The Color, Class, and Context of Family Structure and Its Association with Children's Educational Performance

by

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DEDICATION

To Joann Cross, my earthly angel and to Thomas Cross, who dances with angels,

for your immeasurable sacrifices

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ABSTRACT

Over the last several decades, the U.S. has undergone a major shift in its racial/ethnic landscape. Historically, American society has been majority white. However, higher fertility rates, increased immigration, and younger average ages among people of color have led to racial/ethnic minorities' growth in the relative share of the population, and they are projected to constitute more than half the population by 2050. Accompanying this shift has been a growing recognition of the need for family-related research that reflects the racial and ethnic diversity of American society. Any such investigation would be incomplete, of course, without acknowledging the inextricable link between race and class in America and how it shapes family life. Unfortunately, however, research on family structure and child wellbeing frequently generalizes the experiences of white families to the broader population, without reference to how differences in social location, particularly race/ethnicity and social class may lead to distinct outcomes for youth. To address this limitation, this dissertation investigates racial/ethnic and class differences in family structure and their relationship to children's educational performance.

The first study examines the prevalence and predictors of an understudied but relatively common family structure, especially among minority and/or low-income populations—the extended family. The second study explores an important and unexplained finding: although children raised by both biological parents fare better academically than children raised in any other family structure, living apart from a biological parent is *less* negatively consequential for

racial/ethnic minority children than white children. I test two hypotheses that have been posited to account for racial/ethnic differences in the association between family structure and children's educational attainment: the socioeconomic stress and extended family embeddedness hypotheses. The third study explores intragroup diversity in family life. Specifically, I examine intraracial differences in family structure and family integration among Black Americans and their association with youths' grades, grade repetition, and number of suspensions.

Results from the first study indicate that contrary to popular and academic perceptions, extended family households are fairly common: 35% of youth experience this family structure during childhood. Black and Hispanic children are approximately 3 and 1.5 times more likely to live in an extended family than white children, respectively, and children whose parents have less education are substantially more likely to live in this arrangement. Additionally, the transition into an extended family is largely a response to social and economic needs. Findings from the second study show that that both socioeconomic stress and extended family embeddedness attenuate the effect of family structure on minority youths' educational attainment, though the former to a much greater extent. These findings lend support for the socioeconomic stress hypothesis, which posits that the negative effect of familial disruption may be less independently impactful for groups facing many socioeconomic disadvantages to begin with. The third study demonstrates that there is significant within-group variation in family structure and integration among black families and that these factors have a more limited and inconsistent relationship with adolescents' educational outcomes than implied by previous scholarship.

Collectively, these findings advance a more diverse portrait of American families, which has been lacking in extant research. They also show that the consequences of family structure

differ by race/ethnicity and social class. Thus, efforts aimed at promoting child wellbeing should consider this diversity in family arrangements and outcomes, and their implications for policy and practice.

CHAPTER I

Introduction

Background and Significance

In 2000, social scientists Vonnie McLoyd, Ana Mari Cauce, David Takeuchi, and Leon

Wilson published "Marital Processes and Parental Socialization in Families of Color: A Decade

Review of Research" in the *Journal of Marriage and Family*. In this widely cited piece, the

authors appraise recent scholarship published on family structure and parenting practices among

families of color and highlight key challenges for research in this area. While they acknowledge

important advances in this domain, such as the move from documenting changes in family

structure to investigating the underlying causes of such changes, they also point out the

disconnection between the demographic reality of the United States and the quantity and quality

of studies on families of color:

"Notwithstanding these achievements, social science research on marital processes and familial socialization has considerable distance to go before it adequately reflects the ethnic and racial diversity of the United States. The dearth of family research is a special area of concern because the demographic revolution is already present in the classrooms, schools, and lives of our children. For real progress to occur, we not only need more studies, but higher quality ones."
(McLoyd, Cauce, Takeuchi, and Leon, 2000: 1087)

As McLoyd, Cauce, Takeuchi, and Leon's work aptly suggests, focusing greater attention

on the unique experiences of families of color is important for both research and policy.

Research wise, racial/ethnic groups differ significantly in family composition and access to

socioeconomic resources (McLanahan & Percheski, 2008; Brown, 2010), which may lead to

differences in family processes and outcomes for children. A lack of attention to these factors

limits our ability to fully understand the ways in which the family as an institution matters for youth's daily experiences and future life chances, and how it may operate differently across racial and class lines. In terms of policy, current social welfare policies emphasize the importance of the family, specifically the two-parent nuclear family, in promoting child wellbeing. In fact, 3 of the 4 goals of welfare reform focus on the two-parent family as an important strategy for reducing socioeconomic hardship (U.S. House of Representatives, 1996). However, these policies and the assumptions underlying them more adequately reflect the white middle-class experience of family life, making them potentially less effective than they would be otherwise if they considered racial/ethnic and class differences in family processes and outcomes.

Given growing recognition of the need for social science research that mirrors the racial and ethnic diversity of American families, one may have anticipated a substantial increase in the number of studies focused specifically on families of color. However, in the nearly two decades since the publication of McLoyd, Cauce, Takeuchi, and Leon's work—in arguably the leading family studies journal—such investigations are still rare. And this paucity is most glaring among quantitative research. To address this limitation, my dissertation uses nationally representative data from two surveys, the Panel Study of Income Dynamics (PSID) and the National Survey of American Life (NSAL) to examine racial/ethnic and class differences in family structure and their relationship to one important indicator of child wellbeing: educational performance. This is accomplished through three distinct research aims, which comprise three freestanding but interrelated empirical chapters in my dissertation. These chapters are guided by a central question: *how do race/ethnicity and social class shape patterns of family formation and its consequences for child wellbeing?*

Dissertation Aims

Aim 1: Document the prevalence and predictors of extended family households across childhood, highlighting, differences by race/ethnicity and socioeconomic status (SES)

The first empirical chapter (Chapter Two) addresses the first part of this question by showing how race/ethnicity and social class shape the formation of an understudied but salient family structure, especially among minority and/or low-income populations—the extended family. Most research on family structure and child wellbeing focuses on the presence or absence of a child's biological parents in the household and the parents' union status. This literature has shown that children fare better on a wide range of outcomes when they are raised in a two-parent nuclear family. While these studies provide great insight, it is important to acknowledge that children often live in households whose members extend beyond the nuclear family. They may also live with extended relatives such as grandparents, aunts, uncles, and other relatives, such as cousins. However, little is known about the full extent to which children coreside with extended relatives, which groups are most likely to experience this living arrangement, and which factors determine whether a child will live in an extended family household. Drawing on 26 years of data from the PSID, this study examines the prevalence of extended family coresidence across childhood (from birth to age 17), investigates differences by race/ethnicity and socioeconomic status (SES), and identifies predictors of this living arrangement. Documenting the pervasiveness and predictors of extended family households is particularly important at a time when research has begun to find strong associations (both positive and negative) between extended family coresidence and children's educational, behavioral, and cognitive outcomes (Dunifon & Kowaleski-Jones, 2007; Foster & Kalil, 2007; Mollborn, Fomby, & Dennis, 2012; Pilkauskas, 2014; Kang & Cohen, 2017). Results from this study allow us to better understand the potential

breadth of influence of extended family households on child outcomes and under what

conditions children are most likely to be impacted by coresidence, which can inform policy

related to family structure and child wellbeing.

Aim 2: Conduct hypothesis testing to better understand and explain racial/ethnic differences in

the association between family structure and children's educational attainment

Whereas the first empirical chapter focuses on how race/ethnicity and social class shape

the formation of a particular family structure, the extended family, the second empirical chapter

(Chapter Three) considers how the consequences of living in a given family structure, a single-

parent family, may differ by race/ethnicity and social class. Using 31 years of data from the

PSID and its two youth-centered supplements, it investigates an important and unexplained

finding in the literature: although children raised by both biological parents fare better

academically than children raised in any other family structure, living apart from a biological

parent is *less* negatively consequential for racial/ethnic minority children than white children. To

better understand this finding, I test two hypotheses that have been posited to account for

racial/ethnic differences in the association between family structure and children's educational

attainment: the socioeconomic stress and extended family embeddedness hypotheses.

The socioeconomic stress hypothesis acknowledges that minority children are more likely

to be exposed to socioeconomically stressful environments than white children, and it suggests

that minority children's exposure to sustained socioeconomic deprivation means that the

additional stress incurred by living apart from a parent is only marginally impactful, above and

beyond existing social disadvantages (McLoyd et al., 2000; Smith, 1997). The extended family

embeddedness hypothesis is directly related to findings from the first empirical chapter of my

dissertation about extended family coresidence. This hypothesis points to the fact that minority

families tend to live with or in closer proximity to their extended relatives than white families and they typically engage in more frequent exchanges of practical support (e.g., transportation help or help with chores). Some scholars have suggested that greater involvement in these extended family networks may reduce of some the negative psychosocial effects associated with parental conflict or separation (Lamborn & Nguyen, 2004; Pittman, 2007; McLoyd et al., 2000; Smith, 1997).

Understanding whether racial/ethnic differences in socioeconomic and extended family resources help explain the differential association between family structure and children's educational attainment is important for a number of reasons, but I will highlight just two here in the introduction. I will elaborate on other reasons in Chapter Three. First, this work provides an important corrective to work that assumes the primacy of the white middle-class two-biological-parent family model (Coontz, 1992; Roschelle, 1999). If minority children are less vulnerable to the adverse effects of parental separation than white children, then valorizing the two-biological-parent family over other family forms is unwarranted and may prove to be unfruitful in reducing racial/ethnic disparities in child outcomes. Second, contemporary policy discussions about family structure center on questions concerning the role of the two-parent family in promoting child wellbeing. (U.S. House of Representatives, 1996). If racial/ethnic differences in socioeconomic resources mediate the relationship between family structure and educational attainment, then what deserves policy attention is not minority families' deviation from the two-biological-parent family model, but rather the social structures that produce and maintain racialized socioeconomic inequities.

Aim 3: Examine intraracial differences in family structure and family integration among Black Americans and their association with youths' grades, grade repetition, and number of suspensions

While the first two empirical chapters focus on cross-group differences in family structure and/or outcomes, the third study extends this work by examining within-group heterogeneity in these phenomena among one major racial group, Black Americans. Specifically, I draw on a national probability sample of Black Americans from the NSAL Adolescent supplement (NSAL-A) to assess intragroup variation in family structure and family integration and their relation to black youths' grades, grade repetition, and number of suspensions. This study contributes to existing research in three key ways. To begin, this study's focus on within-group heterogeneity in family structure and integration helps expand notions of black family life by considering how variation in social background leads to differences in family configurations and outcomes among black youth (Cross, Taylor, and Chatters, 2018; Lincoln and Chae, 2012; Lincoln, Taylor, and Chatters, 2013; Thomas, 2012; Waters, 1999). In doing so, I am able to identify aspects of family structure and integration that enhance individual wellbeing within a group that is at an elevated risk of experiencing negative life outcomes, as well as factors that are unrelated or even detrimental to wellbeing. Moreover, while family structure is clearly important for children's educational performance (McLanahan and Sandefur, 1994; Brown, 2010), it does not capture dynamic features of family relationships such as family closeness, contact and support, commonly referred to as 'family integration', that may also impact youths' outcomes (Jarrett and Burton, 1999; Yabiku, Axinn, and Thornton, 1991). Therefore, I examine both family structure and integration side-by-side and assess how each factor relates to educational performance.

As I previously mentioned, each empirical chapter is freestanding, but they are guided by a central question. Therefore, each chapter contains its own background/theoretical framework, methods, and findings sections, and they will not be discussed in this introductory chapter. This introductory chapter is meant to provide a broad overview of each empirical chapter and their connection to one another. And these chapters are meant to be representative of my larger research agenda. Moving forward, I will continue to shed light on family structures like the extended family that are common among minority and/or low-income populations. I also intend to continue investigating how the relationship between family structure and individual outcomes is patterned by race/ethnicity and social class. Furthermore, I will delve deeper into documenting within-group heterogeneity in family processes among major racial/ethnic groups. My aim is that combined, these studies' considerations of *color* (i.e., race/ethnicity) and *class* will provide further *context* for researchers and policy makers about the extent to which existing theories and models of family structure and its relationship with child wellbeing are universal or differ by social location.

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CHAPTER II

Extended Family Households among Children in the United States: Differences by Race/Ethnicity and Socioeconomic Status

ABSTRACT

This study uses nationally representative data from the Panel Study of Income Dynamics (N=4,484), to longitudinally examine the prevalence and predictors of extended family households among U.S. children and to explore variation by race/ethnicity and socioeconomic status (SES). Overall, 35% of youth experience this family structure before age 18. Racial/ethnic and SES differences are substantial: Fifty-seven percent of Black children and 35% of Hispanic children live with an extended relative, compared to 20% of White children. Further, 47% of children whose parents did not finish high school spend time in an extended family, relative to 17% of children whose parents earned a Bachelor's degree or higher. Economic capacities and family needs are key predictors of extended family coresidence. Findings suggest that extended family households are a common living arrangement for children and that the transition into an extended family is largely a response to social and economic need.

