquarters of the Texas Migrant Council in the Lower Rio Grande Valley located near the U.S. and Mexico border. The Lower Rio Grande Valley includes Starr County, which is the second poorest county in the United States according to the 1992 U.S. Census Bureau. Criteria for selection included current registration or recent graduation from the Head Start program. With the parent's permission, current Head Start and elementary school teachers were contacted and asked to participate in the study. Parents were told that their decision to volunteer for participation would not affect their child's schooling.

Teachers were asked to complete the teacher form of the Child Behavior Checklist and the teacher form of the Pictorial Scales of Perceived Com-

pelence and Social Acceptance for young children. The forms took about 30 minutes to complete.

Participants were initially contacted by the Head Start parent coordinator who was a major link between the family and the Head Start program. Because some families did not have telephones, the parent coordinator was the primary means of directly communicating with the parents. Parent coordinators contacted parents at the Head Start school when they were either dropping off or picking up their preschool child, or attending parent meetings. Participating parents and children were given an honorarium to compensate for their time.

Parents were told that the purpose of the study was to help others understand their parenting experiences and their child's experiences. Most parents (90%) agreed to participate. Those who did not complete the interviews, initially agreed, but when they realized the length of the interview, they asked to terminate before the interview was completed. Other parents were preparing to leave the area to begin the approaching summer harvest season in another state.

After parents consented to participate in the study, they were interviewed for three hours in their homes or at the Head Start center, whichever they preferred. The three hour interview sought information that was part of a larger study that examined Head Start program factors that affect parent and child outcomes. The majority (80%) were interviewed in their homes. Children were interviewed after school at the Head Start center, even if they were graduates, in order to provide a consistent environment with minimal distractions.

#### *Procedures*

English and Spanish versions of the recruitment statement and consent form were available. The instruments were translated into Spanish. They were then translated back into English in order to assure linguistic and conceptual accuracy. The instruments were administered by interview. The parents and children were given the choice of being interviewed in the language of their choice. Trained bilingual interviewers individually read each question to the parents. This was necessary because of the limited ability to read or write for some. This has been found in previous research (Reyes, 1980; Siantz, 1991). Mothers were interviewed by a Hispanic female and fathers were interviewed by a Hispanic male. Most of the interviewees were former migrant farmworkers themselves or were from a migrant family that had changed occupations.

#### *Measures*

Interview questions with parents focused on six major areas: (a) demographic information, (b) social support, (c) mastery, (d) self-esteem, (e) parental

acceptance/rejection, (f) family stress, (g) depression. Demographic information included: parental age, number of years of education, place of birth, number of years in the United States, number and ages of children, marital status, and socioeconomic status.

*Social Support.* The Inventory of Socially Supportive Behaviors (ISSB) developed by Barrera, Sandler, and Ainsley (1981) measures supportive actions, including material aid, sharing tasks, giving advice, and helping others master emotional distress. In order to measure the type and amount of support received, respondents were asked to rate the frequency of 40 supportive items on a 5-point scale with the following range: (1) not at all, (2) once or twice, (3) about once a week, (4) several times a week, (5) about every day. In addition, total ISSB scores were calculated by summing the frequency rating across all 40 items. A range of 40 to 200 is possible. The ISSB has well established validity with a high internal consistency (.93) and test-retest reliability (.94) (Barrera et al. 1981). An internal consistency reliability of .94 for mothers and .96 for fathers using Cronbach's alpha was found in the present study.

*Mastery.* The Pearlin Mastery Scale (Pearlin & Schooler, 1978) measures the degree to which respondents feel they are in control of their lives. Parents were asked to indicate the degree of agreement or disagreement with seven statements. Five statements of the seven express helplessness. The remaining two express self-control. The range of agreement is from 0-3 for each item. Statements of helplessness receive higher ranks when respondents agree or moderately agree and statements of control receive higher ranks when respondents disagree or moderately disagree. The scores are additive and the possible range is from 0-21. The score indicates a general description of a person's feelings of control.

