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Racial-Ethnic Disparities in Maternal Parenting Stress: The Role of Structural Disadvantages and Parenting Values

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Abstract

Although researchers contend that racial-ethnic minorities experience more stress than whites, knowledge of racial-ethnic disparities in parenting stress is limited. Using a pooled time-series analysis of data from the Early Childhood Longitudinal Study, Kindergarten Class of 1998–99 ($n = 11,324$), we examine racial-ethnic differences in maternal parenting stress, with a focus on structural and cultural explanations and variations by nativity and child age. In kindergarten, black mothers, albeit U.S.-born only, report more parenting stress than white mothers due to structural disadvantages and authoritarian parenting values. The black-white gap increases from kindergarten to third grade, and in third grade, U.S.-born black mothers' higher stress than white mothers' persists after controlling for structural and parenting factors. Hispanic and Asian mothers, albeit foreign-born only, report more stress than white mothers at both ages due to structural disadvantages and authoritarian values. Despite structural disadvantages, American Indian mothers report less stress.

Keywords

child age; nativity; parenting stress; parenting styles; race and ethnicity; role strain; social structure

Stress research generally suggests that racial-ethnic minorities tend to be exposed to greater stress of various kinds than whites (Williams and Harris-Reid 1999). Yet, despite the importance of role strain, or perceptions of difficulties in a social role as a key chronic stressor (Pearlin 1989), knowledge of racial-ethnic disparities in role strain is limited. In particular, although some studies have investigated racial disparities in job stress (Greenhaus, Parasuraman, and Wormley 1990) and marital stress (Bulanda and Brown 2007), little research has examined racial-ethnic differences in parenting stress. Because parenthood is a major social role, and parenting stress has negative consequences on mental health (Avison, Ali, and Walters 2007; Kandel, Davies, and Raveis 1985), understanding racial-ethnic disparities in parenting stress may provide new insight into understanding racial-ethnic disparities in stress and mental health.

Using data from the Early Childhood Longitudinal Study, Kindergarten Class of 1998–99 (ECLS-K), we explore racial-ethnic differences in maternal parenting stress during a child's early elementary school years among non-Hispanic whites (hereafter whites), non-Hispanic blacks (hereafter blacks), Hispanics, Asian and Pacific Islanders (hereafter Asians), and American Indians. Stress research has emphasized that structural resources and cultural

values play key roles in influencing levels of individuals' exposure to role strains (Pearlin 1989), including racial-ethnic disparities in stress exposure (Williams and Harris-Reid 1999). We examine how racial-ethnic differences in structural factors, demographic characteristics and socioeconomic status (SES), and cultural values as reflected in parenting values, are associated with racial-ethnic disparities in maternal parenting stress. Because structural factors and parenting values vary by nativity within a racial-ethnic minority group (Grieco 2010), we address the possibility that racial-ethnic differences are confounded with native-immigrant differences. Finally, a life course perspective emphasizes the significance of age as a context that shapes the influence of social statuses, such as race-ethnicity, on individuals' experiences (Elder 1994). Thus, taking advantage of panel data that provide information about maternal parenting stress at two time periods, we use a pooled time-series analysis to examine whether racial-ethnic disparities in maternal parenting stress vary between kindergarten and third grade.

BACKGROUND

Determinants of Parenting Stress: Structural Resources and Parenting Values

A dominant approach to examining parenting stress is the role strain perspective (Pearlin 1989). This perspective defines parenting stress as a sense of difficulty experienced in the parenting role because the demands associated with the parenting role exceed the resources available to meet those demands (Abidin 1992). Because parenting stress has negative consequences for the quality of parenting and the well-being of children (Crnic and Low 2002), it is important to identify sources of parenting stress. Prior research has investigated factors in three domains, including parent characteristics, child characteristics, and contexts surrounding parents and children such as marital quality and social support (Crnic and Low 2002; Deater-Deckard 2004).

Little research has examined racial-ethnic differences in parenting stress. This is an unfortunate gap because race-ethnicity is a social status in which demands and resources associated with parenting are distributed unequally across different groups (Pearlin 1989). In addition, racial-ethnic minority parents, on average, have different parenting values from whites (Chao and Kanatsu 2008). Below, we discuss how structural factors and parenting values are related to parenting stress, which will help us predict racial-ethnic disparities in parenting stress.

Several structural characteristics are related to levels of parenting stress. Younger age is related to fewer resources and thus related to more parenting stress (Nomaguchi and Brown 2011). Having more children (McBride, Schoppe, and Rane 2002) and being a single mother (Avison et al. 2007) tend to result in greater daily parenting demands and thus are related to more parenting stress. Higher family income is related to less parenting stress (Mulsow et al. 2002), whereas unemployment is related to more parenting stress (Goldsteen and Ross 1989; Nomaguchi and Brown 2011). The link between education and maternal parenting stress is more complex. Although highly educated mothers have more resources that help them cope with the daily demands of parenting, they tend to feel more stress because of higher standards of parental investment and more work-family conflict (Nomaguchi and Brown 2011).

Parenting values reflect expectations for how children should behave and what mothers are supposed to do for their children; such expectations shape perceived burdens of parenting (Deater-Deckard 2004; Pearlin 1989). Prior research has shown that parenting values called "authoritarian" or "traditional" are related to more parenting stress than those called "authoritative" or "progressive" (Deater-Deckard 2004; Nomaguchi and Brown 2011). Parents with authoritarian parenting values regard the parent-child relationship as

hierarchical, demand respect and obedience from their children, and attempt to teach children and control their children's behavior through coercive methods, including directives and physical punishment. In contrast, parents with authoritative values treat children as equals, encourage two-way negotiations between parents and children, and teach children through inquiry and praise of good behavior (Baumrind 1971). Because they are less tolerant of children's disrespectful behavior, mothers with authoritarian values are more likely than mothers with authoritative values to have more frequent conflict with their children (Dixon, Brooks-Gunn, and Graber 2008), which is a major source of parenting stress. In contrast, mothers with authoritative values are more likely than those with authoritarian values to report joys of interactions with their children (Nomaguchi and Brown 2011), which can serve as psychological resources that help them deal with stressful aspects of parenting.

Race-Ethnicity, Structural Resources, Parenting Values, and Maternal Parenting Stress

We now turn to a discussion of racial-ethnic differences in structural positions and parenting values and how these may shape racial-ethnic variations in parenting stress.

Black mothers—Black mothers exhibit a range of structural disadvantages. Black mothers are more likely than white mothers to have children at an early age (Mathews and Hamilton 2009), to have more children, and to be unmarried (Hummer and Hamilton 2010). Black mothers have lower levels of family income than white mothers (Aud, Fox, and KewalRamani 2010), although they are more likely to be employed (U.S. Bureau of Labor Statistics 2011), a factor that is related to less parenting stress. In addition, black mothers have more authoritarian parenting values than white mothers, as black mothers are more likely than white mothers to expect obedience and respect from their children, provide more strict rules, and use physical discipline (Chao and Kanatsu 2008; Dixon et al. 2008; Gershoff et al. 2012; Slade and Wissow 2004). Because of more structural disadvantages and authoritarian parenting values, we expect that black mothers report more parenting stress than white mothers.