Introduction

Most research on trends in children's living arrangements focuses on the presence or absence of a child's biological parents in a household and parents' marital or cohabitation status (Brown, 2010; Manning, Brown, & Stykes, 2014). However, children often live in households whose members extend beyond the nuclear family; they may also live with grandparents, aunts, uncles, and other relatives, such as cousins, who I collectively refer to as 'extended relatives'. Numerous studies have documented the central role of the extended family in the lives of children, particularly those from minority and/or economically disadvantaged backgrounds (Stack, 1974; Giordano, Cernkovich, & DeMaris, 1993; Trent & Harlan, 1994; Bengston, 2001; Hirsch, Mickus, & Boerger, 2002; Pernice-Duca, 2010; Garrett-Peters & Burton, 2016). Coresident extended family members often contribute to or constrain household finances through the exchange of resources such as money, food, and transportation (Stack, 1974; Edin & Schaefer, 2015; Garrett-Peters & Burton, 2016). They may also nurture children, provide childcare assistance, act as a co-parent, or even raise a child in the absence of their parents (Stack, 1974; Burton, 1992; Hunter, 1997; Pittman, 2007).

Despite the well-established importance of the extended family structure, little is known about the full extent to which children live with extended relatives, which groups are most likely to experience this living arrangement, and which factors determine whether a child will live in an extended household. Using data from the 1988 to 2013 waves of the Panel Study of Income Dynamics (PSID), this study examines the prevalence of extended family coresidence across childhood (from birth to age 17), investigates differences by race/ethnicity and socioeconomic status (SES), and identifies predictors of this living arrangement. Documenting the pervasiveness and predictors of extended family households is particularly important at a time when research

has begun to find strong associations (both positive and negative) between extended family coresidence and children's cognitive, behavioral, and educational outcomes (Dunifon & Kowaleski-Jones, 2007; Foster & Kalil, 2007; Mollborn, Fomby, & Dennis, 2012; Pilkauskas, 2014; Kang & Cohen, 2017). Results from this study will allow us to better understand the potential breadth of influence of extended family households on child outcomes and under what conditions children are most likely to be impacted by coresidence, which can inform policy related to family structure and child wellbeing.

I build upon previous research on family structure in several ways. First, whereas most studies focus on a particular type of extended family, namely grandparent families (e.g., Hill, Yeung, & Duncan 2001; Ellis & Simmons, 2014), I examine coresidence with a broader set of extended relatives (e.g., aunts, uncles, and other relatives). Second, I use a nationally representative sample of children. Much of the research on extended family coresidence has focused on children from low-income and/or minority families living in urban areas, and thus could not shed light on the overall commonness of this living arrangement. Further, it could not compare across groups, for example, comparing minority versus non-minority or low-income versus higher-income children's experiences. Lastly, I use longitudinal data to document prevalence over time; other studies have typically used point-in-time measures that do not fully capture children's lifetime experiences (e.g. Kreider & Ellis, 2011), and it is unclear how dramatically this approach underestimates the prevalence of extended family coresidence.

Background

The Prevalence of Extended Family Households

A few studies examine trends in extended family households, mainly multigenerational households—that is families including a child, at least one grandparent, and/or at least one parent

(for exceptions see Beck & Beck 1984, 1989; Mollborn, Fomby, & Dennis, 2011). One major reason that prior research focuses on these multigenerational households is that coresidence with a grandparent is the most common type of extended family. Most recent published cross-sectional estimates indicate that 16% of children live with extended family, and 10.5% of children coreside with a grandparent (Kreider & Ellis, 2011). However, an exclusive focus on grandparents does not provide a full picture of children's experiences in extended families. Approximately 5% of children also live with an aunt or uncle and 7% live with other relatives (these categories are not mutually exclusive; author's calculation using data from the Survey of Income Program Participation; U.S. Census Bureau, 2011). Thus, more research is needed on the experience of living with an extended family member, more broadly defined (e.g., living with uncles or cousins).

Further, the prevalence of extended families has slowly increased in recent decades. In 1996, 13% of children lived with an extended relative, and this figure rose to 17% by 2014 (author's calculation using data from the Survey of Income Program Participation; U.S. Census Bureau, 2017). Cross-sectional single-year estimates, however, underestimate the prevalence of ever living in an extended family. Indeed, longitudinal studies confirm that incidence over time is substantially higher than single-year estimates. Although coresidence among children was not the focus of this study, Beck and Beck (1984) found that 24% of White women lived in an extended family household during a 15-year time period, compared to approximately 6% in a single-year. Pilkauskas (2012), focusing on the prevalence of three generation households among children, found that the number of children living in three-generation families was approximately four times higher in longitudinal data than in a cross-section. However, due to data limitations, this study was unable to track this family structure across all of childhood, include all types of

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extended relatives, and draw from nationally representative data. Here, I provide nationally

representative estimates of the prevalence of all types of extended family households throughout

childhood, with the expectation that including all types of extended families and calculating

estimates longitudinally will result in substantially higher prevalence than previously estimated.

There is significant racial/ethnic and class variation in the extended family structure, with

minority and/or low-income children more likely to coreside with extended relatives. Recent

estimates show that 10% of White children live with an extended relative, compared to 25% of

Black children, 24% of Hispanic children, and 20% of Asian children (Kreider & Ellis, 2011).

Additionally, of youth living with extended family members, 71% live in households receiving

public assistance, compared to 46% of children overall (Kreider & Ellis, 2011). Thus, when we

broaden the prevalence estimate to include multiple types of extended family households and to

include all of the childhood years, we expect these racial/ethnic and income differentials to

persist.

Predictors of Living in an Extended Family Household

Although no large scale quantitative studies have identified childhood experiences that

predict when children will subsequently live in extended family households, several useful

studies have described the characteristics of extended family households (Angel & Tienda, 1982;

Burr & Mutchler, 1993; Kamo & Zhou, 1994; Kamo, 2000; Cohen & Casper, 2002; Choi, 2003;

Pilkauskas, 2012). This literature suggests three types of experiences that may be related to the

formation of an extended family household: economic capacities, family needs, and cultural

norms and preferences.

Economic factors such as household income, education, housing tenure, and employment

status are associated with extended family coresidence. Families with less economic capacity

(e.g., less education, lower income and job loss) may form extended family households in order to pool and more effectively use limited economic resources (Stack, 1974; Angel & Tienda, 1982; Mutchler & Krivo, 1989; Kamo, 2000; Cohen & Casper, 2002; Pilkauskas, 2012). In this way, coresidence operates as a survival strategy to redistribute resources and minimize economic risks. Thus, I expect that variables indicating lower economic capacity will be positively predictive of extended family coresidence.

The needs of family members are also correlated with living in an extended family. In particular, mother's age at child's birth, the age of a child, whether a child lives with both, one, or neither parent and the health status of parents and other household members may influence the decision to coreside. Young parents, especially single parents of young children, may be more likely to live in extended families so that they can get additional help with childrearing (Hogan, Hao, & Parish, 1990; Trent & Harlan, 1994; Cohen & Casper, 2002; Pilkauskas, 2012). Similarly, parents or extended family members in poor health may also choose to coreside, either because they need extra assistance, or because they themselves help with childcare and/or provide aid to other family members (Burr & Mutchler, 1992; Choi, 2003). Hence, I expect that factors indicating greater family need will be positively predictive of the tendency to live in an extended family household.

Cultural norms and preferences are also likely to be related to the decision to live in an extended family. Families that place greater emphasis on familism — the needs of the family take precedence over individual needs —are more likely to coreside (Baca Zinn & Wells, 2000). This cultural ideal may valorize coresidence in a way that makes it a functional and attractive strategy for organizing household living arrangements and promoting family connectedness. Prior research suggests that religious preference, language spoken at home, and immigrant status

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are useful indicators of familism (Angel & Tienda, 1982; Burr & Mutchler, 1993; Kamo, 2000; Oropesa & Landale, 2004; Sarkisian, Gerena, & Gerstel, 2006). While my nationally representative data allow me to include rich measures of economic capacity and family needs, they do not permit the inclusion of a robust set of indicators of cultural norms and preferences. Thus, in this study, I focus on assessing what I refer to as resource-driven motivations for coresidence, that is the extent to which the decision to coreside is shaped by economic capacities and family needs. In earlier analysis, I found that being Catholic is positively related to extended family coresidence, but because I am unable to incorporate other indicators of culture, I include religious preference as a control variable in this analysis.

Scholars have debated whether the factors shaping the decision to live in an extended family differ by race/ethnicity. Prior research has suggested that economic capacities and family needs may be more predictive of extended family coresidence for minority families than White families. The idea here is that racial/ethnic groups may differ in the strategies they employ to cope with hardships such as financial or health crises. In one group, it may be more customary to rely on formal support from public institutions to address a given crisis, whereas in another group, that crisis may be addressed by informal support from the extended family in the form of coresidence (Stack, 1974; Neighbors et al., 2007; Woodward, 2010). On the one hand, Whites, who benefit from historical and contemporary structural advantages, may perceive institutions such as governmental agencies and the employment structure as more welcoming and supportive, and may draw more heavily on these entities in times of need. On the other hand, Blacks and Hispanics, who face ongoing racial discrimination, may perceive these same institutions as hostile and exploitative, and may depend more on support from extended family members via coresidence (Hays & Mindel, 1973; Mutran, 1985; Musa et al., 2009). If this is the

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case, then economic capacities and family needs will be stronger predictors of coresidence for minority families than White families. To date, it is unclear whether resource-driven motivations for coresidence differ by group membership. To test the extent to which economic capacities and family needs differentially predict the likelihood of living in an extended family, I run my multivariate models separately for White, Black, and Hispanic children and test for significant differences. If predictors do differ by race/ethnicity, I would expect to find statistically significant differences in the magnitude and/or direction of the coefficients by group.

Method

Data

I use data from The Panel Study of Income Dynamics (PSID), from 1988-2013. I focus on this period in order to follow a recent cohort of children through their childhood years and better capture the extended family experiences of contemporary youth. PSID began in 1968 as a nationally-representative sample of approximately 5,000 households. Original respondents and their descendants were followed annually until 1997 and have been followed biennially since then. To maintain population representativeness, a sample refresher in 1997 added approximately 500 households headed by immigrants who had entered the United States since 1968. At each wave, the household head or the spouse or cohabiting partner of the head reports on the household roster, employment, income, education, housing characteristics, expenditures, and health/health care for him/herself and all other family members since the previous interview. In 2013, the interviewed sample included information on almost 25,000 adults in nearly 9,000 households.

Measures

Dependent Variable. The dependent variable is whether a child lives with an extended family member by the observation period. This variable is dichotomous, with children who do

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not live with extended relatives during a given wave being assigned a value of 0 and those who do live in an extended family household being assigned a value of 1 (estimates are used to predict only the first observed transition into an extended family). Coresidence with extended relatives was determined using the PSID's Family Identification Mapping System (FIMS) and household roster information. FIMS provides unique identifiers for each focal person's parents, grandparents, and siblings. From this information, I identified each child's grandparents and aunts and uncles (siblings of parents). If a child shared the same household with at least one of these extended relatives in a given wave, he or she is identified as living in an extended family. I established whether a child lived with an "other relative" using the household roster, which identifies each household member's relationship to the head of household, spouse of head, or head's cohabiting partner. A child is coded as living with an "other relative" if he or she is the child of the head, spouse, or cohabiting partner, and another individual in the household is the cousin, niece, nephew, brother-, sister-, mother-, or father-in-law of the child's parent. Additionally, in rare instances in which neither of the child's parents are present in a given wave, a child is identified as living with an "other relative" if his or her own value for relationship to head of household, spouse of head, or cohabiting partner is coded as "other relative", which indicates that the child is related to this individual by birth, marriage, or adoption, but their relationship is not included in any other category. Thus, this measure includes children who live with an extended relative but not with a parent; it does not include children who coreside with nonrelatives such as boarders or friends. This study does not focus on coresidence with nonrelatives due to the high level of volatility and limited ability to accurately capture these households, as well as the fact that the reasons for coresidence with nonrelatives may be qualitatively different from those related to coresidence with biological relatives (Richards et al.,

1987; Kalil, Ryan, and Chor, 2014). Household relationships were measured once per year until 1997, when the PSID changed to a biannual survey. After that time, a child was counted as living in an extended household during a noninterview year if he or she lived in that arrangement in both the surrounding interview years. If a child was not living with an extended relative in one year, and did so in the other year, that child is coded as not living in an extended household in the middle (noninterview) year.

Independent Variables. I use two categories of variables: economic capacities and family needs to assess predictors of extended family coresidence. Indicators of economic capacity include: family income, parents' education, home ownership, and parents' employment status. Family income is coded into five categories (1) at or below poverty threshold; (2) 101%-200% of poverty threshold; (3) 201-300% of poverty threshold; (4) 301-400% of poverty threshold; and (5) greater than 400% of poverty threshold (reference). These categories are constructed by dividing reported household income for the calendar year by the poverty threshold adjusted for family size in that year. In 2012, 100% of the poverty threshold was $23,050 for a family of four; 400% of the poverty threshold was $92,200 for a family of this size (Department of Health and Human Services, 2012). Parents' education is specified as the highest level of education completed by either parent: less than high school, high school, some college, and Bachelor's degree or higher (reference). Home ownership indicates whether the child's household is owned (reference), rented, or neither owned nor rented by the head of household (an individual may fall into the latter category if he or she lives in non-profit housing or receives government subsidies for housing). Parents' employment status is determined by whether both parents are employed (reference), at least one parent is unemployed, or at least one parent is out of the labor force.