Pearlin and Schooler (1978) defined a score of 0-2 as low or most internal locus of control, 3-4 as medium low, 5-7 as average, 8-10 as medium high, and 11-21 as high or most external. The total score was used in the analyses. Pearlin and Schooler (1978) reported a strong internal consistency ( $\alpha = .95$ ). An internal consistency reliability of .65 using Cronbach's alpha was found for mothers, and .63 for fathers.

*Self-Esteem.* The Rosenberg Self-Esteem Scale (Rosenberg, 1965) measures the strength of positive or negative attitude toward self. Respondents were asked to rank their level of agreement or disagreement with 10 statements. Items were combined and weighted to produce a Gutmann Scale with a possible range of 0-6. High scores (3-6) indicate low esteem, low scores (1.5-2.5) indicate medium esteem. Scores of 0-1 indicate high

esteem. The total score was used in the analyses. Reliability, as measured by a coefficient of reproducibility is high ( $r = .96$ ) (Rosenberg, 1965). Using Cronbach's alpha, an internal consistency was found of  $\alpha = .66$  for mothers and  $\alpha = .63$  for fathers.

**Depression.** The Center for Epidemiological Studies Depression Scale (CES-D) was used to measure depression (Radloff, 1977). The CES-D was designed to measure symptoms of depression for epidemiological studies in the general population. These symptoms include hopelessness, despair, loss of appetite, and sleep, and change in level of activity. Radloff (1977) has reported an internal consistency of  $\alpha = .85$  in the general population and  $\alpha = .90$  in a sample of patients for the CES-D using Cronbach's alpha. Validation studies have shown that the CES-D is sensitive to depressive symptomatology and related to lengthier self reports and clinical ratings (Weisman, Skolomskas, Pottenger, Prusoff, & Locke, 1977). It has been used by others to study depression among Mexican immigrant women (Garcia & Marks, 1988; Roberts, 1986a; Siantz, 1990b; Vega et al. 1986).

Parents were asked to choose one of four ratings ranging from 0-3 (most of the time to all of the time). Item scores were summed to obtain a total scale score. A range of 0 (no depression) to 60 (severe depression) was possible. Consistent with other studies (Belle, 1982, 1983; Radloff, 1977; Siantz 1990b), the present investigation used a score of 16 points or more to indicate depression. An internal consistency of .84 for the mothers and .77 for the fathers as measured by Cronbach's alpha was found in the present study.

**Parenting Style.** Parental responses which included warmth/affection, aggression/hostility, neglect/indifference, and rejection were measured by the parental acceptance/rejection questionnaire (PARQ) developed by Rohner (1980). The PARQ is a self-report 60-item instrument that asks mothers how they treat their children. Responses are forced choice and the ranges are: (4) almost always true, (3) sometimes true, (2) rarely true, (1) almost never true. The total PARQ ranges from 60-240. A low score reflects maximal parental acceptance and minimal parental rejection. On average, the internal consistency of this instrument has been .95. All four scales have been found to be significantly ( $p < .001$ ) related to their respective validation scales (Rohner, 1980). In a previous study of migrant mothers, an internal consistency of .90 as measured by Cronbach's alpha was found (Siantz, 1990a). In the present study, an internal consistency reliability using Cronbach's alpha was found of .84 for the mothers and .88 for the fathers.

**Family Stress.** The family inventory of life events and changes (FILE) was developed by McCubbin & Thompson (1987). The FILE is a 71 item self report instrument that provides information on strains and life changes in

nine areas: intra-family strains, marital strains, pregnancy, and childrearing strains, financing and business strains, work-family transitions and strains, illness and family care strains, losses, transitions, and legal violation. Parents responded with 'yes' or 'no' to whether the change occurred in the past 12 months or before. An internal consistency of .81 for the total scale using Cronbach's alpha has been reported (McCubbin & Thompson, 1987).

