



Change in Parenting Behaviors from Infancy to Early Childhood: Does Change in Family Income Matter?

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The current study intended to answer two main questions: First, do parenting behaviors change as family income changes? Second, if changes in family income are associated with changes in parenting behaviors, is this association different for families of various poverty statuses and ethnicities? Secondary data analyses were conducted using data from Phases I and II of the National Institute of Child Health and Human Development Study of Toe(ethnicities?)220secondary)2

In sum, despite similarities, the link between parenting style and child outcome shows variation depending on ethnicity. These cross-cultural differences were such that some scholars cautioned against treating authoritative parenting as the ideal parenting prototype for all families (e.g., Chao, 2001).

only. It would thus seem that the orthogonal approach to parenting styles is indeed useful in uncovering cross-ethnic/cultural similarities and differences.

PREDICTORS OF PARENTING BEHAVIORS

Because research (as reviewed above) has shown repeatedly that parenting styles are overall good predictors of child outcome, the antecedents of parenting behaviors become an important area of investigation to promote optimal child development. In other words, what are the predictors of parenting behaviors? In a seminal article, Belsky (1984) presented an ecological model on the determinants of parenting behavior. In this model, the characteristics of the parent, the characteristics of the child, and the child-rearing context were posited as three sources that determined parenting behaviors. For example, culture has been found to influence parenting style to fulfill the independent, interdependent, and relational socialization goals in Germany, Cameroon, and Costa Rica, respectively (Keller, Borke, Yovsi, Lohaus, & Jensen, 2005). The present study focused on one component of the child-rearing context, that is, family income, while taking into consideration the characteristics of the parent and the child.

FAMILY INCOME AND PARENTING BEHAVIORS

Past studies sometimes revealed a weak association between family income and parenting behaviors, especially in national samples (e.g., McLeod & Shanahan, 1993). Other studies, in contrast, have linked economic hardship to punitive and inconsistent discipline (Jackson, Brooks-Gunn, Huang, & Glassman, 2000; McLoyd, 1990, 1998).

Despite research findings connecting poverty to less competence-promoting parenting behaviors (e.g., Jackson et al., 2000; McLoyd, 1990, 1998; Taylor, Larsen-Rife, Conger, Widaman, & Cutrona, 2010), we know little about whether poverty relates to a persistent pattern of negative parenting behaviors, or whether the impact of poverty on parenting behaviors

time, and *relative stability* is the consistency of a person's rank order on some measure over time within a group of people (see more detailed definitions in Forehand & Jones, 2002; Holden & Miller, 1999; Loeber et al., 2000). Similar to Corwyn and Bradley, Verhoeven, Junger, van Aken, Deković, and van Aken (2007) also revealed in an one-year longitudinal study that parenting behaviors based on self-reports are quite stable across the three measurement times, when the children were age 17, 23, and 29 months. For the most part, positive and negative aspects of parenting behaviors showed high absolute and relative stability. In contrast, Lohaus and colleagues (2004) found rather low absolute stability in maternal sensitivity over 9 months. The difference in the age of the participating children might have contributed to the different findings in the above studies. Unlike Corwyn and Bradley and Verhoeven et al., who studied the parenting of older infants and toddlers, Lohaus and colleagues recruited mothers of infants younger than age 1 year. It is possible that maternal sensitivity is less stable in the infants' first year of life but becomes more stable in the second, third, and later years. Indeed, Dallaire and Weinraub (2005) confirmed in their secondary data analyses of 893 parents in the National Institute of Child Health and Human Development's (NICHD) Study of Early Child Care and Youth Development (SECCYD) that in the children's first 6 years parenting behaviors were less stable and more variable when the children were younger compared to when the children were older.

Another interesting discovery made by Dallaire and Weinraub (2005) was that different parenting behaviors seemed to show different patterns of change. Specifically, sensitive and stimulating parenting behaviors displayed a considerable amount of relative stability (though not absolute stability, as

from age 6 to 18, Loeber and colleagues (2000) found high relative stability in authoritative parenting, but not absolute stability. Mirroring Dallaire and Weinraub (2005

2006). Families with income-to-needs ratios over one at all five assessment points were classified as never poor, those with income-to-needs ratios less than one at one or two assessment points were classified as transiently poor, and those with income-to-needs ratios less than one at three or more of the assessment points were classified as persistently poor.

Parenting Behaviors

When the children were age 6, 15, 24, 36, and 54 months, mother-child interactions were observed either at the family home or in the research laboratory. The 15-minute interaction task at age 6 and 15 months required the mothers to first spend 7 to 8 minutes playing with the children freely. For the second 7 to 8 minutes, the mothers were asked to play with their infants using a specified set of toys. For this study, four areas of parenting behavior, mostly rated on a 1 to 4 scale (1 = *not characteristic*; 4 = *very characteristic*), were chosen: sensitivity, stimulation of development, detachment, and negative regard. Sensitivity reflects mother's prompt and appropriate responses to her child, and there were three ratings on this component. Stimulation of development summarizes the mother's effort at engaging her child in learning. Detachment is mother's lack of physical and emotional involvement with the child and was rated dichotomously. Negative regard is defined as maternal negative affect directed toward the child.