Measures of family needs include mother's age at birth, the number of a child's parents present in the household, the number of children in the household, the age of the focal child, and the health status of household members. Mother's age at birth is a categorical variable: 19 and under (reference), 20-29, 30-39, and 40+. Number of parents is coded as both (reference), one, or neither. The variables indicating the number of children in the home and the age of the child are both continuous measures (at one point in the analysis, I also included a binary variable specifying whether there is a child under age five in the home to capture whether parents need more help with pre-school aged children, but I later excluded it because it did not improve model specification). The health status of all household members is reported by the household head or the spouse or cohabiting partner of the head. It consists of two dichotomous variables indicating whether either parent is not in good health (i.e., in fair or poor health) and whether any other household member is not in good health.

In addition to these covariates, I control for several demographic characteristics of the child that have been correlated with extended family coresidence: race/ethnicity, sex, region where child lives, and religious preference (Mollborn et al., 2012; Pilkauskas, 2014). Race/ethnicity is coded into four categories: (1) White (reference); (2) Black; (3) Hispanic; and (4) Other race. Child sex is measured as male or female (reference), and region is coded as South (reference) versus non-South. Religious preference is divided into four categories: (1) Catholic (reference), (2) Protestant, (3) other denomination, and (4) no religious preference. When the religious preference of parents differs, the preference of the parent designated as the head of the household is used. While I would have liked to also control for parents' work schedule, hours worked per week, and family wealth, they were not included in the analysis due to their inconsistent availability during the observation period. Work schedule is only available for

children who participated in the Child Development Supplement (CDS) in 1997, 2002, and 2007 and weekly hours is available between 1988 and 1993 and biannually between 2003 and 2013. Family wealth is available in 1989, 1994, and biannually between 1999 and 2013. In a separate sub-analysis (results not shown), for each year that it was available, I included the inverse hyperbolic sine of wealth excluding home equity, which adjusts for the highly skewed distribution of wealth in the sample (and in the larger U.S. population). This factor was not significantly related to coresidence.

Taking advantage of the longitudinal design of the PSID, multivariate analyses include both time-invariant and time-varying variables. The time-invariant variables are: child's race, mother's age at birth, parents' religious preference, and parents' education. While my preference would be to use a time-varying measure of educational attainment, this variable was treated as time-invariant for household heads and their spouse/partner until 2009, when updated information was collected. All other covariates: income, employment status, number of parents and children present in the household, age of focal child, and the health status of household members are time-varying. To adjust for biennial interviewing starting in 1997, I assign the previous year's reported values (adjusting income for inflation) as the missing year's values for the time-varying covariates during noninterview (i.e., even) years in the 1998-2012 period. All time-varying covariates are lagged one year prior to the observation of extended family coresidence. Following the example of Carlson, VanOrman, and Pilkauskas (2013), I use multiple imputation with chained equations in Stata 14 to restore missing time-constant independent variables and to improve the generalizability of my findings. The proportion of missing cases ranges from .02 on parents' education to.06 on parents' religious preference.

Analytic strategy

Most research using observational data uses measures of current household characteristics to predict the outcome of interest (extended family coresidence), and both are measured cross-sectionally and refer to the same period. Thus, previous studies cannot determine whether household characteristics pre-dated extended family coresidence, or whether these characteristics are a consequence of extended family coresidence. To identify *predictors* of subsequent extended family coresidence, I use discrete-time event history models, implemented with logistic regression to explore how economic capacities and family needs, experienced prior to coresidence, are associated with the transition into living with extended family.

Discrete-time event history models model the duration until the occurrence of an event of interest (in this case, the first time a child is observed living in an extended family household) and estimate the effects of explanatory variables on the timing of the event. These models can incorporate time-varying covariates, which is important, given that children's household characteristics can change over time, and they account for right-censoring. However, right-censoring is not a major concern in this study, as the data includes measures for the entire time period of interest (from age 0 up to but not including age 18) for 95% of the sample. Equation 1 depicts the discrete-time logit model:

$$Y_i = log\left(\frac{p_{ti}}{1-p_{ti}}\right) = \alpha D_{ti} + \beta x_{ti} \qquad (1)$$

where Y is the outcome of interest for child i—living with an extended relative, p_{ti} is the probability of an event occurring during interval t, (given that it has not occurred prior to interval t) D_{ti} is a vector of functions of the cumulative duration by interval t with coefficients, and x_{ti} is a vector of the aforementioned demographic, economic, cultural, and family needs variables with coefficients β. All analyses use sample weights to account for the complex

multistage clustered design of the PSID sample, unequal probabilities of selection, nonresponse, and poststratifcation to calculate weighted, nationally representative population estimates and standard errors.

Sample

To examine the transition into an extended family household, I created person-year (by age) files in which I specified the risk period for first observed onset of coresidence starting at age 0 (the first full year of life) and followed children until the first time they were observed living with an extended relative, or until the end of the observation period (up to but not including age 18). Because the data follows children from birth, no respondents are excluded due to left censoring. I began with a sample which included children between the ages of 18 and 25 in the most recent (2013) wave of the PSID, and who were present in at least 50% of the waves in which they could have been observed PSID (N=4,926). This first analytic sample consists of approximately 75% of sample children born between 1988 and 1995 and it is used to evaluate the (unadjusted) baseline risk of first coresidence by age. I then imputed missing data on time-invariant covariates. After excluding cases with missing data, my final analytic sample included 4,484 children (1,731 of which experience extended family coresidence), representing 65,907 person-years. Weighted data are representative of young adults born between 1988 and 1995.

It should be noted that this measurement strategy may lead to a more conservative estimate of extended family coresidence. Children excluded from the study due to high levels of missing reports are more likely to be Hispanic, come from lower income families, have an unemployed parent, be born to a teenage mother, and be Catholic, all of which may be positively related to coresidence. Additionally, among children with spells of missing reports, children typically had complete information up to middle childhood and a prolonged spell of missing

information before age 18, which may downwardly bias the estimate of extended family coresidence during adolescence. Thus, while this paper provides useful insight into children's lifetime experience of extended family coresidence, the prevalence of this household type will likely be underestimated, and differentially so by factors of interest (e.g., SES).

Results

Sample Characteristics

Table 1.1 reports time-constant and time-varying (averaged across all person-years) sample characteristics. About half (49%) of respondents are female and most lived in a region other than the South (57%). White children make up the largest group in the sample (48%), Hispanic children constitute 13%, and Black children account for 33%. There is a modest upward distortion in the proportion of Black children in this sample. This distortion is related to the nearly 600 Black families with young children who were identified to be dropped as part of a larger sample size reduction in 1997, but were retained so that they could be members of the PSID's original Child Development Supplement (Freedman & Schoeni, 2016). To adjust for this, all analyses use weights post-stratified to the Current Population Survey for Black children. Eighteen percent of children had parents who did not finish high school, 36% had parents with a high diploma, 26% had parents with some college experience, and 20% had parents with a college degree. Most children were born to mothers between the ages of 20 to 29 (55%) or 30 to 39 (34%). Fifty-five percent of children spent the majority of their childhood years living with both parents, 42% lived with one biological parent, and a small fraction (3.5%) lived with neither of their parents. Most respondents spent the better part of their youth living with parents and other household members who were in good health (though children do experience considerable year-to-year variation in family members' health status).

Prevalence of Extended Family Households

Table 1.2 shows the overall percentage of children who lived in an extended family, the share of children who lived in various types of extended families, and differences by race/ethnicity and parents' education. For cross-validation purposes, I compared single-year estimates from the PSID to those that I calculated from the Survey of Income Program Participation (SIPP), one of the main sources for single-year estimates of extended family coresidence among children (see Figure 1.1). For comparable years (1996, 2001, and 2009), my PSID estimates are within approximately one percentage point of SIPP estimates, and both sets of estimates have overlapping confidence intervals. This provides evidence that any higher prevalence rates that I may observe when I look across the entire span of childhood are not simply due to a difference in sampling frames or a result of peculiarities in the PSID data.

My estimates show that living in an extended family is fairly common--over one-third (35.1%) of children lived with an extended relative at some point during childhood. This longitudinal estimate of extended family coresidence is more than two times higher than a recent single-year estimate of 16% (Kreider and Ellis, 2011), indicating that a substantially greater proportion of children experience this living arrangement than previously shown by cross-sectional data. Making use of the 25-year span of data, in results not shown, I examined whether there is a general pattern of change in coresidence over time and across cohorts. I find that although children in later cohorts are no more likely than those in earlier ones to experience coresidence, there has been a statistically significant increase in coresidence over my analysis period. While seemingly contradictory, this trend appears quite plausible when we consider the potential influence of compositional changes in the population on prevalence rates during these

years. The overall prevalence of extended family coresidence could have increased, even if the likelihood of coresidence remained constant, provided that groups for whom coresidence is more common (e.g., non-Whites) grew as a relative share of the population. Given that racial/ethnic minorities continue to comprise a larger segment of U.S. children (Child Trends, 2016), we might expect to observe this trend, and over time, prevalence rates may continue to rise.

Taking into account various types of extended families, we see that living with a grandparent, the focus of most prior research on extended family coresidence, is only slightly more common than living with an aunt and/or uncle, and similar in prevalence to living with an other relative. Approximately 24% of respondents lived with a grandparent, 18% lived with an aunt or uncle, and 24% of children lived with other relatives. We also see that coresidence with more than one type of extended family member is often occurring simultaneously or at various points throughout childhood. This is evidenced by the fact that only 6% of children only ever lived with a grandparent, 1% only ever lived with an aunt or uncle, and 7% only lived with an other relative.

There are dramatic differences by race/ethnicity and SES in the percentage of children who lived in an extended family. Approximately 58% of Black children and 35% of Hispanic children spent time in an extended family, compared to 20% of White children. This pattern holds true when looking at each specific type of extended family coresidence, as well – Black children are the most likely to live in extended families of all types, followed by Hispanic children. Whites are the least likely to live in extended families of all types. A higher percentage of children from low-SES families lived with extended relatives, relative to those from higher-SES families. Forty-seven percent of youth whose parents did not graduate high school lived in an extended family, compared to 39% and 35% of youth whose parents had a high school

diploma or some college, respectively. The percentage of children with college-educated parents who experienced extended family coresidence is nearly three times lower (17%) than those whose parents did not finish high school. Similarly, a much higher percentage of children whose parents had less education lived in extended families of all types, compared to peers whose parents had more education.

What is most striking are the differences in coresidence when we consider the intersection of race and SES in Figure 1.2. The percentage of Black children with college-educated parents who lived with an extended relative (39.1%) is higher than the percentage of White children whose parents who did not graduate high school (37.9%). In a similar vein, 26% of Hispanic children whose parents have a Bachelor's degree or more lived in an extended family, relative to 22.8% of White children whose parents earned a high school diploma. These gaps persist when we consider racial/ethnic and education differences in coresidence among various types of extended families, such as grandparents, aunts/uncles, and other relatives (results not shown). Generally speaking, a higher percentage of Black and Hispanic children whose parents' education levels are at the top of the education distribution lived in an extended family, relative to White children whose parents' education is at the bottom of the education distribution.

This finding differs from research on racial/ethnic and SES differences in family involvement (e.g., offering advice and giving money), which reports similar levels of involvement among racial/ethnic groups from the same social class (Gerstel, 2011; Sarkisian and Gerstel, 2012). Although related, coresidence is a qualitatively distinct type of support that may be determined, at least in part, by different underlying mechanisms than family involvement. This may be especially true for types of involvement that are not contingent on geographic

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proximity to relatives. For example, technologies such as smart phones and wire transfers make it possible for middle-class Blacks and Whites to offer advice or transfer money to extended relatives at similar rates, regardless of their proximity to extended relatives. Spatial distance, however, does limit the probability of coresidence, and racial/ethnic minorities are more likely to live closer to extended relatives than Whites (Cherlin and Furstenberg, 1986; Connidis, 2001). Therefore, it is possible for middle-class minorities to offer housing assistance to family members at higher rates than middle-class Whites, even if they engage in similar levels of other types of support.

