Psychology of Women Quarterly, **21** (1997), 247–263. Printed in the United States of America.

MOTHER, CHILD, AND FAMILY FACTORS RELATED TO EMPLOYMENT OF SINGLE MOTHERS WITH LBW PRESCHOOLERS

JoAnne M. Youngblut, Lynn T. Singer,
Elizabeth A. Madigan, and Leslie A. Swegart
Case Western Reserve University

Willard L. Rodgers
University of Michigan

The purpose of this study was to identify maternal, child, and family factors related to the employment status and employment history of single mothers of low-birth-weight (LBW) and full-term preschoolers. A sample of 121 female-headed, single-parent families with 3-, 4-, and 5-year-old LBW and full-term children was recruited through admission records to three Level III neonatal intensive care units (NICUs) and birth records of two normal newborn nurseries. Results show that the birth of an LBW infant was not related to employment status, number of hours employed per week, or employment history for single mothers. Employed mothers had significantly more education and more positive attitudes toward employment. Controlling for other factors, never being married, and having more children, more federal income, and less positive employment attitudes were predictive of nonemployment. Both employed and nonemployed women expressed preference for employment.

Single-parent families, especially those headed by women, are a growing segment of American society. According to the U.S. Bureau of the Census

This study was supported by grant #R01 NR02707 from the National Institute of Nursing Research and the Office of Research on Women's Health, National Institutes of Health.

Address correspondence and reprint requests to: JoAnne M. Youngblut, Frances Payne Bolton School of Nursing, Case Western Reserve University, 10900 Euclid Avenue, Cleveland, OH 44106-4904. E-mail: jmy3@po.cwru.edu

(1992), the number of female-headed, single-parent families with children under 18 years of age increased by 25% from 1980 to 1991; 60.2% of African American children, 24.2% of Hispanic children, and 12.8% of White children under 6 live in a female-headed, single-parent family. Health insurance and many financial benefits are tied to employment and may be in jeopardy if the mother is not employed; only 48.8% of never-married mothers with children under 6 years old are employed as compared to 59.9% of married mothers and 59.8% of separated, widowed, or divorced mothers with children under 6 years of age (U.S. Census Bureau, 1992). Although many studies have identified factors related to employment in married mothers, few have studied factors related to employment of single mothers. Thus, the purpose of this study was to describe the relationship of selected mother, child, and family factors to the employment status of single mothers with term and preterm preschoolers.

In her study of single mothers receiving Aid to Families with Dependent Children (AFDC), Chrissinger (1980) found that mothers employed for up to 18 of the previous 36 months (low-employment group) were less knowledgeable about the amount of income they could earn without affecting their AFDC support than mothers employed for more than 18 of the previous 36 months (high-employment group). Low- and high-employment mothers were similar on education, use of Medicaid and food stamps, enrollment in job-training programs, and possession of job skills, and they held equally positive attitudes toward employment. Although the number of children and age of the youngest child were similar, age of the oldest child covered by AFDC was higher in high-employment families.

In studies of single and married mothers, single mothers were more likely to be employed when they had more education (Mauldin & Meeks, 1990). Race has also been related to employment status, with single Black mothers less likely to be employed than single White mothers (Klerman & Leibowitz, 1994). The longer White women were single mothers, the longer they were employed mothers; this was not true for African American women (Shapiro & Mott, 1994). Amount of nonearned income and age of the youngest child did not significantly influence employment status for single mothers (Mauldin & Meeks, 1990). Although married mothers were more likely to be working at 3 and 24 months postpartum than single mothers (Leibowitz, Klerman, & Waite, 1992), single employed mothers worked more hours per day than married employed mothers (Mauldin & Meeks, 1990).

In studies of married mothers, the woman's age, education, and race have been related to employment. Klerman and Leibowitz (1994) found that older and better educated mothers were more likely to be at work within the first 3 months of their baby's birth than younger and less educated mothers; greater wages for their own work also increased the likelihood of mothers being employed (Klerman & Leibowitz, 1994; Leibowitz et al., 1992). In a sample of mothers with teenagers, Shapiro and Mott (1994) also found that as maternal education increased, the proportion of time employed since becoming a mother

and the number of weeks employed in the preceding year increased. In their sample of two-parent families with 3-month-old preterm infants, however, Youngblut, Loveland-Cherry, and Horan (1990) found no differences between employed and nonemployed mothers on maternal age or education.