Hispanic mothers—Hispanic mothers—dominant subgroups include Mexicans, Puerto Ricans, and Dominicans—also show more structural disadvantages than white mothers. Hispanic women tend to have children at an earlier age (Mathews and Hamilton 2009), have more children (Martin et al. 2011), and are more likely to be single mothers (Hummer and Hamilton 2010) than white women. They tend to have lower levels of education and income (Aud et al. 2010) and are less likely to be employed (U.S. Bureau of Labor Statistics 2011). Hispanic mothers' parenting values are more authoritarian than white mothers'. Hispanic mothers tend to provide their children with higher levels of control and restrictions than white mothers (Bulcroft, Carmody, and Bulcroft 1996; Chao and Kanatsu 2008; Dixon et al. 2008). They tend to use directives and visual cues rather than inquiry and praise (Halgunseth 2004). As to whether Hispanic mothers are more likely than white mothers to use physical punishment, prior research is inconclusive (Gershoff et al. 2012; Julian, McKenry, and McKelvey 1994; Slade and Wissow 2004). In all, because of more structural disadvantages and authoritarian values, Hispanic mothers may report more parenting stress than white mothers.

Asian mothers—On average, Asians—dominant subgroups include Chinese, Filipinos, and Indians—are not necessarily more disadvantaged than whites in structural characteristics. Asian women have little difference in age at first birth (Mathews and Hamilton 2009) and the number of children (U.S. Census Bureau 2012) from white women and are less likely to be single mothers (Hummer and Hamilton 2010). Asians have higher family incomes than whites (U.S. Census Bureau 2012), although with the same level of education, Asians earn less (Zeng and Xie 2004). Asian mothers are slightly less likely to be

employed than white mothers (U.S. Bureau of Labor Statistics 2011). A sharp difference can be found in parenting values. Asian mothers emphasize children's loyalty toward elders, unquestioning obedience to parents, self-sacrifice to gain the well-being of the family, self-control, and academic achievement (Chao and Kanatsu 2008; Julian et al. 1994), which can be characterized as more authoritarian, although empirical research is inconsistent with regard to whether Asian mothers spank their children more often than white mothers (Gershoff et al. 2012; Julian et al. 1994). Because of more authoritarian parenting values, Asian mothers may report more parenting stress than white mothers.

American Indian mothers—American Indian mothers are more disadvantaged than white mothers in several ways. They are more likely than white mothers to have children at an earlier age, have more children, and be single mothers (Sandefur and Liebler 1997). They tend to experience economic difficulties, with a higher unemployment rate and a lower level of education (MacPhee, Fritz, and Miller-Heyl 1996). American Indian parents emphasize respect for elders and conformity (Parke and Buriel 2002) and place less emphasis on extensive language use (MacPhee et al. 1996), which are more authoritarian than authoritative characteristics, although they tend to avoid spanking and rely more on psychological control, such as shaming misbehavior (MacPhee et al. 1996). Because of more structural disadvantages and authoritarian parenting values, American Indian mothers may report more parenting stress than white mothers.

Variation by Nativity

In 2007, close to half (40 percent) of Hispanic populations and two thirds (68 percent) of Asian populations were foreign-born (Grieco 2010). The high rates of foreign-born populations raise a question as to whether racial-ethnic differences are confounded with native-immigrant differences. This question is particularly relevant to the present analysis because immigrants tend to differ from their native counterparts in structural resources and parenting values. Foreign-born Hispanic mothers have lower SES than their U.S.-born counterparts, although Asians have little difference in SES by nativity (Grieco 2010). Immigrant mothers may face additional structural challenges. In particular, poor English proficiency tends to relate to fewer resources for immigrant mothers, as language barriers prevent mothers from having better employment, getting involved in their children's school lives, and adjusting to U.S. norms (Perreira, Chapman, and Stein 2006; Raffaelli and Wiley 2012). As children adapt to the English language and U.S. norms much more quickly, the gap in the pace of adaptation to U.S. society between a mother and her children can strain the mother-child relationship (Perreira et al. 2006). Research on immigrant assimilation suggests that U.S.-born Hispanic and Asian mothers are more likely than their foreign-born counterparts to adapt to the norms of the mainstream culture and thus may be less likely to have authoritarian parenting values (Okagaki and Sternberg 1991). Overall, Hispanic and Asian mothers' higher parenting stress than white mothers' may largely reflect higher parenting stress among the foreign-born.

Although a much smaller percentage of blacks are foreign-born (7.6 percent in 2007; Grieco 2010), variation by nativity may be relevant to blacks, too. More than half of black immigrants come from Caribbean countries, including Jamaica and Haiti, and one third from African countries such as Nigeria and Ethiopia (Grieco 2010). On average, black immigrants have higher levels of education and family income than U.S.-born blacks, and many of them are fluent in English at their arrival to the United States (Kandel 2011). Thus, even though foreign-born black mothers may face challenges due to cultural conflict in parenting values, overall levels of parenting stress would be lower for foreign-born than U.S.-born black mothers. Higher parenting stress for black mothers than white mothers may largely reflect higher stress among the U.S.-born.

In contrast, among whites, structural and parenting factors may vary less by nativity. Fewer than 5 percent (3.9 percent in 2007) of whites are foreign-born, with top countries of origin including the United Kingdom, Germany, and Canada (Grieco 2010). Because immigrants from these countries tend to share similar structural positions and cultural values with U.S.-born whites, they may have similar levels of parenting stress as well. Finally, almost all American Indian mothers are “native,” except for a very small number of those from Central America (Grieco 2010). All in all, to address the role of nativity in racial-ethnic disparities in maternal parenting stress, we break down each racial-ethnic group by nativity except for American Indians.

Variation by Child Age

A life course perspective (Elder 1994) emphasizes the importance of age in shaping structural influences, including race-ethnicity, on individuals’ life experiences. Variation by child age may be crucial to consider in the present analysis because sources of parenting stress vary by the child’s age (Pearlin 1983), and the salience of age-specific sources of parenting stress may differ across racial-ethnic groups (Bulcroft et al. 1996). Between kindergarten and third grade, a child’s social world expands rapidly beyond the family to school and peers (Collins, Harris, and Susman 1995). As children begin to have regular, more diverse contacts with peers, teachers, and other adults, they are increasingly exposed to rules and values that differ from what their parents emphasize. This is also the period when children begin to seek reasons for submitting to their parents’ authority (Maccoby 1984). As such, areas of parental concern shift to include issues such as children’s devaluation of family rules and rituals, disrespect of elders, and peer quality (Pearlin 1983). These types of concerns may be more relevant to racial-ethnic minority mothers than to white mothers because, as discussed earlier, racial-ethnic minority mothers tend to emphasize values different from those in mainstream (i.e., white) culture, such as interdependence among family members and children’s obedience toward parents. As children become increasingly involved in peer networks and acquire values from mainstream U.S. culture, racial-ethnic minority mothers, particularly the foreign-born, may face challenges to the legitimacy of parental authority (Bulcroft et al. 1996; Perreira et al. 2006). Thus, we expect that racial-ethnic disparities in maternal parenting stress will be greater in third grade than in kindergarten.