Descriptive Hazard Probabilities

Figure 2.1 presents the model-based predicted probability of first observed transition into an extended family household. These estimates are based on unadjusted weighted hazard models including only age as a covariate. These probabilities indicate the yearly probability that a child will first experience the outcome (in this case, extended family coresidence) at a specific age, given that he or she has not yet done so. Overall, children are most likely to experience first extended family coresidence at younger ages. The risk of first moving into an extended family is highest between birth and age 1 and it drops steadily until age 9. This finding is similar to studies of three-generation coresidence, which find that multigenerational households are most common when children are young (Bryson and Casper, 1999; Mutchler and Baker, 2004; Pilkauskas, 2012). The rate of risk, however, follows a slightly U-shaped pattern. During middle childhood (ages 9 to 12), the hazard rate is relatively low and stagnant, and then it slightly increases during adolescence (ages 13 to 17). Thus, a non-negligible percentage of children (27%) who lived in an extended family began doing so at older ages (not shown in tables). Confidence intervals constructed for these hazard rates (not shown in tables) indicate that this rise in the probability of

coresidence during adolescence is statistically significant and that this pattern of risk is consistent across racial/ethnic groups. These findings support my assertion that looking at extended family coresidence across childhood may reveal higher rates than cross-sectional estimates or estimates that focus on early childhood as the key risk period. They may also suggest periods of time when parents or extended family members most need help. While a full examination of differences in predictors by developmental stage is beyond the scope of this paper, research has suggested that coresidence during early childhood may be motivated by a need for childcare, whereas coresidence during adolescence may be more related to the needs of extended relatives (e.g., aging grandparents needing assistance from their adult children) (Cohen & Casper, 2002; Pilkauskas, 2012), or it may represent another challenging period for parents, who may rely on extended relatives for additional help with childrearing.

Predictors of Extended Family Households

Table 1.3 displays the odds ratios from discrete time hazard models predicting the transition into an extended family. It summarizes results from a full model that includes all covariates. To assess whether economic capacities and family needs were differentially associated with extended family coresidence by race/ethnicity, I also ran the models separately for Black, White, and Hispanic children and then conducted Chow tests on the fully interacted model that compared each group (White vs. Black, White vs. Hispanic, Black vs. Hispanic). Significant differences by race/ethnicity in the factors that predict the transition into an extended family are indicated with footnotes.

Considering indicators of economic capacity, we see that children who experienced greater disadvantage during childhood have a higher risk of living in an extended family (My use of the term "risk" refers to the yearly conditional odds that a child will experience coresidence; it

does not reflect a preference for or against this living arrangement). In general, children raised in households below 400% of the poverty threshold had higher rates of entry into extended families than children who grew up in households above 400% of the poverty threshold. Odds ratios for youth living in households at or below 100% of the poverty line indicate that they are not statistically different from those from households above 400% of poverty. This may reflect a lack of available extended relatives with stable and/or attractive housing for this group. As prior research has shown, the availability of extended family support via coresidence is conditioned by the economic situation of members of one's extended family network (Trent & Harlan, 1994; Roschelle, 1999; Cohen & Casper, 2002). The poorest members of society may not have the opportunity to live in extended households because they are drawing on the resources of poor network members, who are not in a position to offer this type of support. At every level of education, the relative risk of living with extended family is higher for children whose parents had less than a Bachelor's degree, compared to those who had college-educated parents. Youth whose parents were unemployed or out of the labor force were also at greater risk of entering into an extended family household, relative to those with employed parents. Further, youth who lived in household units that were rented were at lower risk of living with extended relatives, relative to youth who lived in owned homes.

With respect to family needs, mother's age at child's birth, the child's age, the number of parents present in the home, and the health status of household members all increase the risk of subsequent first-time extended family coresidence. Children born to teenage mothers have an approximately 60%-70% higher risk of moving into an extended family, relative to those born to mothers aged 20 or older. Younger children are also at higher risk of experiencing this family structure. Compared to youth who live with both parents, youth who live with one or neither

parent have significantly higher rates of transition into this household type. Moreover, children who have parents and other household members who are not in good health are at a substantially higher risk of experiencing subsequent extended family coresidence.

In the full sample, I find that after accounting for both economic factors and family needs, racial/ethnic minorities have significantly higher rates of living in extended families than Whites. Black children, on average, are more than twice as likely to experience this family structure, and Hispanic children are more than 1.5 times as likely to do so, relative to Whites. When I examine group differences in predictors by race/ethnicity, I find that overall, there is no pattern of statistically significant differences across groups. The exceptions are, region, housing tenure, and one category of household income. Whereas region is inconsequential in the full sample, White children raised in the South live in an extended family at higher rates than their White peers raised outside of the South, but Black and Hispanic children in the South do not have higher rates than their otherwise similar peers. In the full model, children living in a rented home are at lower risk of living with extended family compared to peers living in owned homes; however, this factor is only significant for non-White children. Finally, among all children, those whose household income is 201%-300% of the poverty threshold are more likely to live with extended relatives than those whose household income is 400% or above the poverty threshold; this factor is not significant for Black children. These results demonstrate that while these factors operate similarly across groups, level differences in economic capacities and family needs help account for racial/ethnic differences in prevalence rates.

In results not shown, I also evaluated the extent to which predictors differ by type of extended relative (grandparent vs. aunt, uncle, or other relative). This supplemental analysis was motivated by the idea that reasons for coresidence may be qualitatively different by relative type.

I find few statistically significant differences in predictors. Children who are first observed living with a grandparent are: (1) more likely to be living with one parent, (2) less likely to be born to a mother aged 40 or older, and (3) less likely to have a parent whose religious preference is a denomination other than Catholic or Protestant, compared to children who are first observed living with an aunt, uncle, or other relative.

Discussion

This article examines the prevalence and predictors of extended family households among a recent birth cohort of children and explores racial/ethnic and SES differences in this living arrangement. It builds on prior literature that has largely used cross-sectional estimates and has focused on multigenerational households, to consider extended families more broadly and longitudinally. By including a broader set of extended relatives, and looking across childhood, I find that extended family households are a fairly common living arrangement for children: over 1 in 3 youth spend some time in an extended family before age 18. Taking into account various types of extended families, estimates show that children are almost equally likely to live with a grandparent, aunt or uncle, or other relative, with 24% of children having lived with either a grandparent or other relative, and nearly 20% of children having spent some time living with an aunt or uncle. These estimates highlight the complexity of this household type and confirm that using single-year data and focusing on grandparent coresidence does not provide a full picture of children's experience living in an extended family.

When the whole span of childhood is considered, the percentage of Black children who live with an extended relative (58%) is nearly three times higher, and the percentage of Hispanic children who live with an extended relative is approximately 1.5 times higher (35%) than the percentage of White children (20%) who live in an extended family. This disparity is

substantially larger than what previous cross-sectional studies have observed (e.g., Kreider &

Ellis, 2011). Moreover, at every level of SES, a much greater proportion of Black and Hispanic

youth have lived with an extended relative, compared to their White peers. This finding may

reflect racial/ethnic differences in the socioeconomic composition of extended family networks.

Higher-SES minorities may have more low-SES extended relatives than their White

counterparts, which increases the chance that they will offer housing assistance to an extended

family member. Indeed, using the same data, Heflin and Patillo (2004) found that middle-class

Blacks on average have more siblings than Whites, and they are more likely to have a poor

sibling, which increases the likelihood that middle-class Blacks will have a relative turn to them

for assistance and subsequently live in an extended family.

Together, these findings on racial/ethnic and SES differences in extended family

coresidence shed light on the salience of extended family households for minority children

and/or those from disadvantaged backgrounds. They are particularly important, given that

nuclear family households have long been considered the normative and standard household type

in the U.S., and that the White middle-class experience of family structure is typically treated as

the baseline experience to which all other groups are compared (Coontz, 1992; Kamo, 2000

Gerstel, 2011). Here, we see that extended family households are widespread, and that this

family type is only atypical for high-SES White families. Thus, a narrow focus on the nuclear

family structure overlooks the diverse ways in which families, particularly those from minority

and/or disadvantaged backgrounds constitute household living arrangements, and family life

more generally. Further, as racial/ethnic minorities continue to make up a larger share of the U.S.

population, extended family households will likely become increasingly widespread, and given

the potential positive and/or negative consequences associated with living in an extended family

(Dunifon, 2013; Garrett-Peters & Burton, 2016), this oversight may increasingly limit our understanding of the effect of family structure on child wellbeing and the ways in which extended relatives may help exacerbate or reduce racial/ethnic and class disparities in child outcomes.

Turning to predictors of extended family households, I find strong evidence for the role of economic capacities and family needs as key determinants of coresidence. Consistent with prior literature on extended family living arrangements (e.g., Kamo, 2000; Cohen & Casper, 2002; Pilkauskas, 2012) economic factors such as parents' educational attainment, household income, and having employed parents are negatively related to the risk of living in an extending family. Counter to expectation, children who lived in a rented household unit were less likely to live with an extended relative than peers living in owned homes. By way of explanation, individuals in need typically live with relatives best suited to host extended family members (Cohen & Casper, 2002). Children living in owned homes may be more likely to live in an extended family because their parents' home ownership better positions them to provide stable housing assistance to relatives in need than children of renters. In terms of family needs, being born to a teenage mom, being a young child yourself, having at least one parent absent from your home, and having a household member who is not in good health are strong, positive predictors of subsequent extended family coresidence. These results appear consistent with a life course pattern of the need for child care. Younger mothers with young children, especially those not living with the child's father may rely more heavily on extended relatives for childcare assistance. Combined, these findings provide further support that the transition into an extended family is largely a response to social and economic need. Finally, aside from SES, I found very

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few significant differences in predictors across racial/ethnic groups. Thus, I find little evidence to support the assertion that resource-driven motivations to coreside differ by race/ethnicity.

There are some limitations to this study that should be noted. First, extended family households are often short-lived. In fact, in my sample, among children who were first observed living in an extended family, approximately 30% were not coresiding by the next wave and 45% were no longer doing so two waves later (results not shown). Because of the highly transient nature of extended family households, short term residence may be missed between PSID waves. (Mollborn et al., 2012; Pilkauskas, 2012). Second, this analytic sample is based on children born between 1988 and 1995, many of whom were present in the PSID prior to its immigrant refresher wave, (500 immigrant-headed households were added to the PSID in 1997 to account for post-1965 immigration), and whose parents were born before numerical restrictions to U.S. immigration were lifted in 1965. Thus, sample estimates may not be representative of the experience of contemporary youth whose families entered the U.S. during the most recent immigration waves, and who may be more likely to live in an extended family. Additionally, children excluded from this analysis due to high levels of missing waves were more likely to be members of demographic groups who have increased odds of living in an extended family (e.g., low-SES children) and/or to have long spells of missing reports during adolescence. Therefore, the figures presented here may underestimate the percentage of children who have lived in an extended family, and gaps by race/ethnicity and SES may be even wider. Third, while this study makes an important step towards identifying predictors of coresidence, due to data limitations, it does not distinguish between the movement of children into the household of extended family members and vice versa. Previous studies indicate that when individuals host extended relatives, they are less likely to be receiving assistance and more likely to be providing it, which may have

consequences for child wellbeing (Alquilino, 1990; Jayakody et al., 1993; Cohen & Casper, 2002; Grundy, 2005). If the child's immediate family is in need, then we might expect that the resources flowing to them via coresidence might improve child outcomes. However, if an extended family member moves into the household of the child's immediate family, this may divert resources away from the child, potentially undermining his or her wellbeing. Future work focused on the extended family structure and child wellbeing should consider differentiating between these two circumstances. Finally, given the data available, I am unable to include all variables that may be indicators of cultural norms and preferences. In particular, I would have liked to include a measure of the primary language spoken at home and indicators of familial attitudes. Future research with more robust cultural indicators should explore if and how these cultural factors are related to the transition into an extended family.

Despite these limitations, this study is the first to use nationally representative data to document the prevalence of extended family households across childhood and to identify factors predicting this living arrangement. Additionally, this study is unique in examining racial/ethnic differences in the predictors of coresidence. To the extent that extended relatives play a role in child development and wellbeing, this is an important phenomenon that has implications for both research and public policy.

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Table 1.1 Sample characteristics of children born between 1988 and 1995, Panel Study of Income Dynamics 1988-2013 (N=4,484)

Variables	*M or %*
Demographic Factors	
Female	48.94
Race/Ethnicity	
White	47.87
Black	33.37
Hispanic	12.89
Other race	5.98
Region	
South	43.04
Non-South	56.96
Parents' religious preference	
Catholic	33.18
Protestant	53.49
Other religion	4.25
No preference	8.84
Economic Capacities	
Income-to-needs ratio	
At or below 100% of poverty threshold	9.43
101%-200% of poverty threshold	27.76
201%-300% of poverty threshold	23.18
301%-400% of poverty threshold	18.50
Above 400% of poverty threshold	21.13
Parents' education level	
Less than high school	18.22
High school	36.10
Some college	25.81
Bachelor's degree or higher	19.77
Home ownership	
Family owns home	49.76
Family rents home	48.29
Family neither owns nor rents home	1.95
Parent's employment status	
Both parents employed	49.21
At least one parent unemployed	33.48
At least one parent out of labor force	17.32
Family needs	
Mother's age at birth	
19 and under	9.32
20-29	54.53
30-39	33.56
40+	2.44
Child's age (mean, range 1-17)	7.89
(SD)	(5.22)
No. of children in household (mean, range 0-11)	2.43
(SD)	(1.10)
No. of parents in household	
Both parents	54.55
One parent	41.99

Neither parent	3.46
Health of household members	
Parents in good health	93.15
Other household members in good health	96.10
Observations	4484

Notes: Values are percentages unless otherwise noted. Analysis uses sample weights to account for the complex multistage clustered design of the PSID sample. Total for the time-varying characteristics is the person-year average. No.=Number. SD=standard deviation.