Race has been found to have little independent effect on employment status (Leibowitz et al., 1992), but it has shown an interaction effect with mothers' age and education, and husbands' employment attitudes. Employed, married, African American mothers were younger than employed, married, White mothers; however, African American mothers were younger at the birth of their first child than White mothers (Avioli, 1985). Yoon and Waite (1994) found that African American mothers with some college education were more likely to return to work after the birth of their first child than African American mothers with high school or less education; differences in education were not significant for employed and nonemployed White and Mexican-origin mothers. Husbands' attitudes were related to employment status for White mothers, but not for African American mothers (Avioli, 1985).

Attitudes toward employment and employment history have also been related to employment for married mothers. In Youngblut et al.'s study (1990) of two-parent families with 3-month-old preterm infants, employed mothers held more positive attitudes toward employment but reported less choice and satisfaction with their employment decision than nonemployed mothers. These attitudes did not change significantly over a 15-month period (Youngblut, 1995). At 1 year postpartum, Amstey and Whitbourne (1988) found that full-time employed mothers held more positive attitudes toward employment and were more likely to see their employment as a career than part-time employed and nonemployed mothers. In Symons and McLeod's study (1994), home-preference nonemployed mothers of healthy infants were more anxious about employment-related separations than employed mothers regardless of preference. In addition, employed mothers who had planned to return to work postpartum had higher autonomy scores than employed mothers who had planned to stay home.

In a sample of Australian couples, Cotton, Antill, and Cunningham (1989) found that mothers employed at least 10% of the time since their child's birth cited both financial and nonfinancial reasons for employment. However, mothers employed less than 10% of the time said that only financial reasons would draw them into the workforce; some husbands reported not allowing their wives to work.

Mothers with a history of employment were more likely to be employed at the time of study. Youngblut et al. (1990) found that married mothers who were employed 3 months after their preterm infant's birth were more likely to have been employed prenatally and to have worked more hours per week than nonemployed mothers. Joesch (1994) found that women with healthy infants returned to paid work earlier if they were employed during pregnancy. Avioli (1985) found that employed married mothers were more likely to have prior work experience and to plan to work in the future than nonemployed married mothers.

Few researchers have investigated the relationship between characteristics of the children in the family and the mother's employment status. Youngblut et al. (1990) found no differences on preterm infant morbidity at birth (gestational age, birth weight, and length of neonatal intensive care unit [NICU] stay) or after discharge from the NICU (use of an apnea monitor, number of illnesses, and mothers' ratings of their infants' health) across employment groups. Symons and McLeod (1994) found no differences in mothers' ratings of their infants' temperament at 3 and 6 months across four employment preference by employment status groups, although employed mothers who had planned to be employed reported a significant decrease in their infants' unpredictability from 3 to 6 months of age. On the other hand, Volling and Belsky (1993) found that 1-year-old infants with full-time employed mothers who had planned to return to work scored lower on orientation to social and auditory stimuli measured within 10 days of birth than 1-year-olds with nonemployed mothers who had planned not to be employed.

The influence of number and ages of children in the family on employment status varies. In one study, women with fewer children were more likely to be employed by 3 months postpartum (Klerman & Leibowitz, 1994). In another, the number of children in the family was negatively correlated with number of weeks employed in the previous year for married African American women but not for married White women (Shapiro & Mott, 1994). Higher age of the youngest child was related to greater likelihood of being employed for married mothers of preschoolers (Eggebeen, 1988; Molm, 1978) and for married White women (Shapiro & Mott, 1994). Controlling for various financial indicators, however, Joesch (1994) found no effect of number, spacing, or age of children on mothers' employment.

Financial factors have been related to employment status in several studies. Joesch (1994) found that mothers with higher income from sources other than their own work were less likely to be employed, independent of race. Lower income by husbands has been associated with wives' employment (Eggebeen, 1988) and with more weeks employed in the previous year for White mothers, but not for African American mothers (Shapiro & Mott, 1994). In one study, however, African American mothers who reported having income from other than their own employment returned to work sooner than African American mothers without such outside income; availability of other sources of family income was not related to employment for White and Mexican-origin mothers (Yoon & Waite, 1994).

In summary, a variety of individual and family factors have been related to employment status of married mothers with healthy and LBW children and single mothers with healthy children. The aims of this research were to explore differences in child, mother, and family factors for employed and nonemployed single mothers of LBW and full-term preschool children and to describe the relationships between the mother's employment status and characteristics of the preschool child, the mother, and the family. The data are from a longitudinal study of both female-headed single-parent families and two-parent families

with low-birth-weight (LBW) and full-term children who were 3, 4, or 5 years of age.

