

A wealth of empirical research has documented substantial racial/ethnic gaps in the cognitive and socio-emotional skills of school-aged children and adolescents. These gaps have long term implications for racial and ethnic inequalities, given the importance of these skills to educational attainment and later economic success. According to one estimate, as much as half of the black/white disparities in children's test scores are apparent at the time children enter elementary school (Rouse et al. 2005). Thus, identifying factors that explain racial and ethnic disparities in children's readiness for school is an important goal for social science researchers. In the present study, we use longitudinal data from the Fragile Families and Child Wellbeing Study to assess cognitive and behavioral gaps in school readiness among black, Hispanic, and white children. Specifically, we ask (1) How large are racial/ethnic gaps in verbal ability and behavioral problems at age five? (2) To what extent do parental, child, and family characteristics explain these gaps?

This study contributes to existing literature in several ways. First, while considerable strides have been made in recent years regarding our understanding of racial/ethnic differences prior to the start of school (e.g. Rouse et al. 2005), research is still relatively sparse, and most focuses on gaps between black and white children on measures of cognitive ability (e.g., Brooks-Gunn et al., 2003; Fryer & Levitt, 2004). Given that social and emotional competence play key roles in children's ability to adapt to and function in formal school settings (Raver 2002), gaining a better understanding of racial/ethnic differences in behavioral readiness, especially between Hispanic and white children, is important for reducing these gaps. Second, to our knowledge, this study is the first to examine cognitive readiness gaps as measured by the PPVT-R in a recent cohort of school-aged children, as other research examining this measure relies on an older cohort of children (NLSY). Third, consistent with existing research, we examine characteristics of mothers (e.g., socioeconomic resources, mental health, and parenting behaviors), which potentially explain racial/ethnic gaps in early education. We go beyond prior research, however, by investigating the extent to which characteristics of fathers, including their incarceration history and relationships with children, matter. Fourth, whereas research has investigated the mediating role of family structure and divorce, the longitudinal nature of the Fragile Families study, as well as its oversample of nonmarital births, allow us to identify whether alternative types of union transitions (e.g., into marriage and out of cohabitation) and trajectories of mothers' romantic relationships explain racial/ethnic gaps in school readiness. Furthermore, we draw on Fragile Families' rich measures of marital conflict and co-parenting processes to better understand the extent to which school readiness gaps can be attributed to differences in the early home environments of racial/ethnic minority and white children.

Data and Methods

We use data from the Fragile Families and Child Wellbeing Study; this study uses a longitudinal birth-cohort design and is nationally representative with appropriate weighting. This study follows children born between 1998 and 2000 (N=4, 898), of which approximately 75% were born to unmarried women; data was collected at birth, and at one, three and five years following birth. We draw our outcomes from a special In-Home module added during the three and five year data collections designed to assess the physical environment and parenting through direct observation. Approximately 80 % of those in the core survey also took part in the In-Home survey, with approximately 65 % completing both the survey and the observational component. Our final analytical sample also excludes mothers who were not in the national sample

(N=1899). In the tradition of other research in this area, we use a series of OLS models in which we first compare white and black children, followed by white and Hispanic children. Each model includes a dichotomous indicator of a child's race or ethnic minority status, we then introduce sets of measures which capture socioeconomic status, family instability and functioning, parenting, child characteristics, as well as characteristics of mothers that are expected to explain these disparities. Our final analyses will also include more detailed information, including observed measures, on a child's neighborhood and home. We will also explore variations in measurement of the explanatory factors to see whether the mean level, variation over time, and timing of these resources best explain the racial and ethnic inequalities in school readiness.