**Behavior Problems.** The Child Behavior Checklist (CBCL) (Achenbach & Edelbrock, 1983) is a behavioral assessment inventory that consists of 20 social competence and 118 behavior problem items on which parents rate children ages 4-16 using three point rating scales (no true to very true). The CBCL has been previously evaluated for applicability with Hispanic children. Cronbach's alpha was used to assess the internal consistency of the scales for both boys and girls. Alphas ranged from .89 to .94 (Rubio-Stipec, Bird, Canaino, & Gould, 1990). In this study, results indicated that the total behavior problem scores on the instruments were a good continuous indication of maladjustment for children in Puerto Rico. A child with high values on the scales had a high probability of being classified as a case by a psychiatrist.

The CBCL Teacher Form (TRF) (Achenbach & Edelbrock, 1986) is a 118-item scale designed to obtain teacher ratings on many of the same problem areas rated by parents on the CBCL, as well as behavior problems specific to school. The TRF also requests information on academic achievement, IQ aptitude, special services, type of classroom, repetition of grades, and study skills. In previous research with Hispanic children (Rubio-Stipec, Bird, Canaino, & Gould, 1990) internal consistency was with acceptable level ranging from  $> .78$  for internalizing externalizing symptoms to  $> .93$  for aggressive and inattentive symptoms. The results of this study with Puerto Rican children indicated that the relation of the CBCL and TRF scores to clinical diagnosis, adaptive functioning, and need for services served as indicators of the concurrent validity of the instrument's Spanish version.

**Perceived Peer Acceptance.** This variable was measured by a subscale of the Pictorial Scale of Perceived Competence and Social Acceptance (Harter & Pike, 1984). The peer competence subscale focuses on (1) having lots of friends, (2) staying overnight at friends, (3) having friends to play with; (4) having friends on the playground, (5) getting asked to play with others, (6) eating dinner at a friend's house. Items were scored from most competent or accepted (4) to the least competent or accepted (1). Item scores were averaged across the six items providing the child's profile of perceived peer acceptance. There are two versions of this subscale, one for preschool-kindergarten and one for first and second grades. Both were used in the study.

A teacher rating scale parallels the child's instrument. Teachers are given a brief written description of each item and then rate how true that state-

Table 2. Descriptive Statistics for Predictor Variables

	<i>n</i>	<i>M</i>	<i>SD</i>	Range
Mother				
CES-D	61	14.74	8.77	0-39
Self-esteem	61	1.94	1.21	0-5
Mastery	61	6.62	3.90	0-14
ISSB (Social support)	61	85.43	26.78	42-167
FILE (Family stress)	61	8.21	6.84	0-27
PARQ (Parenting style)	61	89.28	17.77	64-138
Father				
CES-D	56	12.38	7.58	0-31
Self-esteem	56	1.54	1.20	0-5
Mastery	55	6.10	3.74	0-16
ISSB (Social support)	56	89.16	36.18	40-173
FILE (Family stress)	56	7.54	6.36	0-33
PARQ (Parenting style)	56	94.31	29.35	67-215

ment is on a four point scale ranging from not very true (1) to really true (4). The score can be compared with the child's score.

Harter and Pike (1984) has reported subscale reliabilities ranging from .50-.85. When subscales are combined according to their designated factors, reliabilities increase substantially, and range from .75-.89. The reliability of the total scale, all 24 items ranges from the mid to high .80's. In the present study, reliability for the child's scale was .59 and for the teacher rating scale .71.