METHOD

Sample

Female-headed, single-parent families ($N = 121$) were recruited into six gestational age (LBW vs. full-term) by chronologic age (3, 4, or 5 years old) cohorts, resulting in 20 families in each of the three LBW cohorts, 21 in the 3-year-old full-term cohort, and 20 in each of the 4- and 5-year-old full-term cohorts. Families with LBW preschoolers were identified from the admission records of three Level III neonatal intensive care units; families with full-term preschoolers were identified from birth records of two normal newborn nurseries. Single-parent families were eligible if the mother had not lived with a man in the father role for at least 6 months prior to recruitment. In five families, the index child was being raised by a single woman other than the birth mother (one adoptive mother, two grandmothers, and two foster mothers). In each case, the child had lived with the family for most of the child's life and the woman was performing the role of "mother" to the child. Thus, these women are referred to here as "mothers."

Inclusion criteria for the LBW child in the family were: birth prior to 36 weeks gestation, birth weight less than 2,500 grams, weight appropriate for gestational age, and hospitalization for at least 1 week in a Level III NICU. Inclusion criteria for the full-term child in the family were: birth between 38 and 42 weeks gestation, discharged home with the mother after birth, and without preterm siblings born within 10 years of the study child's birth. For all cohorts, children with more than a 2-year developmental delay were excluded.

Mothers ranged in age from 19 to 48 years ($M = 29.5$, $SD = 6.5$). Eighty (66.1%) mothers were African American, 39 (32.2%) were White, and 2 (1.7%) were Hispanic. Twenty-eight (23.1%) mothers had not completed high school, 42 (34.7%) mothers had completed high school, and 51 (42.1%) had additional education beyond high school (45 [37.2%] with some college, vocational-technical, or associate degree, and 6 [5%] with bachelor's degrees). Race and education were related, χ^2 (2, $N = 121$) = 12.6, $p < .01$. More White mothers and fewer African American mothers than expected from the marginal distribution had not completed high school, but the number of each race that had additional education equalled the expected frequency.

Most of the women ($n = 85$, 70.2%) had never been married; 35 (29%) were divorced or separated, and 1 had been widowed. The average length of time of single motherhood was 6.1 years ($SD = 4.95$); 56 (46.3%) had been single since the study child's birth. Number of children ranged from 1 to 7, including the study child, ($M = 2.5$, $SD = 1.44$). Six (5%) women shared custody of the

study child with the father; 3 (2.5%) did not report custody arrangements; 112 (92.5%) had sole custody.

At the time of the study, 34 (28.1%) women were employed, 27 full time (≥ 30 hours/week) and 7 part time (<30 hours/week), for an average of 34.3 (SD = 10.23) hours per week. Sixty one women (50.4%) had been employed for some period of time since the child's birth, being employed for an average of 48% (SD = 34%) of the child's life. Women's self-reported "usual" occupations were classified as homemakers (42.2%); unskilled (7.4%), skilled, or semiskilled (19.8%); clerical or sales (14.1%); and professionals (16.5%), based on Hollingshead's (1975) classifications. Annual income from employment varied widely, though a majority (66.1%) of the women reported an employment income of less than $3,000 for the previous year. Most of the women (78.5%) also reported receiving income other than from their own employment. These sources of support included AFDC or "welfare" (52%), child support (15.7%), Social Security Income (7.4%), both AFDC and child support (1.7%), and relatives (1.7%). Total family income was less than $10,000 for 83 families, $10,000–$20,000 for 20 families, $20,000–$30,000 for 8 families, and over $30,000 for only 5 families. Five families did not report total family income. Thus, the sample was comprised of primarily low-income families.

The sample included 64 male (52.9%) and 57 female (47.1%) children; 54 (44.6%) were first borns. Birth weight ranged from 470 to 2,460 g for the LBW group (M = 1,444; SD = 527.2); 12 (20%) were extremely LBW (<1,000 g), 23 (38.3%) were very LBW (1,000–1,499 g), and 25 (41.7%) were LBW (1,500–2,500 g). Birth weight for the full-term group ranged from 2,515 to 4,965 g (M = 3,331; SD = 514.2). The mean gestational age was 30.5 weeks (SD = 3.17, range 24–35) for the LBW children, and 39.6 weeks (SD = 1.60, range 36–42) for the full-term children. Thus, birth weight and gestational age reflected study inclusion criteria. The LBW children had an average NICU stay of 46.1 days (SD = 33.34). Few preschoolers had experienced complications of prematurity. Thirteen had had an intraventricular hemorrhage; 10 of these were Grade I, and there was one child each with Grades II, III, and IV. Two children had cerebral palsy and two had bronchopulmonary dysplasia.