The Present Study

We examine racial-ethnic differences in maternal parenting stress during a child’s early elementary school years. We expect that black, Hispanic, Asian, and American Indian mothers are more likely to report more parenting stress than white mothers because of structural disadvantages (except for Asians) and authoritarian parenting values. For Hispanic and Asian mothers, we expect that the foreign-born are more likely than the U.S.-born to report more parenting stress compared with white mothers. In contrast, among black mothers, more U.S.-born mothers than foreign-born mothers will report a higher level of parenting stress compared with white mothers. In addition, we expect that racial-ethnic disparities, especially those between foreign-born racial-ethnic minority mothers and U.S.-born white mothers, will be greater in third grade than in kindergarten because of more authoritarian parenting values. Although it is possible that parenting stress may influence structural disadvantages and parenting styles, in the present analysis we do not address the issue of reverse causation between structural factors or parenting values and parenting stress.

DATA AND METHODS

Data

Data were drawn from the ECLS-K, a longitudinal, nationally representative study of American children conducted by the National Center for Education Statistics. This sample of children entered kindergarten in 1998 and 1999 and was followed through their eighth grade year (Tourangeau et al. 2009). Data were collected from children, their “primary parents,” teachers, and school administrators in fall kindergarten (W1), spring kindergarten (W2), fall first grade (W3), spring first grade (W4), spring third grade (W5), spring fifth grade (W6), and spring eighth grade (W7) years. Questions regarding parenting stress were asked in W2 and W5. Thus, in the present analysis we used data mostly from W2 and W5. A few explanatory or control variables that were unavailable in W2 or W5 were drawn from W1 or W4. The base-year sample size was $n = 21,260$. By W5, 5,955 children had been dropped from the study ($n = 15,305$ [72.0 percent]). We selected cases for which parent interview data were present for W2 and W5 ($n = 12,500$ [58.8 percent]). Then we selected cases for which the “primary parent” was the child’s mother in W2 and W5 ($n = 11,398$ [53.6 percent]). Finally, we excluded those who reported being “multiracial” ($n = 11,324$ [53.3 percent]). Those who dropped from the sample were more likely to be black, Asian, foreign-born, younger, single mothers, and less likely to be working part-time and to have college degrees. To account for attrition, all analyses were weighted (weights provided by the ECLS-K).

Measures

Maternal parenting stress was measured as the average of four questions derived from Abidin’s (1990) Parenting Stress Index, including (1) “CHILD does things that really bother me,” (2) “CHILD seems harder to care for than most,” (3) “I often feel angry with CHILD,” and (4) “I find myself giving up more of my life to meet CHILD’s needs than I ever expected” (1 = “strongly disagree” to 4 = “strongly agree”). The values for parenting stress were .53 and .56 for W2 and W5, respectively. This scale has been used in national surveys such as the Child Development Supplement to the Panel Survey of Income Dynamics and the National Survey of Children’s Health and has been widely used in prior research (e.g., Kim, Viner-Brown, and Garcia 2007; Moore et al. 2007).

Mother’s race-ethnicity and nativity was created on the basis of two kinds of information: mother’s race-ethnicity and place of birth. Mother’s race-ethnicity was the mother’s self-report, including non-Hispanic white, non-Hispanic black, Hispanic, Asian and Pacific Islander, and American Indian. Foreign-born status was measured with the W4 question of whether mothers were born outside the United States. The ECLS-K did not ask about foreign-born status until W4. The majority of Hispanic (63.4 percent) and Asian (73.6 percent) mothers were foreign-born, whereas 6.2 percent of blacks, 3.3 percent of whites, and .0 percent of American Indians were foreign-born in our analytic sample. Nine categories of the joint status of race-ethnicity and nativity included U.S.-born white (reference), foreign-born white, U.S.-born black, foreign-born black, U.S.-born Hispanic, foreign-born Hispanic, U.S.-born Asian, foreign-born Asian, and American Indian.

Structural conditions included seven indicators. Mother’s age was measured in years in W1. The number of other children in the household was measured in W2 and W5. Single mother status was a dummy variable measured in W2 and W5. Family income was measured in W1 (as it was not asked about in W2) and W5, ordered by 13 categories indicating the respondent’s total income over the past year. Mother’s employment status was measured as three categories in W1 and W5: not employed, employed part-time, and employed full-time (reference). Mother’s employment status was not asked about in W2. Mother’s education

was measured in W1 as dummy variables including less than high school, high school diploma (reference), some college, college degree, and advanced degree. Poorer English proficiency was the average of four items ($\alpha = .97$) asking how well mothers could (1) speak English, (2) read English, (3) write English, and (4) understand someone speaking English (1 = “very well” to 4 = “not at all well”) in W1. These questions were asked only for those who reported that non-English languages were spoken regularly in the household. Those who were not asked these questions were assigned a value of 1 (“very well”).

Parenting values were measured as two indicators. The “inquiry and praise” method, which indicates a less authoritarian and more authoritative method of child-rearing, was measured in W4 only as the average of four questions ($\alpha = .68$), including “I discourage [CHILD] from talking about [his/ her] worries because it upsets [him/her]” (reverse coded), “I encourage [CHILD] to talk about [his/her] troubles,” “I encourage [CHILD] to tell me about [his/her] friends and activities,” and “I encourage [CHILD] to express [his/her] opinions” (1 = “never” to 4 = “very often”). The frequency of spanking, which indicates more traditional, authoritarian parenting, was measured in W2 and W5 as the number of times mothers spanked their children in the previous week.

Analytic Plan

We first examined differences in maternal parenting stress, structural factors, and parenting values by race-ethnicity-nativity at the bivariate level for kindergarten (W2) and third grade (W5) separately. Then we pooled the observations from the two time periods into one data set (hereafter “pooled data”; Allison 2005; Johnson 1995). As mentioned earlier, some variables came from W1 or W4 because they were unavailable at W2 or W5. These W1 or W4 variables were considered to be W2 or W5 variables. The pooled data were structured in the way that each wave of observation for each individual was represented by a separate record. Thus the total sample size for the pooled data was the number of individuals multiplied by two ($n = 22,648$ person-years). We used random-effects models, not fixed-effects models, because our key explanatory variable, race-ethnicity-nativity, was time invariant. The analysis thus included both time-invariant (i.e., mother’s age, race-ethnicity and nativity, education, English proficiency, and the “inquiry and praise” method) and time-variant (i.e., mother’s parenting stress, the number of children, single mother status, family income, mother’s employment status, and the frequency of spanking) measures. The pooled time-series data violate the assumption of ordinary least squares (OLS) regression that the observations are independent of one another. In random-effects models of the pooled time-series analysis, this problem was solved by a generalized least squares solution in which weights were assigned on the basis of a combination of within- and between-individual covariance (Johnson 1995). The regression equation was expressed as

$$Y_{it} = \mu_t + \beta \mathbf{X}_{it} + \gamma \mathbf{Z}_i + \alpha_i + \varepsilon_{it},$$

where Y_{it} refers to the value of the outcome variable for individual i on occasion t , μ_t is the intercept that varies over time, \mathbf{X}_{it} is a vector of time-varying variables, \mathbf{Z}_i is a vector of time-invariant variables, and each ε_{it} represents differences between persons that is a random variable with a normal distribution (Allison 2005).