**Cognitive Index.** This variable was measured by the McCarthy Scales of Children's Abilities (McCarthy, 1972). The scales are designed for children who are 2.5 to 8 years of age. The scale provides a global measure of intellectual functioning and a profile of performance in a variety of ability areas that are thought to develop rapidly during this stage. The general cognitive index is derived from a variety of language and nonlanguage thinking tasks. These include: verbal index, perceptual performance index, and a quantitative index. Previous research has demonstrated internal-consistency reliabilities of the children's performance on the McCarthy scales with Chicano and non-Hispanic White children that ranged from .60 to .82 for the Chicano's and from .77 to .84 for non-Hispanic Whites (Laosa, 1984). In the present study, the reliability as measured by Cronbach's  $\alpha$  was .70.

## RESULTS

Data analysis included descriptive statistics for the predictor variables (depression, self-esteem, mastery, social support, family stress, and parenting style) as Table 2 illustrates.

Table 3. Pearson Product Moment Correlations Between Predictor Variables for Mothers

	B	C	D	E	F
A. Mastery	-.35**	-.51***	-.19	-.26*	-.33**
B. Self-esteem		.29*	.08	.30*	.25
C. Depression			.46***	.54***	.55
D. Social Support				.30*	.13***
E. Family stress					.26*
F. Parenting style					

\*  $p < .05$ . \*\*  $p < .01$ . \*\*\*  $p < .001$ .

Table 4. Pearson Product Moment Correlations Between Predictor Variables for Fathers

	B	C	D	E	F
A. Mastery	-.52**	-.47**	-.16	-.43**	-.18
B. Self-esteem		.27*	.03	-.04	.15
C. Depression			.22	.30*	.26
D. Social Support				.11	-.04
E. Family stress					-.04
F. Parenting style					

\*  $p < .05$ . \*\*  $p < .01$ . \*\*\*  $p < .001$ .

Correlations were next calculated between the predictor variables, between and within mothers and fathers. Correlations were also computed between the criterion variables to determine if regressions should be conducted for each variable separately or if the criterion variables were strongly related and should be combined into a single indicator of developmental outcome. There were no significant relationships among any of these variables. Correlations were also calculated between child's age and the criterion variables to determine if age should be included in the regression analyses as a covariate.

Several scales were significantly correlated with each other as Tables 3 and 4 illustrate. Twice as many correlations were significant for mothers than for fathers, but correlations were essentially in the same direction for state variables (mastery, self-esteem, depression), the three psychological Specifically, depression and low self-esteem were negatively correlated with a sense of mastery and positively correlated with each other. (Self-esteem scored in the negative direction. Higher scores indicate poorer self-esteem). Social support for mothers was significantly correlated with depression, family stress, and parenting style. For fathers, however, social support was not correlated with any of the other measures.

Table 5. Descriptive Statistics for Dependent Variables

	<i>n</i>	<i>M</i>	<i>SD</i>	Range
CBCL (Mother's rating)	59	51.14	9.32	24-74
TRF (Teacher rating)	42	45.76	9.60	31-64
McCarthy Index	48	80.50	16.30	50-114
Perceived Peer Acceptance (Child rating)	46	3.16	0.53	1.83-4.0
Perceived Peer Acceptance (Teacher rating)	41	2.95	0.58	2.0-4.0

support for mothers. Stress was associated with a decreased sense of mastery and greater depression for fathers. Parenting style was unrelated to any other variables for fathers.

The correlations between mothers' and fathers' mastery was significant ( $N = 53, r = .52$ ). The correlations for depression was also significant ( $N = 54, r = .48$ ) as well as for parenting style ( $N = 54, r = .43$ ).

#### Regression Analyses

In order to determine if gender of the child was significantly related to the criterion variables and should be included in the regression analyses as a covariate, *t*-tests were conducted. The sample size was not sufficiently large to conduct separate analyses for boys and girls or to create interaction terms between gender and predictor variables in order to examine differential effects as a result of gender. Girls and boys were compared on the McCarthy General Cognitive Index, Total Behavior Problems, (CBCL) Total Behavior Problems, Teacher Rated (TRF), Perceived peer Acceptance (Child rating), and Peer Acceptance as reported by the teacher. There were no significant differences between boys and girls on these variables. Table 5 reports the descriptive statistics on the criterion variables for the combined sample.