Instruments

Past and Current Employment

Mothers identified their employment status as either not employed, employed full time, or employed part time, and indicated the number of hours per week they currently worked. In addition, mothers provided detailed descriptions of their employment since the study child's birth, including when they began employment after the child's birth, the jobs they had held, the months they started and stopped each job, and the number of hours per week employed in each job, on a Life History Calendar (LHC) (Freedman, Thornton, Camburn, Alwin, & Young-DeMarco, 1988). Validity and reliability of the LHC is enhanced through the use of memory cues, relating one event to other events

that occurred at about the same time. When data obtained in 1980 about the respondent's current situation were compared with data obtained retrospectively with the LHC in 1985 ($N = 900$), agreement ranged from 72% to 92% (Freedman et al., 1988). The LHC constructed for the current study contained five segments (years), each with 12 blocks (months). Major life events, such as residential moves, births, deaths, and hospitalizations of the study child, were also recorded to aid the mother's memory. Recording began with the month and year of the study child's birth.

Attitudes Toward Employment

The Attitudes Toward Working Women Scale (ATWW) (Tetenbaum, Lighter, & Travis, 1981) has 45 items that mothers rated on a 7-point Likert scale, ranging from 1 = *disagree strongly* to 7 = *agree strongly.* The total score is derived by adding responses to 31 of the 45 items, with lower scores indicating more positive attitudes toward employment of women. Validity of the scale is supported by findings that women who belonged to the National Organization for Women (NOW) scored significantly lower than Right-to-Life women, and employed women had significantly more positive attitudes than nonemployed women (Tetenbaum et al., 1981). Tetenbaum et al. (1981) reported a Cronbach's alpha of .94 for females; alpha for the current study was .93.

The Home/Employment Orientation Scale (HEO) (Youngblut et al., 1990) measures mothers' attitudes toward their own employment with eight items rated on a 5-point Likert scale, ranging from 1 = *strongly disagree* to 5 = *strongly agree.* Higher scores indicate a stronger employment orientation. Validity of the scale is supported by the finding that employed mothers had higher HEO scores than nonemployed mothers, and the number of hours employed per week was positively correlated with HEO scores (Youngblut et al., 1990). Cronbach's alphas ranged from .80 to .85 in previous studies of families with preterm infants (Youngblut, 1995; Youngblut et al., 1990), and it was .73 in this study.

Maternal Employment Attitude–Behavior Consistency

A computed discrepancy score was used to measure consistency. Mothers indicated the number of hours per week they would prefer to work outside the home. Consistency scores were then computed by subtracting the actual number of work hours from the preferred number of work hours and taking the absolute value. Higher scores indicate greater attitude–behavior inconsistency.

In addition, three visual analog scales (VAS) were used to measure the mother's degree of choice, satisfaction, and stress regarding her employment status. Each 13-cm horizontal line had semantic anchors at the ends of the scale, but no hash marks or words between the anchors. The lines were anchored *no choice* to *totally my choice, not at all satisfied* to *totally satisfied,* and *not at all stressful* to *extremely stressful,* respectively. The validity of the choice and satisfaction items is supported by the finding that choice and satisfaction were positively correlated with measures of joy and contentment and negatively correlated with measures of depression and hostility (Youngblut & Casper,

1993). Mothers responded to the three VAS at the beginning and end of the interview to assess test–retest reliability; correlations for the two responses ranged from .86 to .90, indicating considerable stability.

Procedure

The study was approved by the appropriate Human Subjects Review committees at the university and each of the three hospitals. A systematic random sample of full-term families and all LBW families were sent a letter that briefly described the study. An interviewer then contacted the family to screen for inclusion criteria, answer questions, and schedule a data-collection visit. Data were collected during a 2.5-hour home visit as part of a battery of interview and parent self-complete instruments (1.5 hours) and developmental testing (1 hour) for the larger study. Interviewers offered to read self-complete instruments to parents and encouraged them to take short breaks as necessary. Response rates for the single- and two-parent families could not be calculated separately because of the recruitment procedure. Of the 998 families contacted prior to completion of the single-parent sample and eligible to participate, 597 participated, 116 agreed to participate but either could not be scheduled or the appropriate cohort was full, and 285 declined, yielding a "willing-to-participate" rate of 71%.

RESULTS

Differences in child characteristics except neonatal morbidity were tested with two-way analysis of variance (ANOVA); comparisons of gestational age, birth weight, and length of NICU stay were done for the LBW employed-mother and nonemployed-mother groups with two-sample *t*-tests (see Table 1). There were main effects of gestational status and employment status on the number of child hospitalizations and of gestational status on number of days hospitalized. None of the interaction effects were significant. LBW preschoolers were hospitalized more times and for more days than full-term preschoolers. Preschoolers with employed mothers were hospitalized more often than preschoolers with nonemployed mothers; although the number of children with health problems was not related to mothers' employment status, χ^2 (1, $N = 121$) = .85, p = n.s. Comparisons of birth order and proportion of the child's life with a single mother were not significant.