Table 1.2 Percentage of children ever living in extended family households by race/ethnicity and parents' education, Panel Study of Income Dynamics 1988-2013 (N=4,484)

	Lived in an extended family	Lived with a grandparent	Lived with an aunt/uncle	Lived with an other relative
Total	35	24	18	24
Race/ethnicity				
White	20	14	8	12
Black	57	39	34	42
Hispanic	35	20	15	24
Other race	34	23	16	18
Parents' education level				
Less than high school	47	29	26	33
High school	39	26	21	27
Some college	35	26	18	24
Bachelor's degree or higher	17	12	6	11
Lived only with this type of extended relative during childhood		6	1	7

Notes: Analysis uses sample weights to account for the complex multistage clustered design of the PSID sample.

Figure 1.1. Comparison of single-year estimates of children's extended family coresidence, PSID (1996-2009), SIPP (1996-2009)
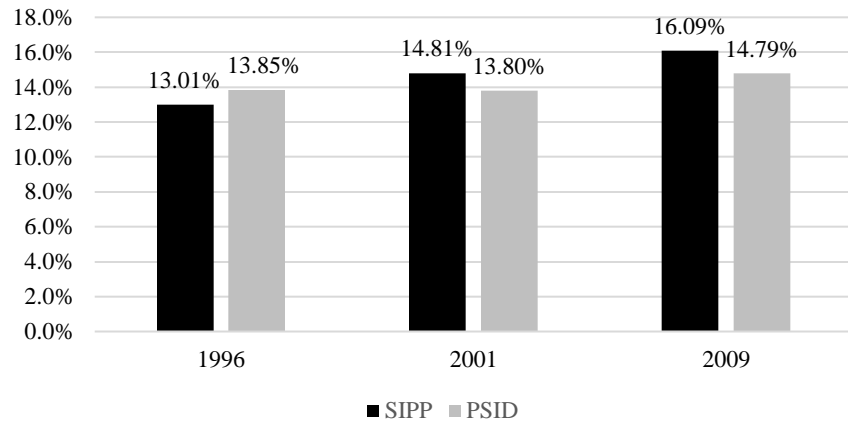
Notes: Estimates are weighted to account for the complex multistage clustered design of the PSID sample. All estimates contain overlapping confidence intervals for comparable years.

**Fig. 1.2. Percentage of children living in an extended family
by both race/ethnicity and parents' education**

Fig. 1.3. Risk of first time living in an extended family by age, Panel Study of Income Dynamics (1988-2013)
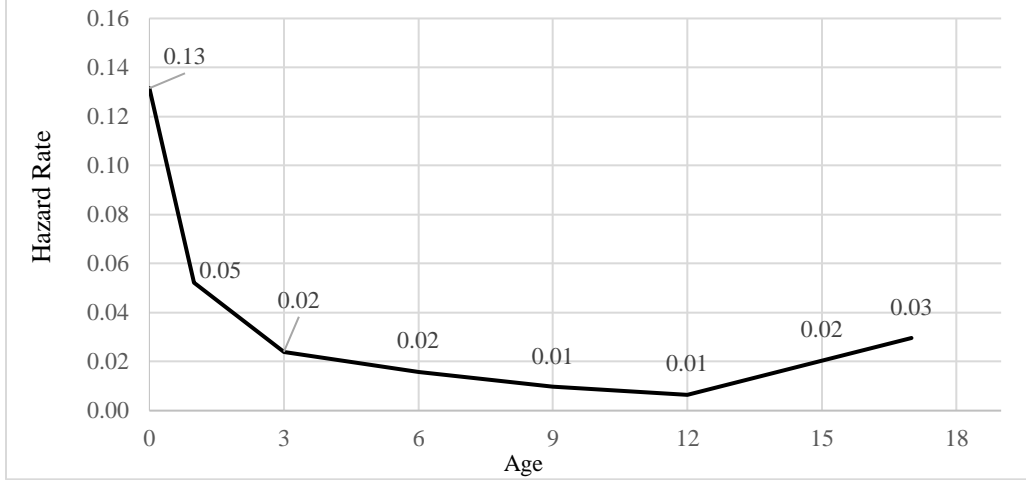
Table 1.3. Odds ratios from discrete time hazard models for the risk of first time living in an extended family, Panel Study of Income Dynamics, 1988-2013

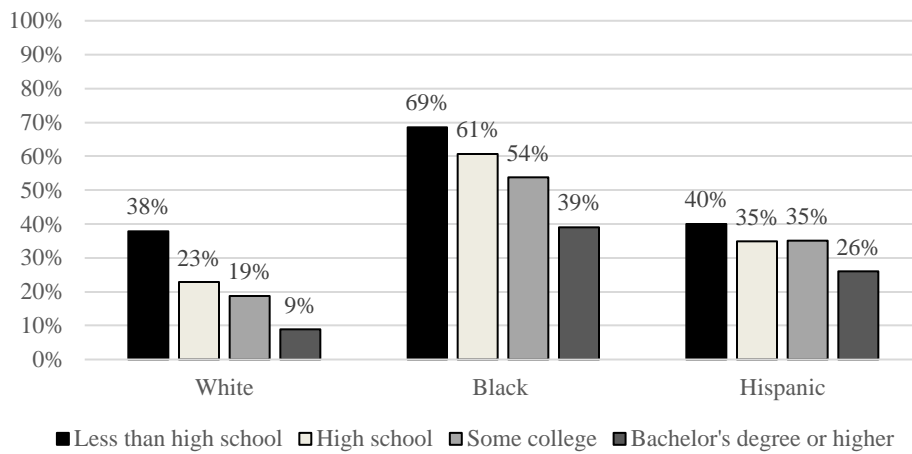|	Full Sample		
	B	*SE*	*OR*
Demographic factors			
Female	0.11*	0.06	1.12*
Race/Ethnicity (vs. White)			
Black	0.86***	0.08	2.37***
Hispanic	0.51***	0.12	1.66***
Other	0.57***	0.14	1.77***
South (vs. Non-South)ac	0.08	0.07	1.08
Parents' religious preference (vs. Catholic)			
Protestant	-0.20**	0.09	0.82**
Other religion	0.13	0.15	1.14
No religious preference	-0.07	0.13	0.94
Economic capacities			
Poverty threshold (vs. at or above 400% of poverty threshold)			
At or below 100% of poverty threshold	0.15	0.13	1.16
101%-200% of poverty threshold	0.35***	0.12	1.41***
201%-300% of poverty thresholdabc	0.23*	0.12	1.26*
301%-400% of poverty threshold	0.28**	0.13	1.33**
Parents' Education (vs. BA or higher)			
Less than high school	0.47***	0.13	1.60***
High school	0.46***	0.11	1.59***
Some college	0.40***	0.11	1.50***
Home ownership (vs. own)			
Rentac	-0.32***	0.07	0.73***
Neither own or rentac	-0.06	0.13	0.94
Parents' employment status (vs. both employed)			
At least one parent unemployed	0.41***	0.09	1.51***
At least one parent out of labor force	0.21***	0.07	1.24***
Family needs			
Mother's age at birth (vs. 19 and under)			
20-29	-0.84***	0.10	0.43***
30-39	-1.13***	0.11	0.32***
40+	-1.14***	0.28	0.32***
Child's age	-0.22***	0.02	0.80***
No. of children in household	0.00	0.03	1.00
No. of parents in HH (vs. both parents)			
Single parent	1.33***	0.07	3.78***
Neither parent	1.56**	0.62	4.74**
Parents in good health	-0.25***	0.09	0.78***
Other HH members in good health	-0.28**	0.13	0.76**
Number of person-years	65,097		

*** p<0.01, ** p<0.05, * p<0.1

Notes: Analysis uses sample weights to account for the complex multistage clustered design of the PSID sample. aWhite-Black difference is significant at p <.05. bBlack-Hispanic difference is significant at p<.05. cHispanic-White difference is significant at p<.05.

CHAPTER III

Racial/Ethnic Differences in the Association Between Family Structure and Children's Educational Attainment

ABSTRACT

While an extensive literature has shown that children raised by both biological parents fare better academically than children raised in any other family structure, there has been little research to explain an important finding: living apart from a biological parent is *less* negatively consequential for racial/ethnic minority children than white children. To address this gap, I test two explanations that have been posited to account for racial/ethnic differences in the association between family structure and children's educational attainment: socioeconomic stress and extended family embeddedness. I assess whether racial/ethnic variation in these two mechanisms explain group differences in the association between family structure and on-time high school completion and college enrollment for white, black, and Hispanic children. Results indicate that both socioeconomic stress and extended family embeddedness attenuate the effect of family structure on these two measures of educational attainment, though the former to a much greater extent. Differences in socioeconomic resources accounted for up to nearly 50% of the gap in these outcomes, and extended family embeddedness explained roughly 15-20%. These findings lend support for the socioeconomic stress hypothesis, which posits that the negative effect of familial disruption may be less independently impactful for racial/ethnic groups facing many socioeconomic disadvantages to begin with. Results are less consistent with the hypothesis that racial/ethnic minority children's deeper embeddedness in their extended family network protects against the negative effects of familial disruption.

Introduction

Decades of research have shown that children fare better academically when they are raised in a two-biological-parent family (i.e., a household with a child and his or her birth mother and biological father; McLanahan & Percheski, 2008). Children who live apart from a parent during childhood are less likely to finish high school, attend college, or earn a bachelor's degree (Amato & Keith, 1991; Hetherington, Camara, & Featherman, 1983; Manning & Lamb, 2003; McLanahan & Sandefur, 1994). A growing body of research has demonstrated, however, that the effects of family structure are not equal across all groups. Studies have found that this negative association between familial disruption and children's educational attainment is significantly weaker for minority children than white children (e.g., Amato, 2000; Shaw, Winslow, & Flanagan, 1999; Sun & Li, 2007). While they have yet to be formally tested, two main mechanisms have been posited to explain racial/ethnic differences in the effect of family structure on children's academic outcomes: *socioeconomic stress* and *extended family embeddedness* (McLoyd, Cauce, Takeuchi, & Wilson, 2000).

Using nationally representative, longitudinal data this study investigates the extent to which racial/ethnic variation in these two mechanisms mediates the association between family structure and two important measures of educational attainment: on-time high school completion and college enrollment. This paper builds on previous work in several key ways. First, unlike prior research that typically uses cross-sectional or short-term measures of family structure, I construct children's full histories of family structure (from birth to age 17), including both nuclear and extended family household configurations. My analyses also include lifetime measures of a wide range of family

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factors including parents' employment and health statuses and family wealth. This allows

me to better articulate how cumulative childhood family experiences influence long-term

outcomes for children. Second, this study moves beyond black-white comparisons that

have traditionally characterized research in this area to incorporate Hispanics, who now

represent the largest minority group in the U.S. (Passel & Cohn, 2008 [inconsistencies in

racial categorizations over time in the dataset and small cell sizes do not permit inclusion

of other racial/ethnic groups]). Given group differences in levels of exposure to

socioeconomic stress, participation in extended family networks, and rates of two-parent

households, including Hispanic families provides a unique opportunity to compare

families of color to one another and to non-Hispanic whites and to assess whether

patterns of association for Hispanic children are similar to those of black or white

children, or altogether distinctive. Third, as it relates to measures of extended family

embeddedness, instead of using coresidence with extended relatives as the sole proxy for

extended family support, I also include indicators of the levels of practical and emotional

support that parents receive from family members. Including additional measures of

support allows me to better approximate the total amount of extended family support that

is available to parents, both within and across households.

Understanding whether racial/ethnic differences in socioeconomic and extended

family resources help explain the differential association between family structure and

children's educational attainment has implications for research and policy. To begin, a

focus on group differences in the effects of family structure advances a more diverse

portrait of American families, one that more adequately reflects the longstanding and

growing racial and ethnic diversity of the United States, which has been lacking in extant

family research (Gerstel, 2011; McLoyd et al., 2000). It also provides an important

corrective to work that assumes the primacy of the white middle-class two-biological-

parent family model (Coontz, 2004; Roschelle, 1999). If minority children are less

vulnerable to the adverse effects of parental separation than white children, then

valorizing the two-biological-parent family over other family forms is unwarranted and

may prove to be unfruitful in reducing racial/ethnic disparities in child outcomes. Further,

contemporary policy discussions about family structure center on questions concerning

the role of the two-parent family in promoting child wellbeing. (U.S. House of

Representatives, 1996). If racial/ethnic differences in socioeconomic resources mediate

the relationship between family structure and educational attainment, then what deserves

policy attention is not minority families' deviation from the two-biological-parent family

model, but rather the social structures that produce and maintain racialized

socioeconomic inequities. Moreover, many welfare reform policies assume that extended

families will act as a social safety net to their families during hard times (Cherlin &

Seltzer, 2014). However, recent studies have called into question the viability of the

extended family safety net (Garrett-Peters & Burton, 2016; McDonald & Armstrong,

2001). Examining the extent to which embeddedness in one's extended family network

serves as a buffer against the negative effects of familial disruption can better inform

policies that encourage reliance on extended family networks to enhance child wellbeing.

