Cumulative Risks on Child Health and Development by Family Structure, Education, and Race

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Extended Abstract

Family structure, parents' race and ethnicity, and education level have all been linked to child health, behavioral problems, and cognitive development. Researchers have also focused on how a combination of individual, social, and biological risk factors affect the health and development of young children, recognizing that children seldom experience risks in isolation. Research concludes that the number of risks a child is exposed to is often more harmful to healthy development than any one particular risk factor alone. However, little attention has been paid to how these risk factors differ across family structure, race/ethnicity, and education level, and whether the impact of multiple risk factors on child health and development is similar across all groups. In addition, we know little about how these risk factors change over time within different families.

We use data from the Fragile Families Study, a new, large, birth cohort study, to examine the level of risk that children are exposed to at birth, and how their risk increases or decreases between birth and age 3. We also determine whether the level and change in risk differs by the family structure, race/ethnicity, and education level of the mother. In addition, we examine the association between these risk factors (individually and cumulatively) and child behavioral problems, cognitive development, and physical health at age 3. Our goal is to determine whether the effect of these risk factors is moderated by family structure, mothers' race and ethnicity, and education level.

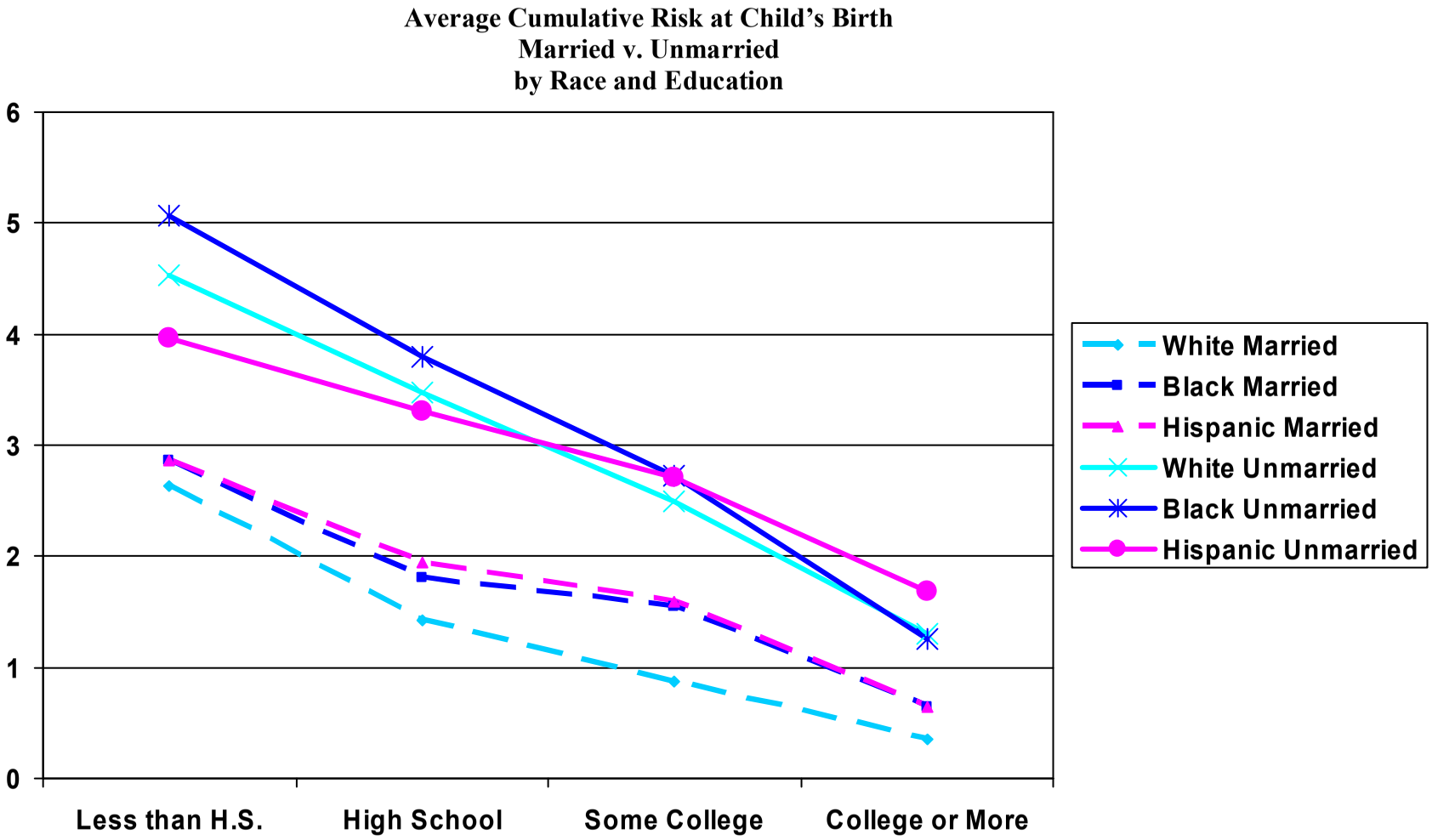
Twenty risk factors are analyzed at the child's birth, age 1, and age 3. Biological (low birth weight); socioeconomic (less than 150% of the poverty line, living in public housing, living in an unsafe neighborhood, mother is working but poor); family structural (family density is greater than 2); maternal (under 21 years old, depressed, in fair or poor health, prenatal smoking, prenatal drug use, substance abuse problem, in an abusive relationship, low social support); and paternal risk factors (under 21 years old, less than high school, health problems limit work, substance abuse problem, incarcerated, unemployed) are included. Family structure (unmarried and father absent), mother's education level (less than a high school degree), and race and ethnicity (minority status) are excluded from the risk index to examine whether risk factors differ across families. Child outcomes include behavioral problems (aggressive, withdrawn, and anxious/depressive based on the 1992 Achenbach Behavioral Problem Index subscales and attention deficit hyperactivity disorder based on the 2000 Achenbach scales), cognitive development (PPVT-R), and visits to the emergency room due to accident or injury, all measured at age 3.