Gestational status was not related to employment status. LBW preschoolers in the employed- and nonemployed-mother groups did not differ significantly on gestational age, birth weight, or number of days in the NICU (see Table 1). There were 17 employed mothers in both the LBW and the full-term groups. Mothers of LBW and full-term preschoolers had returned to work at similar times postnatally, were employed for a similar number of hours per

Table 1

Characteristics of the Study Children by Maternal Employment Status

	Group				*Main Effects*		*Interaction Effects*
Characteristic	*EM*[a] *LBW* (n = *17*) M (SD)	*NEM*[b] *LBW* (n = *43*) M (SD)	*EM Full Term* (n = *17*) M (SD)	*NEM Full Term* (n = *44*) M (SD)	*Employment Status* F	*Gestational Status* F	F
Birth order	1.9 (1.63)	2.0 (1.10)	1.8 (.97)	2.3 (1.20)	1.42	.11	.61
Proportion of life with single mother	.87 (.25)	.89 (.26)	.83 (.26)	.89 (.23)	.68	.12	.10
Hospitalizations	1.94 (4.26)	.62 (.94)	.19 (.40)	.14 (.35)	3.80*	10.10**	3.29
Days hospitalized	33.4 (89.55)	9.7 (23.73)	.94 (2.38)	.93 (2.72)	2.46	7.43**	2.46
Gestational age[c]	30.5 (3.20)	30.5 (3.20)	NA	NA	.004		
Birthweight[c]	1565.8 (590.27)	1395.9 (499.36)	NA	NA	1.28		
Days in NICU[c]	44.7 (40.14)	46.6 (31.04)	NA	NA	.72		

[a] Employed.
[b] Nonemployed.
[c] Comparison for LBW families only with *t*-tests.
* $p < .05$, ** $p < .01$.

Table 2

Differences Between LBW and Full-Term Families on Employment History Variables

Characteristic	*LBW Families* (n = *60*) M (SD)	*Full-Term Families* (n = *61*) M (SD)	t *value*
Hours mother currently employed per week:			
All mothers	9.9 (16.85)	9.5 (16.12)	.14
Employed mothers only[a]	34.4 (11.57)	34.1 (9.05)	.08
Child's age when resumed employment (months)[b]	15.2 (17.91)	17.4 (16.30)	.49
Proportion of life spent in employed-mother family	.27 (.37)	.22 (.32)	.78

[a] *n*'s = 17, 17, respectively.
[b] *n*'s = 33, 26, respectively.

week at the time of the survey, and spent a similar proportion of their children's lives as an employed mother (see Table 2).

Using two-way ANOVA to compare mother and family variables, significant main effects of employment status, but not gestational status, were obtained for mothers' education and employment attitudes (see Table 3). None of the interaction effects were significant. Employed mothers had significantly more education, less income from external sources, and more positive attitudes toward employment than nonemployed mothers. In addition, employed mothers reported greater satisfaction and less inconsistency between employment attitudes and behaviors than nonemployed mothers. Employment status was not related to mothers' race (White versus African American/Hispanic) or marital status category (never married versus separated, widowed, or divorced), χ^2 (1, N = 121) = .72 and 2.95, respectively, *ps* = n.s.

Relationships among the employment-related variables and between these variables and selected child and mother variables were explored (Table 4). Greater number of hours currently employed was related to greater proportion of the child's life as an employed mother, less inconsistency between actual and desired employment, higher maternal education, less income from external sources, more positive attitude toward employment, more satisfaction with employment status, and a higher number of hospital admissions for the study child. Greater proportion of the child's life as an employed mother was related to less inconsistency, higher maternal education, less income from external sources, more positive attitudes toward employment, greater satisfaction with employment status, and higher birth order for the study child. Beginning employment sooner after the study child's birth was associated with being employed for a greater proportion of the child's life. Less inconsistency was