We examined six models. Model 1 included mother’s race-ethnicity-nativity status and child age variables only. Model 2 added structural variables to examine whether the association between race-ethnicity-nativity and maternal parenting stress would be explained by structural positions. Model 3 added indicators of parenting values to Model 1 to examine whether the association between race-ethnicity-nativity and maternal parenting stress would be explained by parenting values. Model 4 added both structural disadvantages and

parenting values. Model 5 added interactions between race-ethnicity-nativity and time variables to Model 1 to examine variation in the association between race-ethnicity and maternal parenting stress by child age. Model 6 added structural and parenting variables to Model 5 to examine whether variation by child age would be explained by changes in structural and parenting factors. Most variables had few missing data, but the largest was 22.4 percent for the frequency of spanking in W5. For missing values, we used the multiple imputation technique suggested by Allison (2002) with five replicates of the data set, using PROC MI in SAS.

RESULTS

Descriptive Results

Table 1 presents descriptive statistics for variables in the analysis by race-ethnicity and nativity. The distribution was 64.8 percent U.S.-born whites, 2.4 percent foreign-born whites, 10.3 percent U.S.-born blacks, .7 percent foreign-born blacks, 5.6 percent U.S.-born Hispanics, 9.3 percent foreign-born Hispanics, 1.2 percent U.S.-born Asians, 4.3 percent foreign-born Asians, and 1.5 percent American Indians. The levels of maternal parenting stress differed by race-ethnicity and nativity. In kindergarten, U.S.-born black mothers ($M = 1.58$, range = 1–4), foreign-born Hispanic mothers ($M = 1.64$), and foreign-born Asian mothers ($M = 1.57$) reported higher levels of parenting stress than U.S.-born white mothers ($M = 1.51$). Differences in maternal parenting stress among these three groups were not statistically significant (data not shown). Foreign-born whites, foreign-born blacks, U.S.-born Hispanics, and U.S.-born Asians had little difference from U.S.-born whites. Unexpectedly, American Indian mothers showed less parenting stress ($M = 1.44$) than U.S.-born white mothers. In third grade, foreign-born black mothers ($M = 1.66$), in addition to U.S.-born black mothers ($M = 1.72$), foreign-born Hispanic mothers ($M = 1.63$), and foreign-born Asian mothers ($M = 1.61$), had higher levels of parenting stress than U.S.-born white mothers ($M = 1.54$). U.S.-born black mothers had a higher level of stress than the other three groups among which differences were not significant (data not shown). Again, American Indian mothers showed less parenting stress ($M = 1.38$).

As expected, structural characteristics and parenting values varied by race-ethnicity. They also varied by nativity within each racial-ethnic group except for whites. Whereas both U.S.-born and foreign-born black mothers were more likely to be younger, have more children at home, be single, have less education, and have lower incomes than U.S.-born white mothers, foreign-born black mothers were better off than U.S.-born black mothers. Black mothers, both U.S.-born and foreign-born, had more authoritarian parenting values than U.S.-born white mothers, because they were less likely to use the “inquiry and praise” method. U.S.-born black mothers were also more likely to use physical discipline than U.S.-born white mothers. Like black mothers, Hispanic mothers, regardless of nativity, showed more structural disadvantages and more authoritarian parenting values. Foreign-born Hispanic mothers were more disadvantaged than their native counterparts in structural characteristics and were more likely to have authoritarian values. Asian mothers, regardless of nativity, were similar to U.S.-born white mothers in structural positions. Asian mothers, especially the foreign-born, had more authoritarian values than U.S.-born white mothers. American Indian mothers were more disadvantaged in structural positions. American Indian mothers were less likely to use the “inquiry and praise” method, but they did not differ from white mothers in the frequency of spanking.

Race-Ethnicity, Nativity, and Maternal Parenting Stress: Structural and Parenting Factors

Table 2 presents results from random-effects models of the pooled time-series analysis. Model 1, the base model, shows that compared with U.S.-born white mothers, U.S.-born

black, foreign-born Hispanic, and foreign-born Asian mothers reported more parenting stress, whereas American Indian mothers reported less stress. The coefficient for the time variable was also significant, suggesting that parenting stress was higher in third grade than in kindergarten.

Model 2 shows that most structural characteristics examined here had associations with maternal parenting stress that were consistent with prior research. Mother's age and family income were negatively related to maternal parenting stress, whereas single parenthood was related to more stress. Education had a nonlinear association with maternal parenting stress. Two factors showed associations with parenting stress that were inconsistent with prior research reviewed earlier. Having more children in the household was related to less parenting stress. Part-time employment, but not nonemployment, was related to more parenting stress. A possible explanation for these inconsistencies is differences in sample characteristics. Prior research used preschool-aged children or younger, whereas the present analysis used a somewhat older sample. Our focus in Model 2 was on how the association between race-ethnicity-nativity and maternal parenting stress might change when structural factors were controlled for. The coefficient for U.S.-born black mothers declined by 36.2 percent (i.e., from .141 to .090), although it remained significant. Supplemental analyses (data not shown) suggested that family income and single mother status contributed to the reduction in the coefficient most. For foreign-born Hispanic mothers, the coefficient declined markedly (by 95.8 percent) and became nonsignificant, suggesting that their higher levels of parenting stress than white mothers' was mostly associated with their structural disadvantages. For foreign-born Asian mothers, the coefficient declined by 24.1 percent, suggesting that structural factors contributed some part of their higher levels of parenting stress than U.S.-born white mothers'. Supplemental analyses (data not shown) indicated that family income and poorer English proficiency contributed the reductions in the coefficients for foreign-born Hispanic and foreign-born Asian mothers most. For American Indian mothers, the negative coefficients increased by 33.3 percent from Models 1 to 2, suggesting that American Indian mothers would experience even less parenting stress than white mothers at the same levels of structural positions.

Turning to parenting values, consistent with prior research, the lower level of "inquiry and praise" method was related to less parenting stress (Model 3). More spanking was related to more parenting stress. When these variables were controlled, the coefficient for U.S.-born black mothers declined by 25.5 percent (i.e., from .141 to .105), but remained significant. This finding suggests that more authoritarian parenting values explained some part of U.S.-born black mothers' greater parenting stress than U.S.-born white mothers', but structural factors appeared to explain the gap slightly better. For foreign-born Hispanic mothers, the coefficient also declined by 26.3 percent and was still significant. Structural factors appeared to explain foreign-born Hispanic mothers' higher parenting stress much better than parenting values. In contrast, parenting values appeared to play a greater role than structural factors in understanding foreign-born Asian mothers' higher levels of parenting stress than that of white mothers. In Model 3, the coefficient for foreign-born Asian mothers declined by 50.6 percent from the coefficient in Model 1 and became nonsignificant. Supplemental analyses (data not shown) indicated that for these three groups (i.e., U.S.-born black, foreign-born Hispanic, and foreign-born Asian mothers), the "inquiry and praise" method contributed more than the frequency of spanking to the reductions in the coefficients. For American Indian mothers, adding parenting variables did not change coefficients very much.