Background and Theoretical Perspectives

Family Structure and Children's Educational Attainment

Children raised in two-biological-parent families tend to fare better academically

than children raised in any other family form (Brown, 2010). In their landmark study on

single-parent families and child wellbeing, McLanahan and Sandefur (1994) found that youth living with both biological parents were less likely to drop out of high school and more likely to enroll in college, compared to youth living with single or divorced parents (though the negative effect of family structure was somewhat smaller for college enrollment than high school graduation). Subsequent studies have produced similar findings related to these outcomes (e.g., Deleire & Kalil, 2002; Ginther & Pollak, 2004; Hill, Yeung, & Duncan, 2001).

Theoretical explanations that account for why children growing up outside of a two-biological-parent family are at an elevated risk of experiencing academic problems can be classified into three categories: (1) economic resources (2) parental socialization, and (3) stress and family instability (Amato, 2005; Brown, 2010; Fomby & Cherlin, 2007; Wu, 1996). Economic explanations maintain that some family structures, particularly single-parent families, tend to be economically disadvantaged, having fewer economic resources such as income and wealth available to facilitate effective family functioning. Economic deprivation undermines parents' ability to provide the material goods and services needed to cultivate children's academic growth (Amato, 2005). Parental socialization explanations focus on child-rearing, foremost parenting practices. The argument here is that there is typically a weaker parental authority structure in single-, step-, and cohabiting families than in two-biological-parent families, and there is less monitoring and supervision, which in turn reduces the quality of parenting that children receive (Amato 2005, Brown 2010; Sandberg and Hofferth, 2001). Family instability explanations assert that the number of family transitions a child experiences during childhood, independent of family type, has negative consequences for children's

academic performance. The idea behind this is that children fare better when family structure is stable; transitions lead to stress due to people moving in and out of the household, potentially disrupting family routines and leading to new role configurations. This familial disruption may also be accompanied by residential and school changes, that potentially further undermine children's educational outcomes (Fomby and Cherlin, 2007; Teachman, 2008; Wu 1996).

In addition to these explanations, researchers have noted that selection may also account for the association between family structure and children's academic outcomes. This perspective suggests that it is not family structure or instability per se that influence child wellbeing. Rather, children perform better in two-biological-parent families because adults who form and maintain such households may be more well-adjusted and socioeconomically advantaged in the first place (Brown, 2010; Hofferth, 2006).

Racial/Ethnic Disparities in the Effects of Family Structure on Educational Outcomes

While numerous studies have examined the relationship between family structure and children's educational attainment, only a few have investigated whether the effect of family structure varies across racial/ethnic groups. Among those focused on racial/ethnic differences, scholars generally find that the negative effects of living outside of a two-biological-parent family are weaker for minority children than white children. For example, in a rigorous meta-analysis of research on the long-term effects of divorce, Amato & Keith (1991) found that the magnitude of the association between parental divorce and educational attainment was nearly twice that for white children than for black children. Amato (2001) found similar racial differences in his follow-up meta-analysis a decade later. In another study focused on high school academic achievement, Smith

(1997) observed a stronger effect of parental separation on children's grades for white youth, relative to their black peers. Further, McLanahan and Sandefur (1994) found that the proportionate increase in risk of dropping out of high school due to familial disruption was significantly greater for whites than for blacks or Hispanics. However, for high school idleness, they found that the effect of familial disruption was stronger for blacks than whites. This latter finding suggests that the differential association between family structure and educational outcomes may depend on the outcome of interest under investigation. Two major mechanisms have been hypothesized to explain why minority children may be less vulnerable to the negative consequences of living outside of a two-biological-parent family than white children: *socioeconomic stress* and *extended family embeddedness.*

Socioeconomic stress hypothesis. In the U.S., race and ethnicity are fundamental axes of inequality along which socioeconomic resources are distributed (Bobo, Kluegel, & Smith, 1997; Bonilla-Silva, 2006; Conley, 2009). Due to historic and contemporary structural racism, minority families on average have less access to socioeconomic resources such as income, wealth, and quality neighborhoods than white families (Charles, 2006; Krysan, Couper, Farley, & Foreman, 2009; Mazumder, 2008; Proctor, Semega & Kollar, 2016; Wilson, 1987). Because of this, minority children are more likely to be exposed to socioeconomically stressful environments, and some scholars have suggested that their exposure to sustained socioeconomic deprivation means that the additional stress incurred by living apart from a parent is only marginally impactful, above and beyond existing social disadvantages (McLoyd et al., 2000; Smith, 1997). This is referred to as the socioeconomic stress hypothesis.

This hypothesis is derived from family stress theory, which focuses on a family's ability to cope with stressful situations and crises. It maintains that a families' ability to respond and adapt to stressors depends on the nature and number of stressful events, the family resources available to facilitate coping, and family members' perception of the event (McCubbin, 1993; McCubbin & McCubbin, 1989; Friedman 1998; Fomby et al. 2010). Given the cumulative number of socioeconomic stressors that minority children face, and the extent to which the pervasiveness of these stressors is more normative, one might expect that the independent effect of an event like parental divorce to be smaller for this group. On the other hand, for children of a racial/ethnic group who on average benefit from greater access to socioeconomic resources (i.e., white children), one might expect that the effect of familial disruption may be more pronounced.

Extended family embeddedness hypothesis. Several studies suggest that minority children are more deeply embedded in extended family networks compared to white children (Burton, 1992; Hunter, 1997; Margolis, Fosco, & Stormshak, 2014; Sarkisian & Gerstel, 2012; Stack 1974; Taylor, 1986). Indeed, research on the extended family networks of Black Americans finds that this group is engaged in ongoing and reciprocal exchanges of practical, emotional, and financial support, and black families are more involved in practical support (e.g., help with household chores, transportation, and child care) than white families (Jayakody, Chatters, & Taylor, 1993; Sarkisian & Gerstel, 2004; Stack & Burton, 1993; Taylor, Chae, Lincoln, & Chatters, 2015). They also tend to live in closer proximity to extended relatives than whites (Farber, Miller-Cribbs, & Reitmeier, 2005). Although limited, extant research on Hispanic extended family networks suggest that they are more integrated and may offer higher levels of support than white extended

family networks (Baca Zinn & Wells, 2000; Kamo, 2000). Greater involvement in these extended family networks may reduce of some the negative psychosocial effects associated with parental conflict or separation (Lamborn & Nguyen, 2004; Pittman, 2007; McLoyd et al., 2000; Smith, 1997). This is known as the extended family embeddedness hypothesis.

This hypothesis is grounded in social capital theory, which asserts that social capital within the family, that is supportive relations between parents and children, is crucial for children's intellectual growth (Coleman, 1988). Social capital within the family gives children access to other forms of parental capital that help facilitate children's educational performance (i.e., economic, cultural, and human capital) (Coleman, 1988). The absence of a parent from the household may diminish the availability of these resources to children, and thus undermine their academic success. Extended family networks, however, may increase the number of nurturant and supportive adults available in the child's life to provide such resources (McLoyd, et al. 2000). Thus, to the extent that extended family networks contribute additional resources such as monitoring and supervision and familial involvement in education, one would expect that embeddedness in these networks may weaken or even countervail the negative effects of parental absence. However, if demands for support exchanges increase stress and diminish household resources, one would anticipate that greater embeddedness in extended family networks would adversely affect children's educational attainment (Pilkauskas, Campbell, & Wimer, 2017; Dominguez & Watkins, 2003).

The Current Study

While plausible, the relative importance of these mechanisms in explaining racial differences in the effects of family structure has yet to be examined (but see Fomby et al., 2010 for an investigation of racial/ethnic differences in the effects of family instability on children's risk behaviors and see Sun & Li, 2007 for a test of the socioeconomic stress hypothesis on parental divorce/separation during late adolescence). This study seeks to overcome this limitation by using nationally representative longitudinal data to assess whether racial/ethnic differences in socioeconomic stress and extended family embeddedness account for group differences in the association between family structure and children's educational attainment. I begin by investigating whether children's lifetime experience of family structure influences their on-time high school completion and college enrollment. I then determine if any observed associations between family structure and these two measures of educational attainment differ by race/ethnicity. Finally, I evaluate the extent to which factors associated with socioeconomic stress and extended family embeddedness explain any group differences in associations by family structure.

Method

Data

This study draws on data from the Panel Study of Income Dynamics (1985-2015) and its two youth-centered supplements, the Child Development Supplement (CDS) (1997-2007) and the Transition into Adulthood Supplement (TAS) (2005-2015). The PSID began in 1968 as a nationally-representative sample of nearly 5,000 U.S. households. Original sample members and their descendants were followed annually until 1997 and have been followed biennially since then. To maintain population

representativeness, in 1997, a sample refresher added approximately 500 households

headed by immigrants who had entered the United States since 1968. At each wave, the

household head or the spouse or cohabiting partner of the head reports on household

composition, and household members' employment, income, educational attainment, and

health status. In 2015, the study collected information on nearly 25,000 individuals in

approximately 9,000 households.

While the PSID has always collected some information about children, in 1997,

the PSID supplemented its main data collection with the CDS, which provides additional

information on up to two children aged 0 to 12 years per household. Information is

obtained through interviews with primary and secondary caregivers and with older

children, and through assessments and interviewer observations. Children and their

caregivers were re-interviewed in 2002 and 2007, or until children reached age 18. In

2005, the Transition to Adulthood Supplement (TAS) was developed to continue

following the original CDS cohort when they aged out of CDS or left high school. TAS

has continued to follow respondents biennially as they complete their educations and

enter the labor force. In 2015, TAS respondents were between 18 and 28 years old. My

analytic sample includes children who were present in at least 50% of the waves in which

they could have been observed in the PSID core data and lived with mothers with a

known union history, who responded to at least one wave of the Transition to Adulthood

Supplement between 2005 and 2015, and who provided information on their educational

status and attainment (N=2,589). This includes 86% of the age-eligible original CDS

sample. Young adults who were not included in this analytic sample were typically

younger, Hispanic, and from families with lower household incomes and wealth at birth.

Weighted statistics are representative of young adults born between 1985 and 1997 who were residing in the United States in 1997.

Measures

  Dependent variables. Two dependent variables are used as indicators of children's educational attainment: on-time high school completion and college-enrollment. On-time high school completion is a binary variable based on whether the child (1) completed high school, and (2) graduated without repeating a grade in school. This information is gathered from CDS and TAS. In CDS, individuals are asked whether they ever repeated a grade in school, and in TAS, respondents are asked whether they completed high school, and in which month and year they did so. If participants responded affirmatively to having repeated a grade, they are assigned a value of 0, regardless of completion status. If participants did not repeat a grade, but also did not finish high school, they are also assigned a value of 0. Only respondents who did not repeat a grade and finished high school are assigned a value of 1. I have chosen this measure over any-time high school completion because high school graduation rates are universally high in the U.S. (Chapman, Laird, Ifill, KewalRamani, 2011), but on-time completion rates are significantly lower, and youth who do not graduate high school on-time are more likely to never graduate, not pursue higher education, and be unemployed (National Center for Education Statistics, 2014). College enrollment is also a binary variable. Respondents are coded as 1 if they reported attending a two-year or four-year college in at least one wave of the TAS in which they were observed. They are coded as 0 if they did not finish high school and/or if they did not report attending college in any of the TAS waves in which they were observed. About one-quarter of college enrollees did

not report an initial enrollment date, so the analysis considers ever having been enrolled, rather than enrollment immediately after high school.

Independent variable. Children's lifetime experience of family structure (from birth to age 17) is based on mother's union status: (1) the proportion of childhood spent living with two biological parents, (2) the proportion of childhood spent living with a mother and a non-biological parent, and (3) the proportion of childhood spent with a single mother. Following the example of Carlson & Corcoran (2001), this categorization of single-mother families includes never married, divorced, widowed, and separated mothers. Although these categories of single-parenthood are not identical, I combined them due to sample-size limitations and to be consistent with prior research. Additionally, a child's non-biological parent may include either the married or cohabiting partner of the child's mother.

I used the PSID's marriage and birth history files to construct the family structure variable. Based on the child's reported birth month and year and his or her mother's reported start and end date for each of her unions (also reported by month and year), I determined the union status of each child's mother when he or she was born, and in each subsequent year of his or her life until age 17. This approach is an improvement upon measurements that rely solely on PSID relationship status variables and/or household roster information, as mother's union status information is not available in non-interview years after 1997 or in years in which she did not participate in the survey. If a child's mother was unobserved in one year, but she reports information on her union status in a subsequent year of the marriage history file, I used the reported union status start and end dates to recover information about her union status for missing years, retrospectively. To

obtain the proportion of childhood spent in each family structure type, I totaled the number of waves a child is observed living in a given family structure and divided this value by the total number of waves a child is observed before age 18.