At the 24- and 36-month assessments, the 15-minute interaction involved the usage of toys in three boxes. Mothers were given the option to either play with their children or not. At the end of the 15 minutes, mothers were told to ask their children to clean things up by putting the toys back in the boxes. The same four areas of parenting behavior were used for the 24-month assessment: These were rated the same way as at the 6 and 15 month assessment points. At the 36-month assessment, the following areas of parenting behaviors were rated on a 7-point scale (the higher the number, the more the behavior) and were used for analyses: supportive presence, stimulation of development, respect for autonomy, and hostility. Supportive presence is similar to the sensitivity rating in earlier assessment points, which reflects maternal responsiveness and warmth expressed to the child. Stimulation of development is essentially the same as the rating bearing the same name in previous assessments. Respect for autonomy indicates maternal consideration of children's desires and individual needs. Hostility is similar to the area of negative regard in the assessment points between 6 and 24 months. It indexes the degree to which mothers slighted, became angry with, and/or rejected the child.

TABLE 1 Family by Income and Ethnicity for Total Sample

Ethnicity	Poverty	Near Poverty	Above Poverty	Total
White	116 (11%)	129 (12%)	789 (76%)	1034 (80%)
African American	99 (57%)	30 (17%)	44 (25%)	173 (13%)
Hispanic	20 (24%)	21 (26%)	41 (50%)	82 (6%)
Total	235 (18%)	180 (14%)	874 (68%)	1289 (100%)

$\chi^2(4, N = 1289) = 245.6, p < .001.$

$p < .001$. In the total sample, 11% of Whites, 57% of African Americans, and 24% of Hispanics were in poverty (see Table 1).

Family Income-to-Needs

The variable family income had changes within the 5 years that were studied. For example, for those families in the 15-months category who were identified as living in poverty in Year 1, only 48% were still in poverty at the 36-months mark. At 1, 6, 15, 24, 36 and 54 months, the family income-to-needs ratio was computed by dividing total family income by the poverty threshold for the appropriate family size (U.S. Census Bureau, 2006).

Initial Status and Change in Family Income to Needs

Two HLMs (Bryk & Raudenbush, 1992) were used to examine the estimate initial status (intercept) and linear change (slope) from 1 month to 54 months for family income, and to test associations between these estimates and the variable of parenting behaviors. The first level of HLM, OLS estimates of initial status and change were calculated for the total population (i.e., fixed effects), and for each individual (i.e., random effects). Hierarchical multiple regression analyses were calculated to assess the relationship of change in income to parenting behaviors after controlling for the influence of race and

TABLE 2 Regression Models Predicting Parenting Behaviors

	Sensitivity			Stimulation		
	<i>r</i>	β	Tolerance	<i>r</i>	β	Tolerance
Race						
African American	.89	.91	1.3	.084	.94	.99
Hispanic	.003*	.16*	.80	.032*	.28*	.62
White	.64	.12	.59	.036*	.12	.52
Poverty status						
Poor	.036	.21	.69	.036	.81	.59
Transiently	1.29	.92	1.32	.89	.56	.23
Never	.92	.83	1.20	.96	.82	1.19

**p* < .05

TABLE 3 Regression Models Predicting Parenting Behaviors

	Detachment			Negative regard		
	<i>r</i>	β	Tolerance	<i>r</i>	β	Tolerance
Race						
African American	.083	.98	1.2	.078	.91	.97
Hispanic	-.015*	-.16*	.80	-.016*	-.11	.76
White	-.50*	-.18*	.66	-.21*	-.09	.59
Poverty status						
Poor	-.048	-.28**	.62	-.021	-.21*	.52
Transiently	1.30	.96	1.45	1.30	.96	1.45
Never	.98	.87	1.23	.98	.77	1.15

p* < .05*p* < .01

Tables 2 and 3 indicated that African Americans scores did not change significantly along the four parenting behaviors as family income changed. The category of Hispanic was associated with increased sensitivity to distress and stimulation and decreased detachment and negative regard when there was a change from poor to not poor status. For the category of Whites, increased family income was positively associated with stimulation and negatively associated with detachment and negative regard. The average effect of change in income-to-needs and nonpoverty status was positively associated with positive parenting behaviors.

The interaction of change in income and poverty status was significant. Change in income did not have much significance on the positive social behavior of children in nonpoor families. Although it did have a significant impact on the positive parenting behaviors of poor families. These maternal ratings were similar for children from poor and nonpoor families when poor families experienced significant increases in income-to-needs (i.e., when they were approximately 1 *SD* above the mean).