Model 4 included both structural and parenting factors. The coefficient for U.S.-born black mothers reduced markedly but continued to be significant. The coefficients for foreign-born Hispanic mothers and foreign-born Asian mothers were nonsignificant. American Indian mothers remained showing less parenting stress than white mothers.

Variation by Child Age

The last question we examined was whether variation by race-ethnicity and nativity in maternal parenting stress vary between kindergarten and third grade years. Model 5 in Table 2 examined this question by using interaction terms between each dummy variable of race-ethnicity-nativity and the third grade variable without controlling for structural and parenting factors. Coefficients for the interactions of third grade with U.S.-born and foreign-born black mothers were significant, and the signs were positive, suggesting that the gaps in parenting stress between black mothers, regardless of nativity, and U.S.-born white mothers increased from kindergarten to third grade. Differences in the increases between U.S.-born and foreign-born black mothers were not significant (data not shown). Model 6, which added structural and parenting factors to Model 5, suggested that the increases in the white-black (both U.S.-born and foreign-born) gaps between the two periods were not explained by changes in structural and parenting values. Another significant finding in Model 5 was the interaction of third grade with foreign-born Hispanic. The negative sign suggests that, contrary to prediction, the gap in parenting stress between foreign-born Hispanic and U.S.-born white mothers became smaller between the two time periods. Yet the interaction became nonsignificant after controlling for structural and parenting factors (Model 6). A supplemental analysis (not shown) indicated that a greater increase in family income for foreign-born Hispanic mothers than for U.S.-born white mothers from kindergarten to third grade contributed to the decline in the gap in parenting stress.

To better understand the results of Models 5 and 6 in Table 2, we calculated predicted means for parenting stress for U.S.-born white mothers (reference), U.S.-born black mothers, foreign-born black mothers, foreign-born Hispanic mothers, foreign-born Asian mothers, and American Indian mothers in kindergarten and third grade, before (Model 5) and after (Model 6) controlling for structural and parenting factors. As shown in Figure 1, in kindergarten, the higher levels of parenting stress for U.S.-born black mothers, foreign-born Hispanic mothers, and foreign-born Asian mothers compared to U.S.-born white mothers was explained by structural and parenting factors.¹ Foreign-born black mothers and American Indian mothers showed a “suppressor effect”: after controlling for structural and parenting factors, they showed lower levels of parenting stress than U.S.-born white mothers. These reflect changes in coefficients from $b = -.056$ (nonsignificant) in Model 5 to $b = -.111$ ($p < .10$) in Model 6 for foreign-born black mothers and from $b = -.059$ (nonsignificant) in Model 5 to $b = -.085$ ($p < .05$) in Model 6 for American Indian mothers. For foreign-born blacks, the relationship was only marginally significant, perhaps because of the relatively smaller sample size (.72 percent of the sample). Thus, we are cautious about making a strong conclusion for this group.

Turning to third grade, higher levels of parenting stress for foreign-born Hispanic mothers and foreign-born Asian mothers than U.S.-born white mothers were again explained by structural and parenting factors. In contrast, U.S.-born black mothers’ higher parenting stress persisted even after controlling for structural and parenting factors. Also note that U.S.-born black mothers’ stress level was higher in third grade than in kindergarten. The effect of U.S.-born black mothers in third grade was $.129 + .038 + .002 = .169$. Divided by a standard deviation of maternal parenting stress of .51 (Appendix), this translates into an effect size of .33. This would be classified as a medium effect by Cohen (1988). Foreign-born black mothers showed more parenting stress than U.S.-born white mothers before controlling for

¹In supplemental analyses, we conducted Models 1 to 4 in Table 2 using OLS regression analysis for kindergarten and third grade separately. In each year, the patterns in the extent to which structural and parenting variables explained higher levels of parenting stress for foreign-born Hispanic and foreign-born Asian mothers compared to U.S.-born white mothers were the same as we found in Table 2. For U.S.-born blacks also, the patterns were similar to what we found in Table 2, except that structural and parenting variables explained all of the positive relationship between U.S.-born blacks and parenting stress in kindergarten.

structural and parenting factors, although differences became nonsignificant after these factors were taken into account.² American Indian mothers showed less parenting stress regardless of whether structural and parenting factors were controlled for. The effect of American Indian mothers in third grade is $-.085 + .038 - .085 = .138$, for an effect size of .27. This would also be considered a medium effect by Cohen. All patterns of findings remained when models were controlled for psychological distress (data not shown), suggesting that the racial-ethnic disparities in maternal parenting stress we found here were not a simple reflection of disparities in general mental health.

Discussion

Despite the notion that racial-ethnic minorities tend to experience more stress than whites, little research has examined racial-ethnic disparities in parenting stress, a chronic stressor that could have negative consequences for the well-being of parenting, the quality of parenting, and the well-being of children. Using a national sample of children and their mothers, we explored racial-ethnic disparities in maternal parenting stress during children's early elementary school years, focusing on whether such disparities are shaped by racial-ethnic differences. Because structural resources and parenting values vary by nativity within a racial-ethnic minority group, we broke down each racial-ethnic group by nativity, except for American Indians. Finally, on the basis of a life course perspective, we examined variation by child age. Findings suggest that overall, black, Hispanic, and Asian mothers report more parenting stress than white mothers, but patterns differ across these groups in the roles of nativity and child age as well as how structural and parenting factors are related to parenting stress disparities. Contrary to prediction, American Indian mothers report less parenting stress than white mothers. Below we discuss findings for each racial-ethnic minority group, highlighting unique patterns found for each group.

Findings for black mothers differ notably by nativity and child age. In kindergarten, the U.S.-born, but not the foreign-born, experience more parenting stress than U.S.-born white mothers, largely because of structural disadvantages, especially lower family income and more single mothers and, to a lesser extent, more authoritarian parenting values. By third grade, the disparity increases, and U.S.-born black mothers' higher parenting stress than U.S.-born white mothers' persists even after controlling for structural and parenting factors. Foreign-born black mothers, whose parenting stress level did not differ from U.S.-born white mothers' level in kindergarten, report more parenting stress than U.S.-born white mothers in third grade, although the difference disappears when structural disadvantages are controlled. These increases in parenting stress from kindergarten to third grade for both U.S.-born and foreign-born black mothers are not found for other racial-ethnic groups.