Table 3

Characteristics of the Mother and Family by Maternal Employment Status

	Group				*Main Effects*		*Interaction Effects*
Characteristic	*EM LBW* (n = 17) M (SD)	*NEM LBW* (n = 43) M (SD)	*EM Full-Term* (n = 17) M (SD)	*NEM Full-Term* (n = 44) M (SD)	*Employment Status* F	*Gestational Status* F	F
Mother's age	32.1 (5.14)	29.0 (7.30)	29.8 (5.93)	29.0 (6.31)	2.21	.77	.68
Mother's education	4.8 (.90)	4.1 (.82)	4.6 (.86)	3.9 (.94)	15.10**	.83	.06
Number of children	2.3 (1.95)	2.7 (1.38)	2.0 (1.06)	2.7 (1.39)	3.56	.11	.27
Years single mother	5.4 (3.95)	6.6 (5.73)	4.6 (2.97)	6.4 (5.08)	2.10	.21	.09
Income from external source	2.0 (1.27)	2.5 (1.50)	1.9 (2.05)	2.7 (1.52)	4.25*	.04	.14
ATWW	106.4 (40.99)	125.4 (34.87)	100.6 (21.01)	130.4 (30.42)	13.39**	.004	.67
HEO	24.8 (5.75)	23.9 (6.78)	27.6 (6.14)	24.4 (6.25)	2.25	2.12	.69
Choice	7.5 (4.95)	5.8 (4.94)	6.4 (4.44)	6.6 (4.87)	.60	.05	.88
Satisfaction	7.6 (3.63)	3.1 (3.89)	7.4 (3.53)	4.5 (4.00)	22.22**	.54	.98
Stressfulness	7.6 (4.05)	5.7 (4.64)	6.3 (3.86)	5.6 (4.16)	2.19	.65	.50
Inconsistency	10.6 (6.50)	25.6 (12.50)	8.4 (6.44)	26.2 (13.81)	46.88**	.12	.38

* $p < .05$, ** $p < .01$.

Table 4

Relationships Between Employment-Related Variables and Selected Mother and Child Variables

Variables	*Hours Currently Employed*	*Proportion Child's Life As Employed Mother*	*Child's Age When Employment Resumed*	*Inconsistency*
Hours currently employed	1.00			
Proportion child's life with employed mother	.64**	1.00		
Child's age when resumed employment	−.12	−.55**	1.00	
Inconsistency	−.51**	−.34**	.01	1.00
Mother's age	.11	−.05	.03	−.15
Mother's education	.29**	.32**	−.06	−.15
Income from external sources	−.22*	−.35**	.15	.20*
Proportion child's life as single parent	−.09	−.13	.11	.11
ATWW	−.38**	−.30**	.01	−.03
HEO	.18	.08	.28	.21
Choice	.07	.13	−.08	−.22*
Satisfaction	.40**	.33**	−.09	−.47**
Stressfulness	.15	.13	.03	.01
Birth weight	.02	−.06	−.03	−.003
Gestational age	−.01	−.05	−.08	.02
NICU length of stay	−.07	.03	.10	−.03
Child's current age	.12	.12	.23	.06
Birth order	−.10	−.29**	.16	.05
Number hospital admissions	.25**	−.06	.25	−.06
Number of days hospitalized	.01	−.09	.17	.01

* $p < .05$, ** $p < .01$.

related to more hours currently employed, greater portion of the child's life as an employed mother, less income from external sources, and greater choice and satisfaction with employment status.

Logistic regression was used to examine the effects of selected variables on employment status, controlling for the other variables in the equation (see Table 5). Two cases (both foster mothers) were deleted because of extreme standardized residuals. More positive attitudes toward working women and fewer children were significant predictors of employment ($p < .05$). When amount of nonearned income from federal sources was added to the equation, more positive attitudes toward working women, fewer children, marital status as separated/widowed/divorced, and less federal income were significant predictors of employment. In addition, the proportion of correctly classified mothers, controlling for chance, was greater. Because other investigators have found

Table 5

Regression of Employment Status[a] on Selected Mother and Child Variables

Independent Variables	*b*	*b*
Mother's age	.09	.11
Mother's education	.51	.47
Mother's race	.91	.85
Marital status category	−.86*	−1.12**
Number of children	−1.72***	−1.74***
Nonearned income from private sources	.22	−.16
Proportion of child's life as single parent	.92	.98
Attitudes Toward Working Women Scale	−.04***	−.03**
Home/Employment Orientation Scale	.04	.06
LBW vs. full-term group	.46	.49
Number of hospital admissions	.79	.64
Nonearned income from federal sources	—	−1.11***
Log odds	65.75	54.54
Model χ^2	58.01***	11.21***
Tau[b]	.810	.867

[a] Nonemployed = 0, employed = 1.
[b] Proportion of cases correctly classified, correcting for chance.
* $p = .06$, ** $p < .05$, *** $p < .01$

different results based on race, these regressions were run again with only the African American mothers ($n = 79$). Results were similar. Women with fewer children and a more positive attitude toward working women were more likely to be employed, but when nonearned income from federal sources was included in the equation, federal income and number of children were the only significant predictors. These analyses were not run with the White mothers because of their small number ($n = 38$).