As family income increased, there was a significant decrease in two parenting behaviors: negative regard and detachment. Families who were identified initially as with lower income-to-needs ratios were more likely to experience positive changes in these parenting behaviors. The mean value for the OLS estimates of initial status was 3.07; income-to-needs ratio of about three is suggestive of middle-class families (see Conger et al., 1997). The reliability of these OLS estimates for initial income-to-needs status was .85. The mean value for the OLS estimates of change was .02; this signifies the quantity of change per month, indicating on average, families experienced a positive change of .70 in income-to-needs between 1 month and 54 months.

The results indicate a significant correlation between the variable poor and detachment ($-.048$) and negative regard ($-.021$); p value was found to be less than .05. As families moved from poor to not poor, there was a decrease in detachment and negative regard. For the categories *not poor* or *transiently poor*, no significant findings were found.

For the variable *race*, there were changes in parenting behaviors for White mothers as family income increased. White mothers experienced a change in parental behavior when there was a change in poverty status. For White and Hispanic mothers, there was a change in parental behaviors when they went from poor to not poor. For White mothers, there was a decrease in detachment ($-.50$), a decrease in negative regard ($-.21$), and an

and appropriate responses to the child) or stimulation of development (effort at engaging the child in learning). Therefore, the first research question was answered in accord with prediction.

families that were able to move in and out of poverty. This was in accord with Dearing et al.'s (2001) and Garrett et al.'s (1994) research showing that increases in family income were much more important to poor children than children who were nonpoor, in terms of improved home environment and optimized child outcome. Our research expanded on past research in this area showing that the stronger impact of increased family income for poor families may be extended to parenting behaviors. Also, as family income increases, the initial parenting behavioral change may be a reduction in negative aspects of parenting. As income continues to improve to a significant level, an increase in positive aspects of parenting also ensues.

Family Income and Parenting Behavior Changes in Families of Different Ethnicity

The final research question that we had for the current study was any ethnic difference in the relationship between family income change and parenting behavioral change. Indeed, there were observable ethnic differences. When poor White families transitioned into the nonpoor status, they showed increases in the two positive aspects of parenting behavior (i.e., maternal sensitivity and stimulation of cognitive development) and decrease in one negative aspect of parenting behavior (i.e., detachment). When poor Hispanic families improved their income enough to move into the nonpoor status, they exhibited increases in maternal sensitivity and stimulation of cognitive development (both positive aspects of parenting behavior) as well as reductions in detachment and negative regard (both negative aspects of parenting behavior). African American families did not display any significant changes in parenting behaviors as they moved from poor to the nonpoor status. This lack of association between change in family income and change in parenting behaviors in African American families echoed research (e.g., Dotterer et al., 2012; Pachter et al., 2006; Pungello et al., 2009) that showed decreased association between parenting behavior and child outcome in African American families compared to White families.

Taken together, it would appear that the parenting behaviors of Hispanic families change the most (in terms of changes in all four aspects) as family income changes, followed by White families that changed in three aspects. Family income change's lack of impact on African American families was not entirely surprising. When studying a sample of low-income urban families that were primarily African American, Coley et al. (2007) found increased family income associated with welfare reform and maternal employment to have little impact on parenting behaviors, despite improved maternal psychological well-being. Similarly, although using a more ethnically diverse sample, Dunifon and colleagues (2006) found welfare policies unable to predict parenting behavior. Given that our research finding was in accord

with past research (Dotterer et al., 2012; Pachter et al., 2006; Pungello et al., 2009) showing limited relationship between parenting behavior and child outcome in African American families relative to White families, parenting behavior in African American families appears to have unique antecedents and consequences that are worthy of further investigation.

CONCLUSIONS

The finding that increased family income predicted decreased maternal detachment from and negative regard toward the child bears research and practical significance. The next step in this line of inquiry would be the uncovering of mediating variables: Which factors can explain this association? Maternal depression comes up as a viable candidate. The mediating effect of parental depressive symptoms between family income and parenting behavior have been confirmed in studies involving preschool (Mistry, Biesanz, Taylor, Burchinal, & Cox, 2004) and schoolage children (Mistry, Vandewater, Huston, & McLoyd, 2002; Pachter et al., 2006). It is still unknown, however, if depressive symptoms mediate the relationship between family income and different aspects of parenting behavior in a similar way.

Practically, knowing that increased family income predicts decreased detachment and negative regard has policy implications. As social service professionals work with maltreating families in the reduction and elimination of child abuse and neglect on a day-to-day basis, policy makers should bear in mind that macrolevel interventions aimed at increasing the family's income may also make a difference. Because limited studies to date have compared the ethnic difference in the relationship between family income change and parenting behavior change, we are only able to draw tentative conclusions on the complex interplay between income, ethnicity, and parenting. Overall, our findings departed from Mesman et al.'s (2012) study that showed little support for cultural differences in parenting but converged with McLoyd and Smith (2002)'s research and Garcia Coll & Lamberty (1996) and Garcia Coll and Pachter (2002)'s assertion that ethnic minority parenting practices reflected a unique culture, above and beyond socioeconomic situations. In conclusion, how parenting behaviors change along with family income change in families of various ethnicity presents an intriguing research question for the future.

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