When age was next calculated between child's age and the criterion variables, it was found to be negatively correlated with the McCarthy General Cognitive Index ( $r = .31, p < .05$ ). There were no other significant correlations with age. Age was entered into the regression as a covariate for the analyses involving the McCarthy General Cognitive Index and Perceived Peer Acceptance (child rating). The decision to include age as a covariate for Perceived Peer Acceptance was due to there being two different forms for the measure based on the age of the child.

**Multicollinearity.** In order to reduce the problem of multicollinearity among the predictor variables in the regression analyses, self-esteem, depression, and mastery were combined into a single scale representing psychological state and self-perception for mothers and fathers separately. The mastery scale was reversed so that it would be scored in the same direction as the depression and self-esteem scales. The three scales were

verted to *Z* scores and added together. A higher score indicated a poorer psychological state and self-perception. Multicollinearity was still somewhat of a problem for the mothers primarily, because of the strong correlations between the other predictor variables and depression. However, combining depression with social support, stressors, and parenting style made less theoretical sense than combining depression with the psychological variables (mastery, and self-esteem).

Interaction terms were created in order to examine the multiplicative effects of (1) parental style and social support, (2) parental style and family stress, (3) psychological state by social support, and (4) family stress and social support. All possible multiplicative relationships could not be examined due to the lowered subjects to variables ratio. These particular multiplicative effects were chosen due to the lowered subjects to variables ratio. These particular multiplicative effects were chosen due to the potential buffering effects of social support and to the possibility that stress may exacerbate a less accepting parenting style. Interaction terms were entered at the second step after main effects had been entered in order to examine any additional variable explained by the multiplicative effects beyond that explained by the main effects (Pedhazur, 1982).

A series of regression analyses were then conducted with the following criterion variables: mother's rating of behavior problems, teacher's rating of behavior problems, McCarthy General Cognitive Index, child's ratings of perceived peer acceptance, and teacher's rating of child's peer acceptance. Two regression analyses were conducted for each dependent variable. In the first analysis, mother variables were entered as predictors and in the second analysis, father variables were entered as predictors. These two sets of variables were not combined in the same analysis because the ratio of the number of subjects to predictors was too small.

The results of the regression analyses are reported in Table 6. Both mother and father variables predicted the variance in the CBCL. Parenting style also predicted for both regression equation—the less accepting the parenting style, the more behavior problems the mother reported. Additionally, for the fathers, social support was found to be a predictor. Greater social support was associated with more behavior problems. None of the multiplicative effects was significant.

An additional regression analysis was conducted with the CBCL as the criterion variable and mother and father parenting style and father social support as predictor variables. The purpose of this analysis was to evaluate the contribution of each predictor variable to explaining the variance in CBCL scores. The equation was significant,  $F(3,50) = 6.37, p < .01$ . These three predictor variables explained 23% of the variance in the CBCL. The only significant predictor, however, was father's social support ( $\beta$  weight = .38,  $p < .01$ ). Parenting styles of mothers and of fathers were significantly corre-

Table 6. Predictors of Behavior, Cognitive Development and Perceived Peer Acceptance