Effects of mother, child, and family variables on attitude–behavior inconsistency were explored with hierarchical multiple regression (Table 6). Variables not describing employment were entered in the first stage, employment attitudes in the second stage, and employment behavior in the third stage. The first-stage regression was not significant, precluding interpretation of the significant slope coefficients. In the second stage, greater income from federal sources and stronger employment orientation were significant predictors of greater attitude–behavior inconsistency. With addition of number of hours employed, the effect of federal income became nonsignificant, leaving only attitudes and behavior as significant predictors of consistency. Greater inconsistency was related to a more positive attitude toward working women, stronger employment orientation, and fewer hours employed per week.

Table 6

Regression of Inconsistency on Selected Mother and Child Variables

Independent Variables	β	β	β
Study child's age	.05	.03	.08
Mother's age	−.20	−.16	−.11
Mother's education	.008	−.03	−.03
Mother's race	.03	.06	−.10
Marital status category	−.10	−.06	.07
Proportion of child's life as single parent	.03	.03	.05
Number of children	.11	.08	−.06
Nonearned income from private sources	.13	.14	.13
Nonearned income from federal sources	.32**	.37**	.18
LBW vs. full-term group	.09	.13	.07
Number of hospital admissions	−.10	−.12	.05
Attitudes Toward Working Women	—	−.03	−.20*
Home/Employment Orientation Scale	—	.23*	.23*
Number of hours employed per week	—	—	−.61**
F	1.67	1.94*	4.65**
Adjusted R^2	.07	.11	.34

* $p < .05$, ** $p < .01$.

DISCUSSION

In this sample, the health-related characteristics of the child had little effect on the mother's employment status. Mothers with LBW preschoolers were just as likely to be employed as mothers with full-term preschoolers. As in a previous study (Youngblut et al., 1990), neonatal morbidity indicators did not distinguish between employed- and nonemployed-mother groups. Number of health problems was not related to employment status; however, preschoolers with employed mothers were hospitalized more often than preschoolers with nonemployed mothers. One possible explanation for this finding is that children of employed mothers are exposed to more illnesses because they are with other children during the mother's work hours; it is equally possible that mothers are more likely to be employed when their children experience numerous hospitalizations in order to pay for the illness care and other expenses associated with hospitalization. Insurance coverage may also be a compelling motivation, as it is frequently linked to employment and may be difficult to obtain once significant illness risk is established.

Consistent with several previous studies of single mothers (Mauldin & Meeks, 1990) and married mothers (Klerman & Leibowitz, 1994; Leibowitz et al., 1992; Shapiro & Mott, 1994), employed mothers were more educated than nonemployed mothers. Although it is possible that education increases the desire to work and perhaps the mother's confidence in the workplace, it is likely that greater education also allows mothers to obtain jobs that pay enough

for them to meet the additional expenses incurred because of employment, including child care, transportation, and clothing.

Mothers who had never been married were less likely to be employed than mothers who were separated, widowed, or divorced. This is consistent with the proportions of employed mothers by marital status in the U.S. census data (U.S. Bureau of the Census, 1992). Employed mothers received less income from external sources than nonemployed mothers. When federal and private sources of nonearned income were examined separately, however, only amount of federal support was related to employment status. This is contrary to Mauldin and Meeks' (1990) finding that amount of nonearned income was not related to likelihood of employment for single mothers.

Attitudes toward employment were important in this study, as in other studies (Amstey & Whitbourne, 1988; Symons & McLeod, 1994; Youngblut et al., 1990). Employed mothers held more positive attitudes toward working women and were more satisfied with their employment decision than nonemployed mothers. Even when the effects of other factors were controlled, positive attitudes toward working women were associated with longer and greater intensity (more hours per week) of employment.

Mothers differed on attitude–behavior consistency by employment status. Employed mothers were considerably more consistent than nonemployed mothers. The scores for nonemployed mothers suggest that most would prefer to be working outside the home, many as full-time employees. Mothers with more attitude–behavior consistency worked more hours per week, had been working for a longer period of time, received less outside income, and reported more choice and satisfaction with their employment status. Without considering employment attitudes and number of hours employed per week, none of the mother, child, or family variables were significant predictors of inconsistency. Mothers with greater inconsistency reported more positive attitudes toward employment and fewer hours employed.

Our findings suggest that nonemployed single mothers would prefer to be working but for some reason are not able to do so, perhaps because of lower education and more children. Though Chrissinger (1980) did not find differences in education or job skills between high- and low-employment AFDC mothers, differences in educational preparation between employed and nonemployed mothers in the current study suggest group differences in job skills and, perhaps, marketability. Almost 77% of this study's mothers had completed high school, but with the changes in employee skills needed in today's marketplace, a high-school diploma may not provide women with sufficient skills to obtain and maintain employment.