Why, in third grade but not in kindergarten, do U.S.-born black mothers report more parenting stress than U.S.-born white mothers even after controlling for structural and parenting factors? Why do black mothers, regardless of nativity, experience an increase in parenting stress from kindergarten to third grade, while mothers in other racial-ethnic groups do not? One possible explanation, which we did not examine in the present analysis, is differences in perceptions of racial-ethnic prejudice between black and other racial-ethnic minority mothers. Research has shown that as children get older and become able to understand the social meaning of race-ethnicity, black mothers are more likely than other racial-ethnic minority mothers to be concerned about their children's encounters with racial-

²A supplemental analysis, using OLS regression models for the third grade data, suggests that a higher percentage of single mothers and lower family income explain the higher level of foreign-born black mothers' stress than white mothers. Because changes in family income and single mothers were not significantly higher for foreign-born black mothers than white mothers, we would interpret these results as foreign-born black mothers reported less parenting stress despite structural disadvantages in kindergarten. As we found with American Indian mothers, this too was unexpected.

ethnic prejudice and discrimination (Hughes et al. 2006). Presumably such concern can be a significant source of stress in parenting. Because the ECLS-K does not have information about experiences or concerns about prejudices, we were unable to examine this explanation. Future research is warranted to investigate the role of perceived racism in influencing parenting stress among racial-ethnic minority parents.

Among Hispanic mothers, unlike black mothers, the foreign-born, but not the U.S.-born, reported more parenting stress than U.S.-born white mothers. Structural disadvantages, particularly lower income and the lack of English proficiency, appear to be major sources of higher stress for foreign-born Hispanic mothers. This finding is consistent with prior studies with a small local sample that have found that Hispanic immigrant mothers commonly emphasize language barriers and financial strains as major challenges (Perreira et al. 2006; Raffaelli and Wiley 2010). Contrary to expectation, foreign-born Hispanic mothers' stress did not increase from kindergarten to third grade. It could be that challenges in dealing with different cultural values are already prominent when their children start kindergarten, the time when mothers are subjected to the major changes of children entering the education system and having contact with peers, teachers, and other adults who have suddenly become a notable presence and influence on their children's lives. In contrast, U.S.-born Hispanic mothers are higher in SES and less authoritarian than foreign-born counterparts and show no difference in the level of parenting stress compared with white mothers.

Among Asian mothers, similar to Hispanic mothers, the foreign-born but not the U.S.-born reported more parenting stress than white mothers. Unlike their Hispanic counterparts, foreign-born Asian mothers' higher parenting stress was due largely to their authoritarian parenting values. Given that Asian mothers tend to be similar to white mothers in their SES positions, it is not surprising that structural factors are not main sources of parenting stress. Studies have documented that Asian American mothers place a strong emphasis on children's self-control and academic success (Julian et al. 1994). Asian immigrant mothers, in particular, tend to emphasize children's academic achievement as a means of overcoming discrimination and gaining higher social status in the United States (Lin and Fu 1990). Mothers' high expectations for their children's academic achievement may result in more frustrations and conflicts with their children, which can result in more parenting stress. In contrast, U.S.-born Asian mothers showed more authoritative parenting values than immigrant mothers and did not show differences in levels of parenting stress compared with white mothers.

The finding that American Indian mothers report less parenting stress than white mothers despite their structural disadvantages is intriguing. This unexpected finding could be due to cultural differences that the present analysis was unable to capture. Prior research has indicated that American Indian families generally have close kinship networks, and child-rearing tends to be communal (MacPhee et al. 1996). It is possible that American Indian mothers do not feel as much pressure as white mothers about being solely responsible for how their children will turn out. Alternatively, American Indian culture may discourage parents from expressing negative emotions (Williams and Harris-Reid 1999). Future research on American Indian parenting values and its implications for adult well-being is warranted.

This study has limitations that future research should address. First, our results might have under-estimated racial-ethnic disparities in maternal stress as those who dropped out of the sample were more likely to be black, Asian, and foreign-born and to have structural disadvantages (e.g., single mothers). Second, the ECLS-K, a representative sample of children in a particular cohort, is not a representative sample of parents. Future research using a nationally representative sample of parents is warranted to understand patterns of

disparities in experiences of parenting across racial and ethnic groups. Third, the present analysis examined cross-sectional associations and did not address the causal relationship between structural and parenting factors and parenting stress in understanding racial-ethnic disparities in parenting stress. Fourth, we were unable to examine variation by child age beyond third grade, because more recent waves of the ECLS-K have no information on parenting stress. Fifth, heterogeneity within each racial-ethnic group should be considered more carefully. For example, the majority of Asian mothers in our sample were Filipinos (data not shown). Because foreign-born Filipinos have higher SES and better English competence than other Asian immigrant groups (Wolf 1997), the results of the present analysis might have underestimated parenting stress that foreign-born Asian mothers typically experience. Future research is warranted to investigate variations in parenting stress within each racial-ethnic group. Finally, we focused on maternal parenting stress. A national survey on children tends to include information about parenting only from the “primary” parent who tends to be the focal child’s mother. Researchers should consider including questions for both mothers and fathers asking about their experiences of parenting stress in a national survey.

In the present analysis, we investigated racial-ethnic disparities in parenting stress, an important yet underexamined topic. The results show that racial-ethnic disparities in parenting stress exist among mothers with early elementary school-aged children. Explanations of disparities in parenting stress as well as variations by nativity and child age are not uniform across racial-ethnic minority groups, reflecting variation in social profiles across racial-ethnic groups in the United States. Specifically, U.S.-born black, foreign-born Hispanic, and foreign-born Asian mothers experience higher levels of parenting stress than U.S.-born white mothers in both kindergarten and third grade. These disparities are mostly explained by structural disadvantages and authoritarian parenting values, but alternative explanations are needed for U.S.-born black mothers’ higher stress in third grade. In addition, American Indian mothers have lower parenting stress than white mothers despite structural disadvantages, which also needs further investigation. Future research should explore more nuanced cultural differences and racism-related issues of parenting to advance our understanding of racial-ethnic disparities in stress in raising children.

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APPENDIX

Weighted Means (Standard Deviations) or Percentage Distributions for Variables for Total Sample (n = 22,648 Person-Years)

Variable	<i>M (SD) or Percent- age Distribution</i>	
Maternal parenting stress	1.55	(.51)
Mother’s age	33.35	(6.30)
Number of other children	1.52	(1.11)
Single mother (%)	28.43	

Variable	<i>M (SD) or Percent- age Distribution</i>	
Mother's education		
Less than high school (%)	13.29	
High school diploma (%)	29.71	
Some college (%)	33.09	
College degree (%)	17.88	
Advanced degree (%)	6.04	
Family income	7.99	(3.22)
Mother's employment		
Full-time (%)	47.52	
Part-time (%)	22.43	
Nonemployment (%)	30.06	
Poorer English proficiency	12.26	
Parenting values		
Inquiry and praise	3.61	(.45)
Spanking	.40	(1.01)