Preliminary results show that the number of risks children are exposed to at birth differs most by education level. College educated mothers expose their children to the fewest risks (.99) and mothers with less than a high school degree expose their children to the greatest number of risks (6.74). Number of risks also differs considerably by family structure (1.49 for married,

4.76 for cohabiting, and 6.36 for single mother families). Differences by race and ethnicity are smaller, and almost negligible within given family structures and education levels.

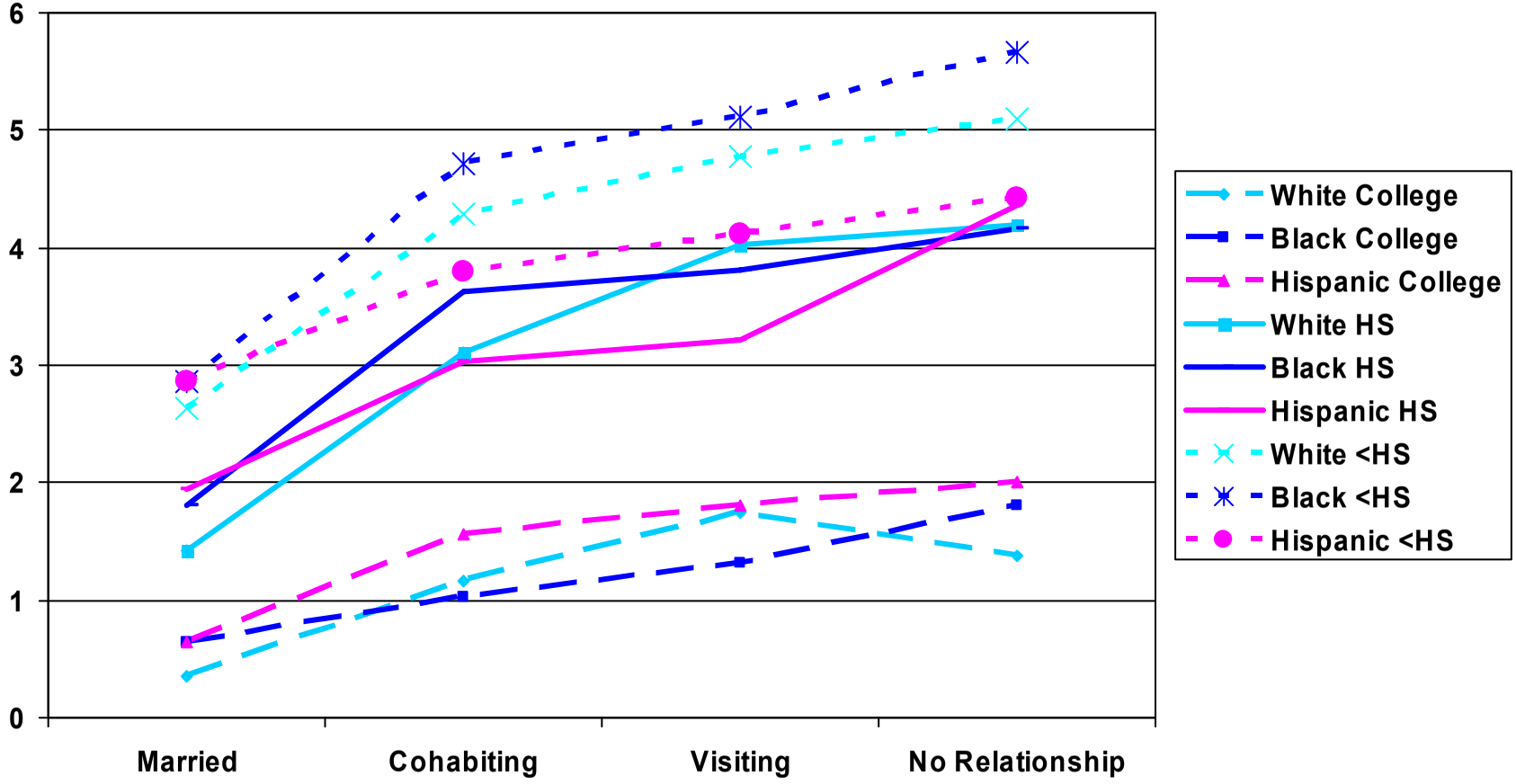
The next stage of the analysis will analyze how these risk factors change from birth to age 1 and from age 1 to age 3. Preliminary results show that children born to unmarried and less educated parents not only experience more disadvantages at birth, but that this disparity increases over time. These findings have important implications for understanding the growing inequality among families.

The final stage of the analysis will analyze the effect of cumulative risks on child health and development. Preliminary results suggest, that consistent with prior research, the number of risks a child is exposed to is more predictive of negative outcomes as compared to any one particular risk. We plan to investigate how this differs by family structure, education level, and race/ethnicity.



Risk factors include: lbw, 150% poverty line, public housing, unsafe neighborhood, working poor, family density>2, <21yrs, depressed, fair or poor health, prenatal smoking, prenatal drug use, substance abuse problem, abusive relationship, low social support, dad health problem, dad<21yrs, dad<hs, dad drug problem, dad in jail, dad unemployed

Average Cumulative Risk at Child's Birth
High v. Low Education
by Race and Relationship Status