Measures

School readiness outcomes. Children's *verbal ability* is measured with age-standardized scores on the Peabody Picture Vocabulary Test-Revised (PPVT-R). The PPVT-R, a measure of receptive vocabulary, was administered to children during the five-year in-home survey and assesses the size and range of words that children understand. Children's behavioral problems are measured using subscales derived from the Child Behavioral Checklist. For each subscale, mothers report the extent to which statements about the child's behavior are true of the child (0 = *not true*, 1 = *sometimes or somewhat true*, 2 = *often or very true*). *Externalizing problems* is the sum of mother-reported responses to the aggressive and rule-breaking behavior subscales. The aggression subscale assesses whether a child attacks others, argues, disobeys, or destroys property, for example. The rule-breaking subscale includes items on setting fires, stealing, swearing, and vandalizing. We measure *internalizing problems* by summing scores on the anxious/depressive and withdrawn behavior subscales. The anxious/depressive subscale asks, for example, about worrying that no one loves them, that they might do something bad, or that they have to be perfect. The withdrawn subscale includes items such as whether a child is uninvolved in social activities, refuses to talk, or would rather be alone. Our measure of *attention problems* assesses whether a child stares blankly, is confused, or acts without thinking, for example. The *social problems* subscale asks about not being liked by other children, preferring to be with younger children, or being teased.

Explaining Racial and Ethnic Disparities

Fragile Families data includes an extensive set of measures capturing socioeconomic conditions, the home environment, family instability and functioning, parenting behaviors, and a wealth of characteristics that tap into parent and child wellbeing. We follow previous research by utilizing measures of poverty and hardship that account for family size as well as measures of maternal education. We also examine whether dimensions of mother's employment, family's residential mobility, and intergenerational measures of social background such as grandparent's education level can add to our understanding of race and ethnic disparities. In an improvement over previous study, we can go beyond simple measures of family structure and fertility timing to include residential and nonresidential relationship transitions, multipartnered fertility, and aspects of the mother and biological father's relationship including supportiveness, and conflict. We also examine whether living arrangements such as a grandparent's presence in the home and the ability to draw on social and economic support from family explains existing gaps. In addition to using observational measures of parenting that tap into warmth, discipline and

literacy promoting behaviors, we will also examine how parents' cooperation in parenting varies by race and ethnicity. Finally, in addition to drawing on a host of measures that capture maternal and child wellbeing during these early years, we will also examine how characteristics of fathers, both resident and nonresident, shape children's school readiness and may account for school-entry inequities.

We find substantial disparities in school readiness; in virtually every instance whites are more academically and behaviorally ready for school, as compared to black and Hispanic children. White children have on average PPVT-R scores that are 0.8 standard deviations above the average black child and 1.04 SD above the average Hispanic child. Behavioral measures also show sizable gaps; for instance, white children show lower levels of externalizing behaviors than black children (0.23 SD) and Hispanic children (0.21 SD). White children also show lower levels of social problems, on average 0.28 SD lower than black children and 0.42 SD lower than Hispanic children. While, on average, white and black children show similar levels of internalizing behaviors, Hispanic children are almost half a standard deviation higher (0.43 SD).

To the extent that we can compartmentalize intertwined processes, our preliminary results suggest that socioeconomic resources remain a key explanatory mechanism, while family instability as well as parenting also contribute to explaining racial and ethnic disparities. For example, SES factors explain 45, 34 and 16% of the black-white gaps in academic readiness, externalizing and social problems. Independently considered, family instability and parenting controls can completely explain the higher levels of externalizing behaviors and social problems among black children. Family instability and parenting each explain approximately half of the gap in academic readiness. Given that these measures tap into some of the same concepts, we also examine the additive value of both parenting and family instability over and above socioeconomic factors; here, we find that they explain a more modest, but additional 6 and 30% of the remaining academic gap, respectively.

The story for the white-Hispanic gap is substantially more complex. SES explains 43%, 28%, 0% and 11% of the gaps in academic readiness, internalizing, externalizing and social problems. Independently considered, family instability and parenting explain approximately 30 to 50% of the gaps in PPVT-R, internalizing, and social problems but virtually none of the gap in social problems. After controlling for both SES and child characteristics, family instability and parenting measures explains approximately 10% of the remaining gap each for both PPVT-R and social problems. Family instability explains approximately 20% and parenting 40% of the remaining gap for internalizing. Our ability to explain to disparities between white and Hispanic children is lower, and especially so for the differences in externalizing. We will continue to refine measures and isolate conditions that may be particularly important to understanding the different social and economic conditions of white and Hispanic families.

References available upon request.