	Predictors	$\beta$	$R^2$	$F$
CBCL (Mother's rating) ( $n = 59$ )	Mother			
	Psych. state	.05		
	Social support	-.12		
	FILE (Family stress)	.14		
CBCL (Mother's rating) ( $n = 54$ )	PARQ (Parenting style)	.34**	.11	2.85*
	Father			
	Psych. state	-.04		
	Social support	.37**		
TRF (Teacher's rating) ( $n = 42$ )	FILE (Family stress)	.14		
	PARQ (Parenting style)	.31*	.19	4.03**
	Mother			
	Psych. state	-.02		
TRF (Teacher's rating) ( $n = 38$ )	Social support	-.09		
	FILE (Family stress)	.02		
	PARQ (Parenting style)	-.27	.00	0.93
	Father			
McCarthy Index ( $n = 45$ )	Psych. state	-.10		
	Social support	-.44**		
	FILE (Family stress)	.29		
	PARQ (Parenting style)	-.14	.18	2.81*
McCarthy Index ( $n = 42$ )	Mother			
	Child's Age	-.53***		
	Psych. state	.11		
	Social support	-.05		
Peer acceptance (Child rating) ( $n = 45$ )	FILE (Family stress)	.07		
	PARQ (Parenting style)	-.15	.19	3.01*
	Father			
	Child's Age	-.47**		
Peer acceptance (Child rating) ( $n = 45$ )	Psych. state	.17		
	Social support	.06		
	FILE (Family stress)	-.18		
	PARQ (Parenting style)	-.26	.38	3.17*
Peer acceptance (Child rating) ( $n = 45$ )	Mother			
	Child's Age	.29		
	Psych. state	.23		
	Social support	.42**		
Peer acceptance (Child rating) ( $n = 45$ )	FILE (Family stress)	-.27		
	PARQ (Parenting style)	-.26	.24	3.74**
	Father			
	Child's Age	.34*		
Peer acceptance (Child rating) ( $n = 45$ )	Psych. state	.27		
	Social support	-.06		
	FILE (Family stress)	.24		
	PARQ (Parenting style)	.09	.10	1.88

Migrant Child

Table 6. Continued

	Predictors	$\beta$	$R^2$	$F$
Peer acceptance (Teacher rating) ( $n = 41$ )	Mother			
	Psych. state	-.21		
	Social support	.41		
	FILE (Family stress)	.13		
Peer acceptance (Teacher rating) ( $n = 38$ )	PARQ (Parenting style)	.24	.11	2.27
	Father			
	Psych. state	.23		
	Social support	-.21		
Peer acceptance (Teacher rating) ( $n = 38$ )	FILE (Family stress)	.24		
	PARQ (Parenting style)	-.07	.04	1.35

\*  $p < .05$ . \*\*  $p < .01$ .

parenting style and father parenting style were .4 ( $p = .08$ ) and .20 ( $p = .13$ ), respectively.

Father social support was also a significant predictor of teacher's ratings of behavior problems. However, unlike the mother's ratings of behavior problems, social support for fathers was negatively associated with behavior problems at school. The more social support the father reported, the fewer problems the teacher reported. The correlation between mother report and teacher report was nonsignificant, but it was in the negative direction ( $r = -.21$ ).

Mother's social support significantly predicted perceived peer acceptance with greater social support being associated with greater perceived peer acceptance. The equation with the father variables was not significant and none of the multiplicative effects was significant for either mother or father. Mother and father variables did not predict a significant amount of the variance for the McCarthy General Cognitive Index and the teacher rating of peer acceptance. The equation for the McCarthy Cognitive Index was significant due to the inclusion of age in the equation.

## DISCUSSION

The purpose of this study was to investigate parental factors correlated with child developmental outcomes among Mexican-American migrant Head Start children. Parental factors (psychological state, social support, family stress, and parenting style) were those thought to contribute to developmental outcomes in children (behavior, cognitive development, and peer acceptance). Parenting style was a significant predictor of mothers reporting child behavioral problems. The less accepting the mother and father, the likelier



the mother was to identify behavioral problems in her child. This finding was surprising in view of the importance that Mexican American families place on their children. In general, Mexican American parents tend to be nurturing, permissive, and indulgent with their young children (Zuniga, 1992). However, it is also true that in a more traditional Mexican American culture, in particular, adherence to convention, respect for authority, and identity with the family are also stressed (Romero, 1983). Children are expected to accept responsibility within the family at an early age. For poorer families the need to survive may demand that all members contribute to the good of the family (Zuniga, 1992). If children act independently at home, the mother may perceive such behavior as problematic.