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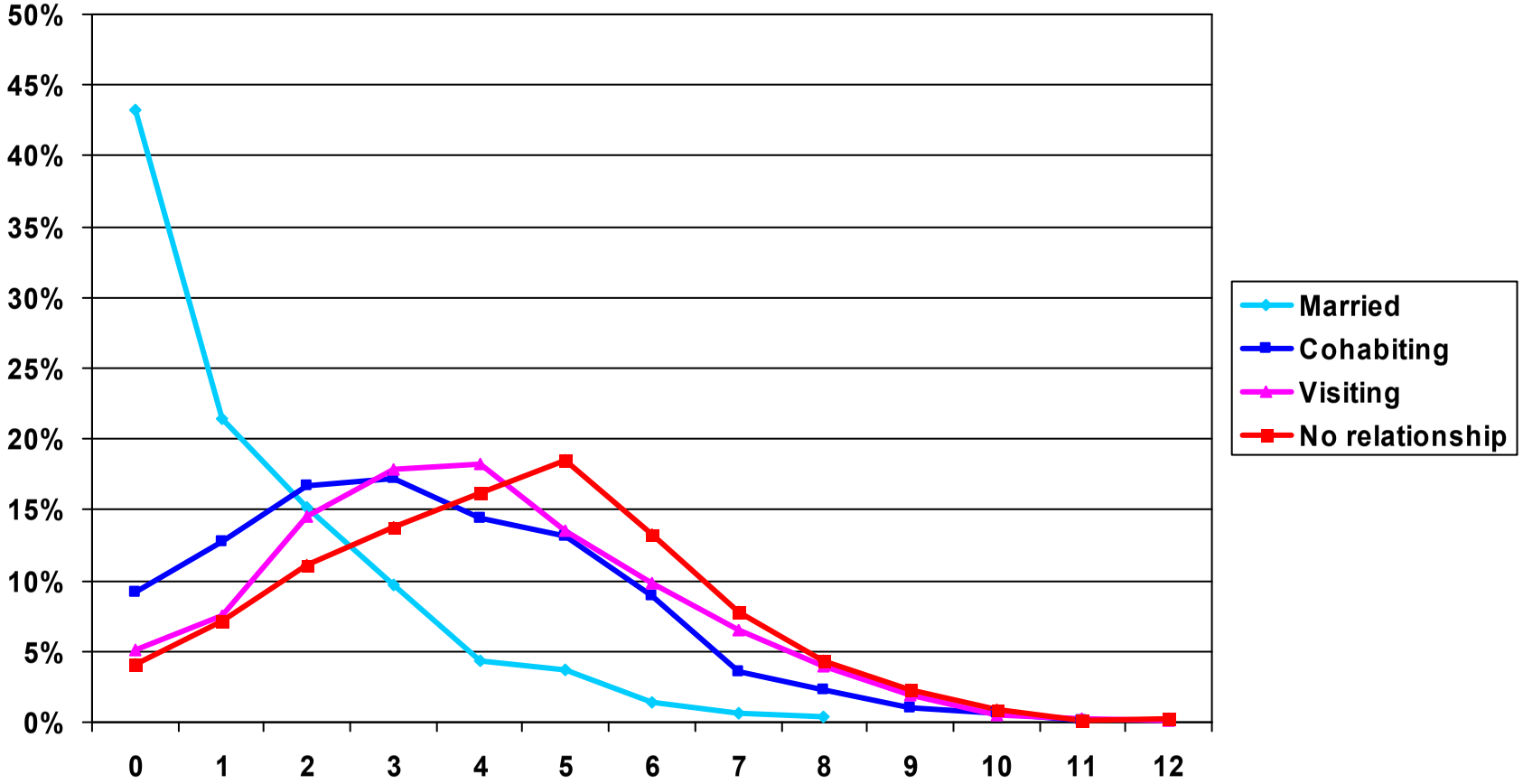
Distribution of Cumulative Risk at Child's Birth
by Relationship Status
(Maximum = 20)