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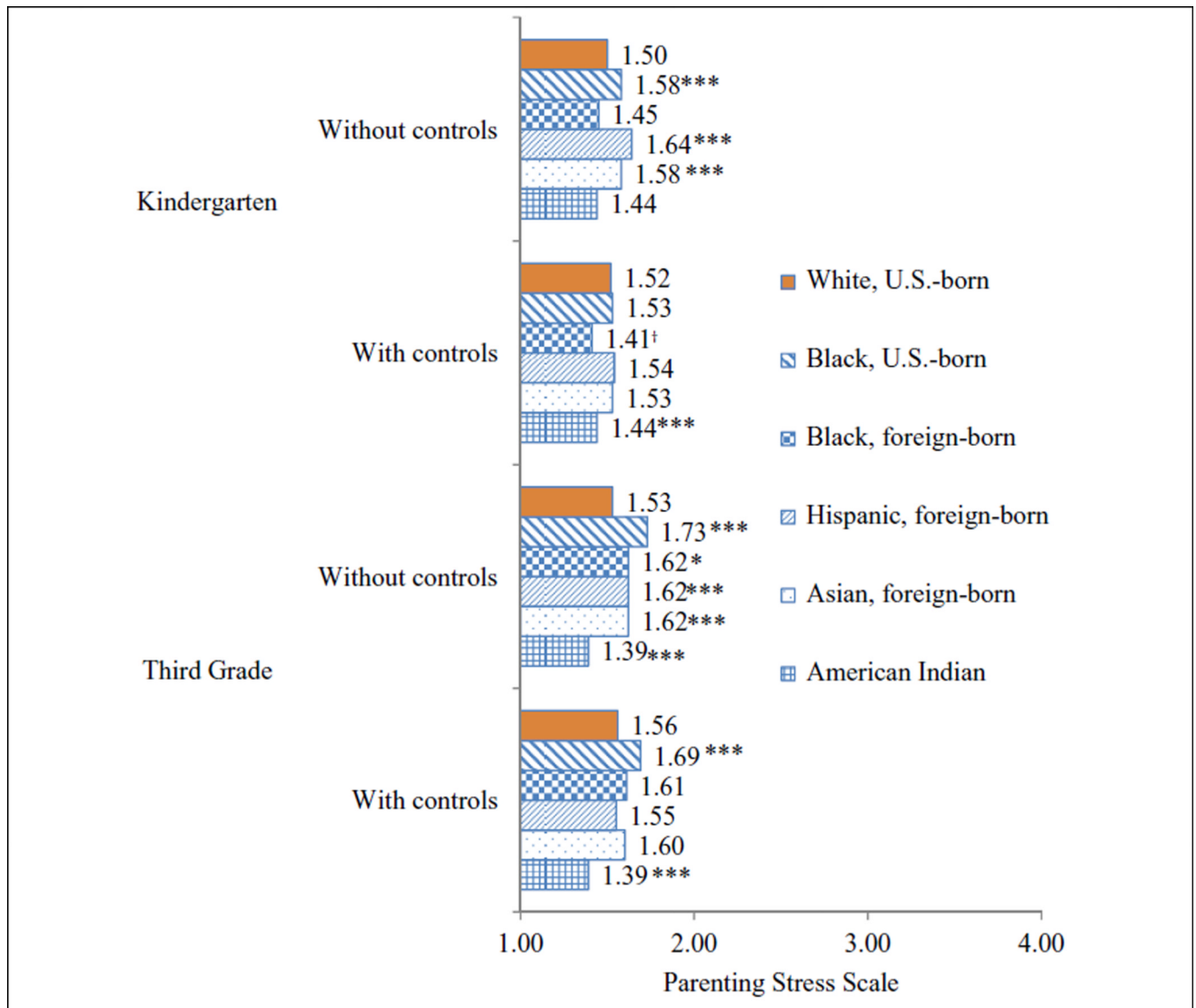


Figure 1. Predicted Means for Maternal Parenting Stress for Selected Racial-Ethnic and Nativity Groups in Kindergarten and Third Grade.
Note: Differences from U.S.-born whites were significant at † $p < .10$, * $p < .05$, and *** $p < .001$. Figures for “without controls” are created on the basis of coefficients in Model 5 in Table 2. Figures for “with controls” are created on the basis of coefficients in Model 6 in Table 2.

Table 1
 Weighted Means (Standard Deviations) or Percentage Distributions for Variables by Race-Ethnicity and Nativity ($n = 11,324$).

Variable	White Native	White Foreign	Black Native	Black Foreign	Hispanic Native	Hispanic Foreign	Asian Native	Asian Foreign	American Indian
Maternal parenting stress in K (range = 1-4)	1.51 (.48)	1.54 (.52)	1.58*** (.55)	1.47 ^a (.59)	1.50 (.54)	1.64*** ^c (.60)	1.48 (.34)	1.57*** ^b (.40)	1.44** (.49)
Maternal parenting stress in G3 (range = 1-4)	1.54 (.50)	1.56 (.45)	1.72*** (.67)	1.66** (.54)	1.53 (.55)	1.63*** ^c (.49)	1.49 (.36)	1.61*** ^c (.34)	1.38*** (.42)
Mother's age in K	34.15 (5.73)	35.16** (5.94)	32.85*** (9.00)	34.04 ^b (5.53)	31.50*** (6.38)	32.20*** ^b (6.29)	35.03* (4.69)	35.13*** (3.83)	32.62*** (7.01)
Number of other children in K	1.40 (.99)	1.38 (.99)	1.56*** (1.40)	1.71*** (1.42)	1.54*** (1.21)	1.70*** ^c (1.26)	1.51 (.94)	1.56*** (.97)	2.25*** (1.78)
Number of other children in G3	1.45 (.98)	1.46 (.89)	1.64*** (1.49)	1.54 (1.40)	1.61*** (1.08)	1.87*** ^c (1.22)	1.71** (1.04)	1.64*** (.90)	2.22*** (1.67)
Single mother in K%	16.90	11.92***	64.41***	37.24*** ^c	31.27***	26.74*** ^b	14.07	13.75**	52.88***
Single mother in G3%	22.71	15.58***	65.50***	41.42*** ^c	30.24***	27.84***	26.18	19.17*** ^a	50.94***
Family income in K (range = 1-13)	8.96 (2.71)	9.12 (2.82)	5.40*** (3.22)	6.68*** ^c (3.06)	7.33*** (3.14)	5.21*** ^c (2.74)	8.68 (2.32)	8.42*** (2.17)	5.54*** (3.29)
Family income in G3 (range = 1-13)	9.11 (2.76)	9.58** (2.51)	5.65*** (3.59)	7.48*** ^c (3.41)	7.67*** (3.22)	5.85*** ^c (2.79)	8.34 (2.32)	9.04 (1.93)	6.07*** (3.29)
Maternal employment in K									
Full-time%	43.28	29.30***	59.77**	59.58***	48.70*	33.34*** ^c	50.48*	49.92**	46.75
Part-time%	26.84	26.70	13.63***	12.79***	20.37***	15.83*** ^b	20.26*	17.64***	14.04***
Nonemployment%	29.88	44.00***	26.60**	27.62	30.94	50.83*** ^c	29.26	32.44	39.20**
Maternal employment in G3									
Full-time%	47.60	37.97*	64.78***	69.33*** ^a	51.52**	46.50 ^c	55.10	59.87*** ^a	53.03*
Part-time%	26.35	31.05*	11.39***	13.79**	20.15***	15.27*** ^c	17.58**	19.06***	14.17***
Nonemployment%	26.05	30.98*	23.84*	16.88*** ^a	28.33	38.23*** ^c	27.32	21.06*** ^a	32.80*
Mother's education in K									
Less than high school%	5.29	3.98	15.22***	11.05*	17.40***	50.17*** ^c	4.50	10.62*** ^c	14.73***
High school diploma%	27.75	16.85***	37.50***	21.58*** ^a	37.05**	26.12*** ^c	30.18	22.38*** ^b	33.94**
Some college%	35.23	37.25	36.24	46.19*** ^a	33.87	17.10*** ^c	26.53**	23.19***	41.10*
College degree%	23.24	27.15	9.15***	17.12*** ^a	9.78***	5.23*** ^c	34.11***	31.96***	8.66
Advanced degree%	8.49	14.77***	1.89***	4.06**	1.90***	1.39***	4.68**	11.85*** ^c	1.57***