On the other hand, poverty in combination with ongoing problems in life conditions, such as those migrant mothers experiences, has also been associated with maladaptive responses of mothers to children (Lempers, Clark-Lempers, & Sincons, 1989; McLoyd & Wilson, 1991). Poor mothers tend to make greater demands on their children emphasizing obedience and socially appropriate behavior and immediate compliance on the one hand while curtailing warmth and responsiveness and engaging in more critical behavior (McLoyd, 1990; Zelkowitz, 1982). This may sensitize the mother to disproportionately attending to child behaviors perceived as non-compliant and negative.

Numerous studies have found that as a family's economic circumstances worsen, parents exhibit less nurturance and more inconsistent discipline (Conger et al., 1984). Problems associated with a poor living environment, marital and parental status, physical health, mental health, age, intimate relationships, lack of education, and low socioeconomic status negatively affect parenting (Colletta, 1981; Makosky, 1982; Siantz, 1990a; Zuravin, 1989). It may be that in allocating scarce resources of time and energy, low-income mothers give precedence to the provision of basic needs like food, clothing, and shelter. This may leave little time or personal resources to respond to attention seeking behavior or to engage in positive interaction with her children (McLoyd, 1990; Zelkowitz, 1982).

Education rather than culture has also been associated with differences in maternal interaction among Mexican American mothers. The parents in the present study averaged 7.5 years of education. Laosa (1978; 1980) found that mothers who had received more formal education used inquiry and praise more often than mothers with less education. In comparison with Anglo mothers, Mexican American mothers used modeling, visual cues, directives, and negative physical control more frequently but praise and inquiry less often (Laosa, 1980). These differences disappeared when the mother's or father's schooling levels were statistically controlled. It may be that the educational level of these migrant parents also influenced their parenting style.

A relationship between parental social support, child's peer acceptance, and behavior at school was also found in the present study. Mothers who

experienced social support were more likely to have children who reported more peer acceptance. Previous research has found that satisfaction with emotional support is associated with positive mother-child communication (Weintraub & Wolf, 1983). This in turn may increase the mother's ability to give effective directions to the child and the child to conform to rules (Weintraub & Wolf, 1983). A child who has the opportunity to learn and master verbal and instrumental strategies may be more likely to develop and maintain positive peer interaction (McLoyd, 1990).

Unexpectedly, when fathers experienced social support, mothers were more likely to report behavior problems in their children while teachers were less likely to report behavior problems. Maternal reporting of behavioral problems may have been due to the fathers need to seek support outside the home and thus have less time to contribute to the family at home. For low-income mothers, in particular, support provided by spouse seems to be negatively associated with maternal restrictiveness and punishment (Colletta, 1981; Siantz, 1990a).

For Mexican American migrant mothers, husbands are an important source of emotional support providing companionship, affection, and intimacy (Siantz, 1990a; 1990b). Studies have found that fathers who are emotionally supportive of their wives and involved with their children enhance their wives' feelings of maternal competence and increase their wives' enjoyment in and responsiveness to their children (Belsky, 1984; Colletta, 1981; Zuravin & Longfellow, 1982). It may be that perceiving a lack of support from husbands who are absent, hopelessness may be intensified, as Hashima and Amato (1994) found in their study. Feeling abandoned and isolated, the mother may be less likely to initiate nurturant interactions with her children. She may be less aware of her children's needs except when they are misbehaving (Hashima & Amato, 1994).

Other studies have documented the general effects of isolation upon persons belonging to low socioeconomic and minority groups. In general, such individuals are more likely to experience stress because they are unlikely to have substitute sources of support in times of need (Salgado de Snyder, 1986; Vega & Kolody, 1985; Vega, Kolody, Valle, & Hough, 1986). In a study of the impact of poverty and social support on parental behavior, Hashima and Amato (1994) found that the greater the number of people parents felt they could rely on for support, the less likely they were to report problematic behavior among their children.