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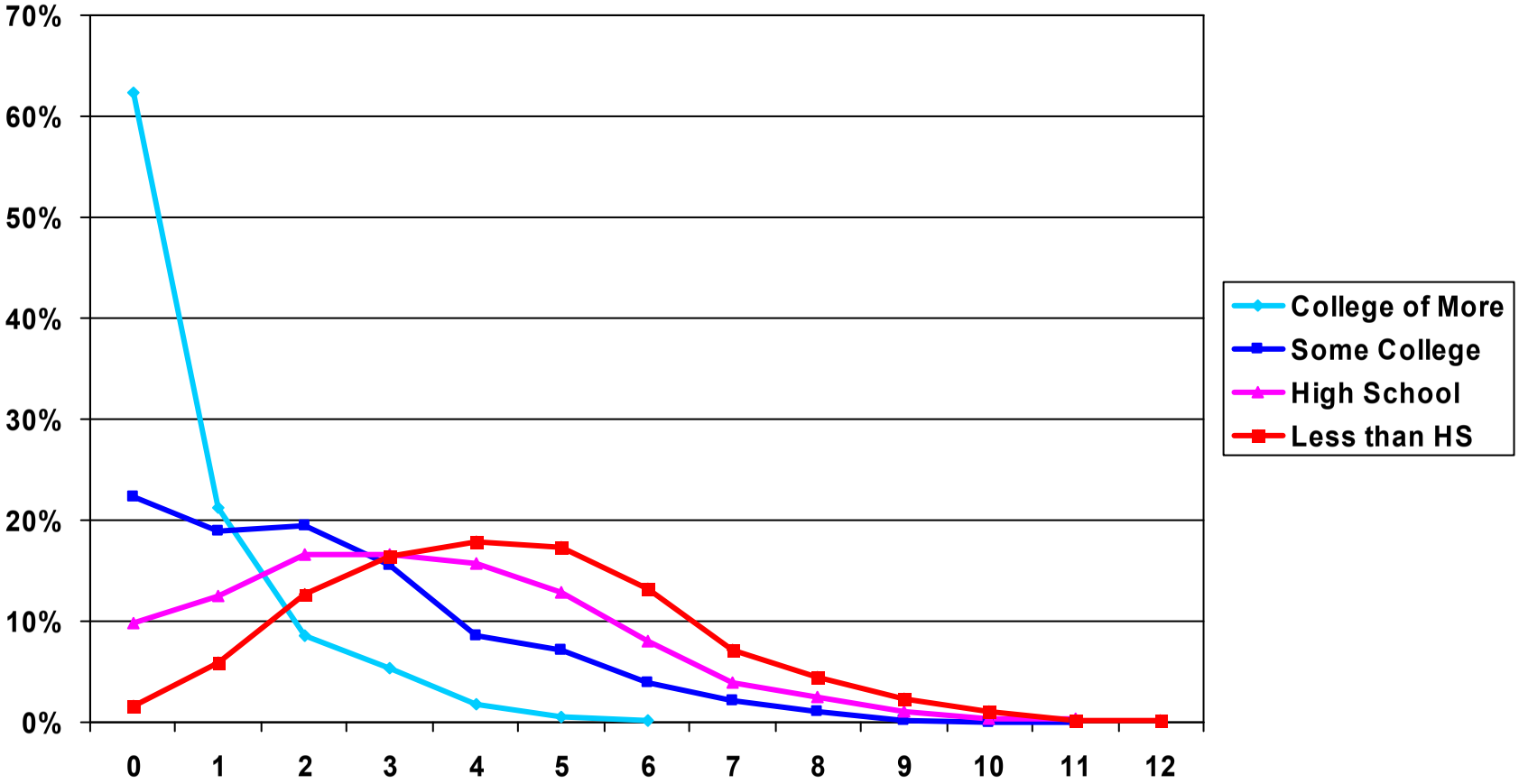
Distribution of Cumulative Risk at Child's Birth
by Education Level
(Maximum = 20)