Socioeconomic stress. To test the socioeconomic stress hypothesis, I used several measures that have been previously identified as indicators of children's socioeconomic circumstances: (Conley, 2009; Fomby et al. 2010): parents' education, self-reported measures of neighborhood quality, safety, and homeownership, mother's age at child's birth, and lifetime measures of family wealth and parents' employment and health status. Mothers' education is specified as the highest level of education completed by the child's mother: less than high school, high school, some college, and bachelor's degree or higher (reference). Education was used instead of family income in this analysis due to high levels of collinearity between the two variables and because income is likely to be endogenous (affected by mother's union status). For neighborhood quality, I used the child's primary caregiver's (PCG) self- reported rating of their neighborhood as a place to raise children (1=excellent/very good, 2=good, 3=fair/poor). Neighborhood safety was measured based on the PCG's report of how safe they perceived their neighborhood to be to walk around alone after dark (0=neighborhood is somewhat or extremely dangerous, 1=neighborhood is completely or fairly safe). Homeownership is a binary variable that is based on the PCG's report of the percentage of their neighbors who owned their home (0=less than 50%, 1=more than 50%). Mother's age at birth is a categorical variable: 19 and under (reference), 20-29, and 30+. Average family wealth and parents' employment and health statuses are all lifetime measures that I created by summing the values for each of these variables across all the waves that a child was observed and dividing them

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by the total number of waves that a child was observed. For family wealth, I included the inverse hyperbolic sine of wealth excluding home equity to account for the highly skewed distribution of wealth in the sample. Mothers' employment and health status are both dichotomous variables indicating whether the child's mother is employed and in good health (0=no, 1=yes).

 Extended family embeddedness. I included five indicators to test the extended family embeddedness hypothesis: (1) coresidence with extended relatives, (2) geographic proximity to extended relatives, (3) frequency of contact with extended relatives, and (4) the PCG's reported satisfaction with the level of practical support and (5) emotional support he or she received from extended family members. Coresidence with extended relatives was determined based on information from the household roster and from the Family Identification Mapping System (FIMS). A child was identified as living with an extended relative if he or she resided with an adult relative (by birth, adoption, or marriage) who is not his or her parent or sibling. This includes grandparents, aunts, uncles, and adult cousins; it does not include nonrelatives such as friends or boarders or underage extended family members. Following Fomby et al. (2010), I distinguish between short-term and long-term extended family coresidence with a three-category variable: 1=never lived with an extended relative (reference), 2=lived with an extended relative for less than a quarter of childhood, and 3=lived with an extended relative for at least a quarter of childhood. Geographic proximity to extended relatives is measured based on the PCG's report of the number of family members (besides the child's other parent if they are not present in the household) who live in the same neighborhood. Due to the highly positively skewed distribution of responses, I constructed a categorical

variable that collapsed responses into quartiles. Frequency of contact with extended

relatives is based on how often the PCG reports that the nuclear family "gets together

with relatives or friends": less than once a month (reference), one to three times a month,

or once a week or more. Measures of practical and emotional support from extended

family is based on the PCG's report of how satisfied he or she is with the level of support

that he or she is receiving from family members besides the child's other parent.

Responses are based on a 7-point Likert scale with 1 indicating complete dissatisfaction

and 7 indicating complete satisfaction. Higher values on these scales signify higher

levels of satisfaction with practical and emotional support received by the primary

caregiver.

      Moderator. Race/ethnicity is coded into four categories based on the PCG's report

of the child's race: (1) non-Hispanic white (reference); (2) non-Hispanic black; (3)

Hispanic; and (4) other race.

      Control variables. In addition to these variables, I also control for several

demographic characteristics of the child: gender, region where the child grew up, and the

average number of children living in the child's household. Gender is measured as male

(reference) or female. Region (South vs non-South) measures the proportion of all

observed waves that a child lived in a state in the US South. Average number of children

in the household was constructed in a similar fashion. At each wave that a child was

observed, he or she was assigned a value indicating the total number of children living in

his or her household. These values were then totaled and averaged across the total

number of waves that a child was observed.

All covariates except child's race, gender, age, region, family income, and number of children present in the household included missing data on at least some observations. To restore missing cases and improve the generalizability of my findings, I used multiple imputation with chained equations in Stata 15. The imputation model included all dependent, independent, and control variables with missing values, as well as child's race, gender, and age, a family-level identifier shared by all related individuals in the sample, and stratum and clustering indicators. My multivariate regressions used multiply imputed datasets where covariates include imputed values but dependent variables are not imputed (von Hippel).

Analytic Strategy

I use logistic regression analysis to examine the relationship between children's lifetime experience of family structure and their educational attainment. I begin with baseline models that estimate the strength of the association between the main effects of family structure and on-time high school completion and college enrollment, taking into account the aforementioned control variables (Model 1), before including interaction terms for white, black, and Hispanic children (Model 2). I then separately add in indicators of the socioeconomic stress (Model 3) and extended family embeddedness (Model 4) hypotheses, before jointly including all covariates (Model 5) to assess the extent to which these mechanisms help explain group differences in the association of family structure between family structure and educational attainment. Next, I conduct Wald tests to determine whether the family structure-race/ethnicity interactions are jointly significant. Then, I calculate predicted probabilities to show how, if at all, the effects of family structure on high school completion and college enrollment vary by

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race/ethnicity. To appropriately compare changes in coefficients across logistic

regression models and to quantify the amount of variance in the two dependent variables

that is explained by socioeconomic stress and extended family embeddedness, I calculate

the average partial effects of these two sets of factors using the Karlson, Hohm and

Breen (KHB) method for decomposing total effects (Kohler, Karlson, and Holm, 2011).

Results

Descriptive Results

Table 2.1 displays the distribution of the dependent variables and sample characteristics

by race/ethnicity. Statistically significant group differences (black vs. Hispanic, black vs.

white, and Hispanic vs. white) are indicated with footnotes. Starting with outcome

variables, I found that there were significant differences by race/ethnicity in educational

attainment. White youths had the highest rates of on-time high school completion (85%)

and college enrollment (81%) among the three groups. Hispanic youths followed with

74% for both outcomes, and black youths with 61% and 70%, respectively.

Consistent with findings from cross-sectional research (U.S. Department of

Health and Human Services, Health Resources and Services Administration, 2014), the

longitudinal estimates of exposure to various family structures indicate that black

children spend less of their childhood living in a two-biological-parent and more time

living with a single mother, compared to white and Hispanic children. Black children also

spent more time living with their mothers and her partner who is not their biological

parent (both married and cohabiting), relative to their white peers, whereas Hispanic

youths and white youths spent similar amounts of time with their mother's non-biological

partner.

Turning to socioeconomic stress, black and Hispanic children had significantly less access to socioeconomic resources during childhood than their white peers. For instance, the average family wealth for white children was roughly 1.5 to two times higher than that of Hispanic and black children, respectively. Similarly, white parents were approximately 1.5 times more likely to rate their neighborhood as "excellent" or "very good", relative to black and Hispanic parents. Black and Hispanic children were, however, more likely to live with or in close proximity to extended relatives, and their parents expressed higher levels of satisfaction with the amount of practical support received from extended family members. Eighty percent of white children never lived in an extended family, compared to approximately 40% of black children and 60% of Hispanic children. Further, white parents reported significantly lower levels of satisfaction with the amount of practical support received from extended family members than black and Hispanic parents.

In sum, descriptive results generally support findings from prior research indicating racial/ethnic differences in levels of educational attainment and family structure. They also show that on average, black and Hispanic children are confronted with more socioeconomic hardship than their white peers. Moreover, they lend some evidence to support the assertion that minority children are more deeply embedded in their extended family networks than white children. The multivariate analyses in the following section assess the extent to which racial/ethnic differences in these family resources account for group differences in the effects of family structure.

Multivariate Results

On-time high school completion. In the baseline model (Model 1) for Table 2.2, the variables indicating the main effects of family structure show that more time spent living with a single-mother or with a mother and a non-biological parent are associated with a lower likelihood of finishing high-school on-time, compared with more time spent with two biological parents. The main effects of race/ethnicity are statistically significant, indicating that black and Hispanic youth are less likely to complete high school on-time, relative to white youth. The interaction term between single-mother family and race/ethnicity (Model 2) is highly significant and *positive* for black youth (OR 3.049), signifying a weaker negative association between family structure and on-time high school completion for black youth, compared to white youth. The association between family structure and this outcome was not different between white and Hispanic youth.

Model 3 accounts for indicators of socioeconomic stress. Children who spent more time not living in a two-biological-parent family remained less likely to graduate high school on-time (though the coefficient for time spent living with mother and a non-biological parent is only marginally significant). The interaction term for single-mother family and black children is no longer statistically significant, signifying that socioeconomic stressors help explain the differential association between family structure and on-time high-school completion between blacks and whites. Indicators of socioeconomic stress, namely parents' education, age, and health status are positively related to high school completion and appear to be explaining much of the variation in this outcome. Children whose parents earned a bachelor's degree or higher and those whose mother was older at childbirth and whose mother spent more time in good health during their childhood were more likely to graduate on-time.

Model 4 includes indicators of extended family embeddedness. Here, we see no change in the significance of the association between family structure and on-time high completion or the family structure-race/ethnicity interaction term for black youth and high school completion. This suggests that indicators of extended family embeddedness explained little of the main interaction effects of family structure on high school graduation between blacks and whites. When both sets of factors are taken into account in the full model (model 5), the main effects for family structure are no longer statistically significant, and neither is the interaction term for blacks. Thus, combined, indicators of socioeconomic stress and extended family embeddedness help explain the relationship between family structure and high school completion, as well as the differential effect of family structure for black youth. Wald tests indicate that the family structure-race/ethnicity interactions are statistically significant in models 2 through 5 (Table 2.2), providing evidence that the association between family structure and on-time high school completion differs for at least one group (in this case, black children).

To better understand the interaction terms for race/ethnicity and family structure, I calculated and graphed the predicted probabilities for each family structure-race/ethnicity combination from Table 2.2 model 2 that had statistically significant differences by race/ethnicity, setting all other values to their mean or modal values. Figure 2.1 displays these values for on-time high school completion. This graph shows that as black children spend longer periods of time in a single-mother family, the change in slope for the effect of living in a single-mother family declines less sharply than the change in slope for whites. This pattern indicates that more time spent in this family structure is less negatively consequential for black youth. This pattern is consistent for Hispanic children,

though as demonstrated in Table 2.2, this differential effect is not statistically significant at p<.05. Summarizing Table 2.2 and Figure 2.1, the results show that living in a single-mother family for the majority of childhood is less detrimental for black children's on-time high school completion, compared to white children.

College enrollment. In the baseline model for college enrollment (Table 2.3), the main effect of family structure indicates that children who spent some time in a single-mother family or with a mother and a non-biological parent are less likely to enroll in college, relative to those who spent a greater proportion of childhood living in a two-biological-parent family. The main family structure-race/ethnicity interaction terms for blacks and Hispanics, however, are not significant (Model 2). This suggests that the effect of family structure on college enrollment does not differ by race/ethnicity.

Model 3 adds in factors related to socioeconomic stress. Unlike the baseline model, the main effect of family structure is no longer statistically significant, indicating that socioeconomic factors help explain the association between the main effect of family structure and college enrollment. In particular, parents' education, family wealth, and mother's age at childbirth are positively related to college enrollment. On the contrary, when indicators of extended family embeddedness are taken into account (Model 4), the main effect of family structure remains similar to that in the baseline model. This suggests that the extended family embeddedness hypothesis does little to explain the association between family structure and college enrollment. Extended family embeddedness does appear to be independently associated with college enrollment, however. Specifically, children who spent some time living with an extended relative had

a roughly 40% lower odds of attending college than those who never lived with an extended relative during childhood.

In the full model, when I account for factors related to both socioeconomic stress and extended family embeddedness, the main effects of family structure are nonsignificant. Similar to Model 3, the coefficients for parents' education, family wealth, and mother's age are highly and positively related to college enrollment. Coresidence with extended family members is no longer related to college-enrollment. This finding suggests that socioeconomic factors are more predictive of college enrollment than family structure itself or extended family embeddedness. Wald tests show that the family structure-race/ethnicity interactions are not statistically significant in each model (see Table 2.3), providing further evidence that the association between family structure and college enrollment does not differ by race/ethnicity.

Table 2.4 displays the average partial effect of family structure in the baseline and full models estimated using the Karlson, Hohm and Breen (KHB) method for decomposing total effects (Kohler, Karlson, and Holm, 2011). The average partial effect indicates the difference in the predicted probability that a child experienced an outcome of interest (in this case, on-time high school completion and college enrollment), given the time he or she spent in a single-mother family or with a mother and a non-biological parent, relative to time spent in a two-biological-parent family. The percentage change in the average partial effect between the baseline and full models demonstrates the difference in how much of the variance is explained by family structure for each outcome before and after taking into account indicators of socioeconomic stress and extended family embeddedness and controlling for sociodemographic characteristics.