In this study, women with more children were less likely to be employed. There are two possible explanations for this. Perhaps women bear more children because of their interest in being a mother and their greater commitment to children than employment. It is also possible that greater fertility makes it economically more difficult to be employed, however. Each additional child needing adult supervision and care increases the cost of providing alternate

child care. For women whose employment would be in low-paying jobs, the cost of child care is likely to exceed their take-home wages.

In summary, the birth of an LBW infant was not related to employment status, number of hours employed per week, or employment history for single mothers. Employed mothers had significantly more education and more positive attitudes toward employment, and their preschoolers had more hospitalizations than nonemployed mothers. Controlling for other factors, never being married, and having more children, more federal income, and less positive employment attitudes were predictive of nonemployment. Both employed and nonemployed women expressed preference for employment, however. These findings have significant implications for governmental policy regarding changes in AFDC benefits. Although cutting AFDC benefits may be seen as providing motivation for single mothers to work, our current findings imply that the motivation for employment is already present and that support for educational improvement and child care may be more effective in increasing employment of single mothers than cutting benefits. Research is needed to identify other reasons why some single mothers are employed and others are not and to design and test strategies to address barriers to employment.

Initial submission: August 1, 1996
Initial acceptance: October 31, 1996
Final acceptance: December 16, 1996

REFERENCES

Amstey, F. H., & Whitbourne, S. K. (1988). Work and motherhood: Transition to parenthood and women's employment. *Journal of Genetic Psychology, 149,* 111–118.

Avioli, P. S. (1985). The labor-force participation of married mothers of infants. *Journal of Marriage and the Family, 47,* 739–745.

Chrissinger, M. S. (1980). Factors affecting employment of welfare mothers. *Social Work, 25,* 52–56.

Cotton, S., Antill, J. K., & Cunningham, J. D. (1989). The work motivations of mothers with preschool children. *Journal of Family Issues, 10,* 189–210.

Eggebeen, D. J. (1988). Determinants of maternal employment of white preschool children: 1960–1980. *Journal of Marriage and the Family, 50,* 149–159.

Freedman, D., Thornton, A., Camburn, D., Alwin, D., & Young-DeMarco, L. (1988). The Life History Calendar: A technique for collecting retrospective data. *Sociological Methodology, 18,* 37–68.

Hollingshead, A. B. (1975). *Four factor index of social status.* Unpublished manuscript, Yale University, Department of Sociology, New Haven, CT.

Joesch, J. M. (1994). Children and the timing of women's paid work after childbirth: A further specification of the relationship. *Journal of Marriage and the Family, 56,* 429–440.

Klerman, J. A., & Leibowitz, A. (1994). The work-employment distinction among new mothers. *Journal of Human Resources, 29,* 277–303.

Leibowitz, A., Klerman, J. A., & Waite, L. J. (1992). Employment of new mothers and child care choice: Differences by children's age. *Journal of Human Resources, 27,* 112–133.

Mauldin, T., & Meeks, C. B. (1990). Time allocation of one- and two-parent mothers. *Lifestyles: Family and Economic Issues, 11,* 53–69.

Molm, L. D. (1978). Sex role attitudes and the employment of married women: The direction of causality. *The Sociological Quarterly, 19,* 522–533.

Shapiro, D., & Mott, F. L. (1994). Long-term employment and earnings of women in relation to employment behavior surrounding the first birth. *Journal of Human Resources, 29,* 248–275.

Symons, D. K., & McLeod, P. J. (1994). Maternal, infant, and occupational characteristics that predict postpartum employment patterns. *Infant Behavior and Development, 17,* 71–82.

Tetenbaum, T. J., Lighter, J., & Travis, M. (1981). Educators' attitudes toward working mothers. *Journal of Educational Psychology, 73,* 369–375.

U.S. Bureau of the Census. (1992). Statistical abstract of the United States (112th ed.). Washington, DC: U.S. Government Printing Office.

Volling, B. L., & Belsky, J. (1993). Parent, infant, and contextual characteristics related to maternal employment decisions in the first year of infancy. *Family Relations, 42,* 4–12.

Yoon, Y.-H., & Waite, L. J. (1994). Converging employment patterns of black, white, and Hispanic women: Return to work after first birth. *Journal of Marriage and the Family, 56,* 209–217.

Youngblut, J. M. (1995). Consistency between maternal employment attitudes and employment status. *Research in Nursing & Health, 18,* 501–513.

Youngblut, J. M., & Casper, G. R. (1993). Single-item indicators in nursing research. *Research in Nursing & Health, 16,* 459–465.

Youngblut, J. M., Loveland-Cherry, C. J., & Horan, M. (1990). Factors related to maternal employment status following the premature birth of an infant. *Nursing Research, 39,* 237–240.