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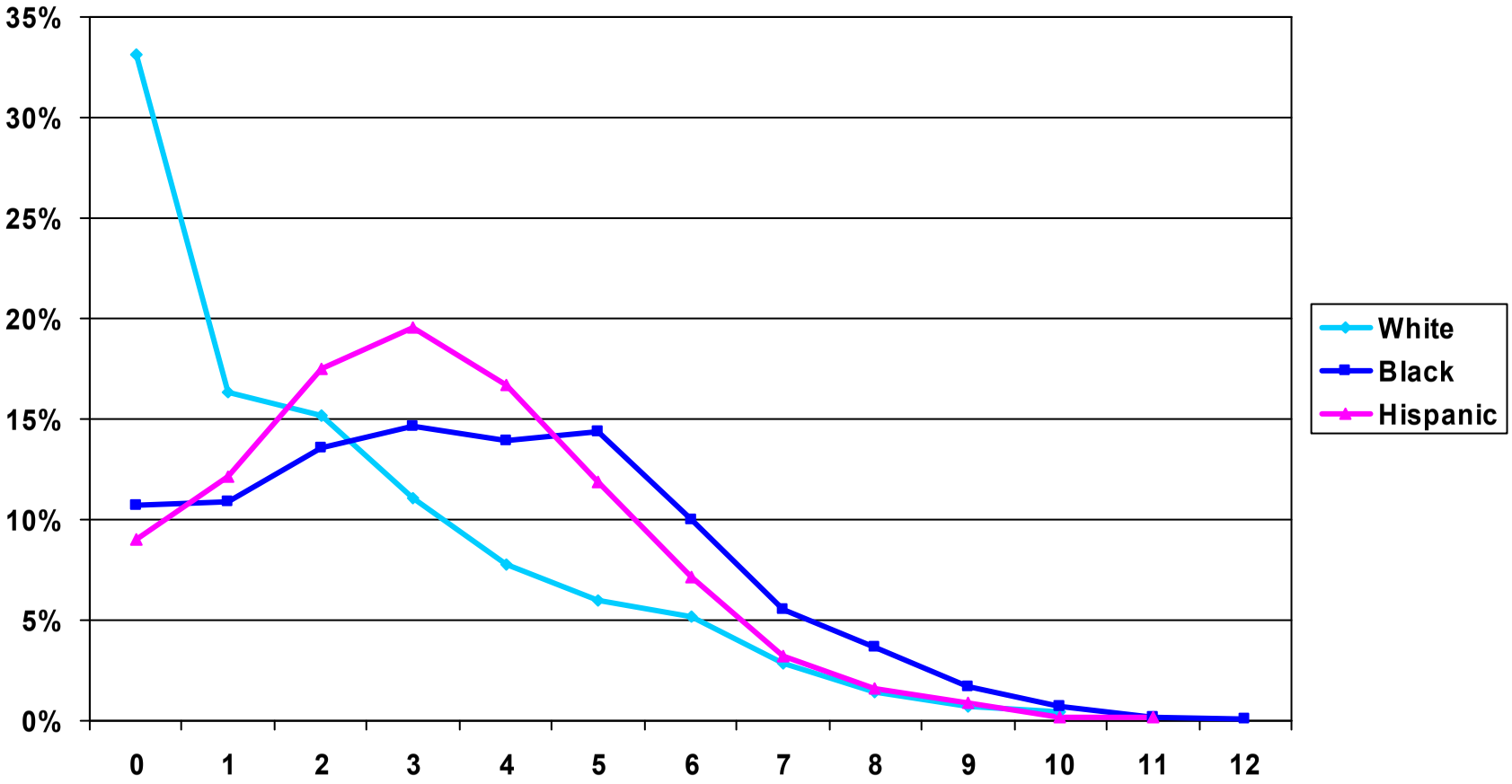
Distribution of Cumulative Risk at Child's Birth
by Race/Ethnicity
(Maximum = 20)



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