Variable	White Native	White Foreign	Black Native	Black Foreign	Hispanic Native	Hispanic Foreign	Asian Native	Asian Foreign	American Indian
Poorer English proficiency in K (range = 1-4)	.01	.22***	.00	.11***c	.21***	.82***c	.07*	.50***c	.02**
Parenting values									
Inquiry and praise in G1 (range = 1-4)	3.68 (.39)	3.66 (.42)	3.48*** (.53)	3.37***d (.50)	3.61*** (.47)	3.40***c (.55)	3.59*** (.38)	3.37***c (.40)	3.60* (.42)
Frequency of spanking in previous week in K	.47 (1.18)	.36* (1.01)	.84*** (1.57)	.63 (1.18)	.56** (1.16)	.62*** (1.15)	.47 (.61)	.58** (.87)	.35** (.83)
Frequency of spanking in previous week in G3	.24 (.66)	.24 (.54)	.44*** (.92)	.27 ^b (.75)	.33* (1.07)	.16***c (.52)	.42** (.54)	.39** (.59)	.23 (.49)
<i>n</i>	7,279	267	1,153	81	623	1,040	134	486	171
<i>n</i> person-years	14,557	535	2,305	162	1,247	2,081	267	973	342
%	64.79	2.38	10.26	.72	5.55	9.26	1.19	4.33	1.52

Note: G1 = grade 1; G3 = grade 3; K = kindergarten.

Differences from U.S.-born white mothers are significant at * $p < .05$, ** $p < .01$, and *** $p < .001$ (two tailed).

Differences from U.S.-born mothers within the same racial-ethnic group are significant at ^a $p < .05$, ^b $p < .01$, and ^c $p < .001$ (two tailed).

Table 2

Random-Effects Models of Pooled Time Series Analysis Predicting Differences in Maternal Parenting Stress by Race-Ethnicity and Nativity (*N* = 22,648 Person-Years).

Variable	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Mother's race-ethnicity and nativity						
White, U.S.-born	—	—	—	—	—	—
White, foreign-born	.042 (.028)	.037 (.027)	.042 (.027)	.037 (.027)	.042 (.033)	.038 (.033)
Black, U.S.-born	.141 *** (.014)	.090 *** (.015)	.105 *** (.014)	.069 *** (.015)	.079 *** (.017)	.002 (.017)
Black, foreign-born	.018 (.048)	-.002 (.048)	-.021 (.048)	-.032 (.047)	-.056 (.059)	-.111 [†] (.058)
Hispanic, U.S.-born	.004 (.019)	-.022 (.019)	-.009 (.018)	-.026 (.018)	-.002 (.022)	-.034 (.022)
Hispanic, foreign-born	.118 *** (.014)	.005 (.023)	.087 *** (.014)	.003 (.022)	.137 *** (.017)	.013 (.024)
Asian, U.S.-born	-.005 (.047)	-.004 (.047)	-.022 (.045)	-.018 (.045)	-.006 (.054)	-.015 (.054)
Asian, foreign-born	.083 *** (.024)	.063 ** (.024)	.041 (.024)	.028 (.024)	.075* (.029)	.018 (.029)
American Indian	-.096 ** (.036)	-.128 *** (.036)	-.103 ** (.035)	-.123 *** (.035)	-.059 (.041)	-.085* (.041)
Structural characteristics						
Mother's age	—	-.003 *** (.001)	—	-.003 *** (.001)	—	-.003 *** (.001)
Number of other children	—	-.019 *** (.004)	—	-.021 *** (.004)	—	-.020 *** (.004)
Single mother	—	.023* (.010)	—	.024* (.010)	—	.025* (.010)
Family income	—	-.012 *** (.002)	—	-.010 *** (.002)	—	-.010 *** (.002)
Mother's employment						
Full-time	—	—	—	—	—	—
Part-time	—	.022* (.009)	—	.022* (.009)	—	.023* (.009)
Nonemployment	—	.014 (.009)	—	.013 (.009)	—	.012 (.009)
Mother's education						
Less than high school	—	.062 *** (.015)	—	.053 *** (.015)	—	.054 *** (.015)
High school diploma	—	—	—	—	—	—
Some college	—	-.004 (.011)	—	.002 (.011)	—	.002 (.011)
College degree	—	.028* (.013)	—	.038 ** (.013)	—	.037 ** (.013)
Advanced degree	—	.084 *** (.019)	—	.092 *** (.019)	—	.092 *** (.019)

Variable	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Poorer English proficiency		.033** (.012)		.027* (.012)		.027* (.012)
Parenting values						
Inquiry and praise			-.103*** (.011)	-.094*** (.011)		-.094*** (.011)
Spanking			.051*** (.004)	.049*** (.004)		.049*** (.004)
G3	.035*** (.005)	.041*** (.005)	.049*** (.005)	.054*** (.005)	.022*** (.007)	.038*** (.007)
Mother's race-ethnicity and nativity × G3						
White, U.S.-born × G3						
White, foreign-born × G3					-.002 (.038)	-.002 (.040)
Black, U.S.-born × G3					.120*** (.017)	.129*** (.017)
Black, foreign-born × G3					.148* (.061)	.157* (.061)
Hispanic, U.S.-born × G3					.012 (.024)	.015 (.024)
Hispanic, foreign-born × G3					-.040* (.019)	-.021 (.019)
Asian, U.S.-born × G3					.003 (.084)	-.006 (.083)
Asian, foreign-born × G3					.017 (.037)	.021 (.037)
American Indian × G3					-.082 (.045)	-.085 (.045)
Intercept	1.498*** (.006)	1.678*** (.030)	1.853*** (.035)	1.978*** (.046)	1.504*** (.006)	1.981*** (.046)

Note: Models used weighted data. G3 = third grade.

† $p < .10$.

* $p < .05$.

** $p < .01$.

*** $p < .001$.