Father's absence from the home may be due to cultural and gender-role differences. Mexican American traditional values place primary responsibility for child care with the mother and place the father as head of the house. As previously reported, the majority of the respondents (70%) were born in Mexico and were Spanish speaking (63%), with traditional family role expectations likely. Seeking support away from home may be a cultural response, since more traditional

social support outside the home. It may be that these fathers also perceive an inconsistency between the family's expectations of their involvement and the ridicule and stigma from friends and members of their peer groups for being active in family work. Effort expended in home life may be considered like energy taken from their primary role as the breadwinner and an indicator of failure as the provider and head of the family (Zuniga, 1992).

Gender differences may also exist in available support for mothers and fathers. Roberts (1986a) has found gender differences in parental support with mothers seeking support from extended family members and fathers seeking support outside this circle. This may also be occurring among migrant fathers.

Finally, the differences in the reporting of behavior problems between the teacher and the mother may be due to the child's adherence to convention and respect for authority, values that are emphasized in the traditional Mexican American home. Such values include respect for elders and good behavior outside the home resulting in a child who is "*una persona bien educada*" (well mannered) (Zuniga, 1992). The child may sit quietly to avoid any negative interaction with the teacher and seek the teacher's approval. Having to turn to a mother that focuses on negative behavior, the child may not want to further aggravate or embarrass his mother with his or her behavior outside the home.

Several limitations exist in this study. First, the sample size limited the ability to consider complex, nonlinear relationships between variables especially since nonlinearity is characteristic of behavioral systems with strong maturational components (Roberts, 1986b). This study was correlational rather than longitudinal, and only allowed the investigation of the major variables and their relationships at one point in time. Questions related to gender differences were not considered because of the sample size. Questions related to gender differences will need to be studied in future research. Finally, the amount of explained variance in the dependent variables (behavior problems and peer acceptance) was small.

Three conclusions may be drawn from this study. First, the findings of the present study underscore the importance of parenting style and parental social support to children's peer acceptance and behavior. Second, migrant fathers and mothers have different sources of support within and outside the family. Fathers, in particular, seek support outside the home, while mothers look to their spouse. Third, migrant mothers and teachers have contrasting views of a migrant child's behavior which may be due to differences in behavior that the child exhibits at home or at school. Feeling overlooked at home, the child may misbehave to seek maternal attention. On the other hand, he or she may behave in school out of respect for the teacher and to comply with rules. Such behavior is expected by traditional Mexican families of their children when outside their home.

The findings further suggest the importance of identifying mothers and fathers who are isolated or lack access to spouse, partner, family, and friends. Inaccessibility to supportive individuals, in combination with consequent isolation could have deleterious effects on their children's behavior at home and at school.

*Social Policy Implications.* It is reasonable to assume that among Mexican American migrant farmworker families, as with other poor families, the stress that they experience from poverty affects their parenting which in turn affects their children as well. Parents have an important role in mediating the effects of poverty and stress in the lives of their children (Garmezy, 1985; Garmezy, 1987; Garmezy, Masten, & Tellegen, 1984; Garmezy & Tellegen, 1984; Rutter, 1979, 1990). Therefore, it is crucial for the Migrant Head Start program to identify isolated mothers and fathers who are most at-risk, as well as, providing all migrant parents with culturally sensitive, social and emotional support. Such action will not only directly help parents, but indirectly prevent or alleviate potential behavioral, and social problems their children may experience.

It has been documented that successful programs place the child in the context of the family and the family in the context of its surroundings. Such programs offer flexible services from individuals who care and respect those they serve (Schoor, 1991). The Migrant Head Start program has provided and must continue to provide a crucial ongoing source of support to migrant families and their children where and when they are most needed, during the harvest season and in their home states.

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