Average partial effects from the KHB decomposition method reveal that indicators of both socioeconomic stress and extended family embeddedness significantly attenuated the relationship between family structure and children's educational attainment, though the latter did so to a much lesser degree. The reduced model estimated that on average, the probability of on-time high school completion for each additional year a child spent living with his or her mother and a non-biological parent was 17.6 percentage points lower than for each additional year spent in a two-biological-parent family. In the full model, once indicators of socioeconomic stress are taken into account, the average partial effect decreased to 10.2 percentage points. Thus, the difference in the size of average partial effects in the reduced and full models indicates that 42% of the gap in on-time high school completion between children who spend an additional year living with a mother and a non-biological parent compared to with two biological parents is explained by socioeconomic factors included in the full model. Extended family embeddedness, on the other hand, explained 15% of the gap. When we compare differences between the amount of time spent living with a single mother compared to two biological parents, we see that socioeconomic factors explained 22% and extended family embeddedness explained 13% of the gap in on-time high school completion. The results for college enrollment echo those of on-time high school completion. For each additional year a child spent with his or her mother and a non-biological parent compared to with both biological parents, socioeconomic factors accounted for 48% of the variance in college enrollment, whereas extended family embeddedness accounted for 19% of the variance in this outcome. Socioeconomic factors explained 36% and extended family embeddedness explained 13% of the gap in college enrollment between children who

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spent more time living with a single mother, compared to those who spent more time living with both parents.

Sensitivity Analysis

I assess the robustness of my findings in several ways. First, research suggests that children who experience multiple transitions in family structure face worse educational outcomes than children raised in stable families, independent of the type of stable family structure (Fomby & Cherlin, 2007). In a supplemental analysis, I controlled for whether a child experienced one or more changes in family structure during childhood. Children who spent more time outside of a two-biological-parent family were still less likely to complete high school on-time and enroll in college, and black children in single-mother families remained marginally more likely to finish high school on-time, relative to white children who spent similar periods of time in this family structure.

Second, I considered an alternative approach to measuring family structure that captures both mother's relationship type and transitions (but not biological parental status): (1) stable two-parent family, (2) stable one-parent family, (3) two-parent to one-parent family (4), one-parent to two-parent family, and (5) two or more family transitions. Consistent with my main findings, children who grew up in a stable two-parent family were more likely to graduate high school on-time, compared to children raised in any other family type. Black children raised in a stable one-parent family were more likely to complete high school on-time than white children raised in a stable one-parent family.

Third, my analytic sample includes children who were present in at least half of the waves in which they could have been observed in the PSID. I also ran my analysis on

children who were present in all waves of the study. Results from this more restricted sample are representative of the results that I obtained when I included individuals who were missing in up to 50% of waves. Further, my analytic sample also contains 326 sibling pairs. Given that observations between siblings are non-independent, I ran all models clustering on family unit identifiers rather than on the indicators of the PSID's multistage sampling design and observed similar results.

Finally, research has suggested that there is negative selection into extended families; that is, children who live with extended relatives may do so because their parents lack the resources to live independently (Chase-Lansdale, Brooks-Gunn, & Zamsky, 1994; Pilkauskas & Dunifon, 2016). If this is the case, then the observed negative association between extended family coresidence and on-time high school completion and college enrollment may be attributable, in part to, to the fact that children raised in these households are less well-off to begin with.

To account for factors related to the selection into an extended family, I used propensity score matching (PSM) methods to estimate the average treatment effect of extended family coresidence. This was accomplished by comparing the on-time high school completion and college enrollment of children who spent time in an extended family during childhood with children who never spent time in an extended family but are otherwise similar in terms of family background characteristics. Measures in the matching model included the extended family coresidence status (treatment), child's gender, race, sex, and region, number of children in the household at birth, mother's education, and mother's age, union, and health status at birth. In a sample balanced on these characteristics, children who lived in an extended family for less than or a quarter

or more of their childhood were *not* significantly less likely to finish high school on-time or enroll in college, compared to those who never lived in an extended family. These findings suggest that the negative association between extended family coresidence and children's educational attainment is largely explained by the negative selection into this living arrangement. Findings from PSM methods may differ from those of the logistic regression analyses, which regress toward the mean, if the treatment group (i.e., those likely to experience extended family coresidence) and the control group do not have substantial overlap on characteristics that distinguish the two groups. All in all, however, the results of the sensitivity checks considered here lend confidence to the robustness of my main findings.

Discussion

This study used nationally representative, longitudinal data to examine the association between children's lifetime experience of family structure and their educational attainment, the extent to which this association varied by race/ethnicity, and the relative importance of two hypothesized mechanisms in explaining any observed group differences. More specifically, I assessed the relationship between childhood family structure and on-time high school completion and college enrollment and tested whether racial/ethnic differences in socioeconomic stress and extended family embeddedness mediate these relationships for white, black, and Hispanic children. Results from this study confirm findings from prior research demonstrating that children raised outside of a two-biological-parent family are at an elevated risk of experiencing lower educational attainment than those raised in this family type. They are also consistent with previous studies showing that the consequences of living in a single-

mother family are less negatively impactful for black children, relative to white children who spend similar amounts of time in this family structure (e.g., McLanahan & Sandefur, 1994). This suggests that the experience of single-parenthood for white children has limited generalizability to black children, as the two groups may adjust differently to life in a single-parent family.

I did not, however, observe racial differences in the link between family structure and college enrollment. This indicates that the differential association between family structure and educational attainment, or child wellbeing more generally, may depend on the outcome of interest. Indeed, prior research has identified stronger family structure effects for more proximate outcomes such as behavioral and psychological wellbeing, than more distal ones such as educational attainment (Amato, 2005), and only in some instances have researchers observed racial/differences in these outcomes (Dunifon & Kowaleski-Jones, 2002; Manning & Brown, 2006; McLanahan & Sandefur, 1994). Overall, findings on racial differences suggest that our examination of the impact of family structure on children's educational attainment, and wellbeing broadly speaking, is best approached from a pluralistic perspective, one that does not privilege one family type over another, since family structure does not always have the same social consequences for all groups.

There were no observed differences between whites and Hispanics in the effects of family structure on either measure of educational attainment. While this finding is consistent with Fomby et al. (2010)'s work on racial differences in the effect of family instability on adolescent's risk behavior, it does not preclude the possibility of group differences for other dimensions of child wellbeing. Given the limited number of studies

that focus on Hispanic children, more work is needed to investigate potential differential effects of family structure on child wellbeing for this group.

What accounts for racial/ethnic variation in the association between family structure and educational attainment? Findings from this study suggest that both socioeconomic stress and extended family embeddedness attenuate the effect of family structure on on-time high school completion and college enrollment. Socioeconomic stress, however, appears to have greater relative influence. Differences in socioeconomic resources accounted for 22-48% of the gap in on-time high school completion and college enrollment between amount of time spent in a two-biological-parent family and those living with a mother and nonbiological parent or single mother. Extended family embeddedness factors helped explain roughly 15-20% of the variance in these outcomes. These findings lend support for the socioeconomic stress hypothesis, which posits that the negative effect of familial disruption may be less independently impactful for children of racial/ethnic groups facing a large number of socioeconomic disadvantages to begin with. In contrast, they provide little evidence to support the hypothesis that racial/ethnic minority children's deeper embeddedness in their extended family network protects against the negative effects of familial disruption.

In interpreting these findings, it is important to acknowledge that exposure to socioeconomic hardship is harmful to children, irrespective of race/ethnicity and that black children are not uniquely impervious to the negative consequences of familial disruption. Rather, they may have developed adaptive strategies derived from their structural position in society that aids them in coping with this stressor. Indeed, research suggests that while exposure to racially and economically problematic life circumstances

is detrimental to child wellbeing, black children may develop competencies that help them respond to major life events such as parental separation (Smith and Carlson, 1997). Future work should explore racial/ethnic variation in children's responses to familial disruption and its link to child outcomes.

Given the key role that socioeconomic factors play in explaining the relationship between family structure and children's educational attainment, these results call into question whether welfare funds should be diverted to encourage the formation and maintenance of two-parent nuclear families and discourage nonmarital childbearing (U.S. House of Representatives, 1996), rather than being spent directly on alleviating financial hardships for disadvantaged groups. They also suggest that expectations for the extended family to compensate for family hardship may be misplaced. Extended family embeddedness does not appear to fully protect against the negative impact of living outside of a two-biological-parent family. Therefore, efforts aimed at improving child wellbeing for disadvantaged groups may be more effective by focusing on reducing socioeconomic hardships for low-income families and adopting reasonable expectations for the extended family to meet the needs of its disadvantaged members.

Results should be interpreted within the context of the study's limitations. First, while I included a robust set of indicators of socioeconomic stress and extended family embeddedness, the factors used in this study are not exhaustive. I would have liked to include direct measures of the amount and frequency of practical and emotional support that mothers received from extended family members, as well as measures of relationship quality among extended family members, but was unable to do so due to limitations of the data. This would allow me to more accurately assess the levels of extended family

support available to mothers in various family types, as well the amount of extended family cohesion they experience. Second, the relatively small sample size for Hispanic children diminishes my statistical power, making it difficult to observe statistically significant differences and to generalize to the broader U.S. population for this group. Third, although my use of the birth and marriage history files allows me to retrospectively identify mothers' union status between waves and during skipped waves, I miss children whose mothers attrited. As noted earlier, individuals who attrited were more likely to be economically disadvantaged. To the extent that children of disadvantaged mothers are more likely to have lower levels of educational attainment, attrition is likely to have underestimated the influence of socioeconomic stress on children's on-time completion and college enrollment. Lastly, while the two hypotheses that I tested help partially account for racial/ethnic differences in the association between family structure and children's educational attainment, neither of them fully explain this phenomenon. Future research should investigate how other factors related to children's familial and community context may account for these differences.

Despite its limitations, this study takes important steps towards understanding why black children are less affected by family structure with regard to educational attainment than their white peers. Using nationally representative longitudinal data, this research shows that group differences in access to socioeconomic resources are an important mechanism for explaining this gap. Combined, study findings highlight the importance of examining racial/ethnic differences in the consequences of family structure for children's educational attainment and their wellbeing more generally.

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Table 2.1. Sample characteristics by race/ethnicity, Panel Study of Income Dynamics, Child Development Supplement, Transition into Adulthood Study, (1985-2015)

Variables	Full Sample	Black	White	Hispanic	Other
Proportion of childhood with two biological parents[abc]	0.68	0.33	0.78	0.73	0.62
Proportion of childhood with mother and non-biological partner[ab]	0.09	0.12	0.09	0.08	0.10
Proportion of childhood with single mother[abc]	0.22	0.55	0.13	0.19	0.28
On-time high school completion[abc]	0.79	0.63	0.85	0.74	0.83
College enrollment[ab]	0.77	0.61	0.81	0.74	0.76
Female[a]	0.48	0.42	0.49	0.48	0.53
Child's age[ab]	24.6	25.1	24.6	24.0	24.0
(SD)	0.09	0.16	0.12	0.31	0.34
Proportion of childhood spent living in the South[abc]	0.33	0.59	0.30	0.22	0.24
No. of children[abc]	2.33	2.52	2.18	2.80	2.39
(SD)	0.02	0.06	0.02	0.09	0.13
Parents' education					
<HS[abc]	0.13	0.15	0.05	0.47	0.17
HS	0.34	0.38	0.32	0.25	0.27
Some college[bc]	0.29	0.33	0.27	0.15	0.25
BA or higher[abc]	0.25	0.14	0.37	0.13	0.31
Family wealth without home equity[abc]	7.24	4.54	8.33	5.97	6.30
(SD)	0.14	0.23	0.17	0.41	0.71
Proportion of childhood mom is employed[abc]	0.65	0.60	0.69	0.53	0.57
Neighborhood quality					
Excellent/very good[ac]	0.56	0.44	0.71	0.43	0.49
Good[ab]	0.26	0.30	0.21	0.32	0.25
Fair/poor[ac]	0.18	0.26	0.08	0.25	0.26
>50% of neighbors own their home[abc]	0.68	0.43	0.80	0.59	0.45
Neighborhood is completely or fairly safe[ac]	0.88	0.74	0.94	0.74	0.90
Mother's age at child's birth					
19 and below[a]	0.12	0.17	0.07	0.13	0.11
20-29[c]	0.55	0.54	0.54	0.56	0.51
30 and above[ac]	0.33	0.27	0.39	0.29	0.36
Proportion of childhood mom is in good health[ac]	0.90	0.84	0.93	0.85	0.82
Extended family coresidence					
Never lived with an extended relative[ac]	0.60	0.39	0.80	0.62	0.61
Lived with an extended relative for <1/4 of childhood[ab]	0.18	0.24	0.13	0.14	0.21
Lived with an extended relative for >=1/4 of childhood[ac]	0.22	0.37	0.07	0.24	0.18
No. of extended relatives living in R's neighborhood by quartile					
Bottom 25th percentile[ac]	0.45	0.35	0.53	0.45	0.53
25th-50th percentile	0.07	0.07	0.07	0.04	0.08
50th-75th percentile[ac]	0.23	0.27	0.19	0.27	0.16
75th-99th percentile[ac]	0.25	0.31	0.20	0.25	0.23

Frequency of contact with extended relatives and friends

Less than once a month	0.24	0.28	0.19	0.30	0.25
One to three times a month_a	0.16	0.13	0.18	0.15	0.19
Greater than or equal to once a week_{bc}	0.60	0.59	0.62	0.55	0.55

PCG satisfaction with the level of practical support received from extended family members_{abc}	5.13	5.32	4.89	5.83	5.53
(SD)	0.04	0.10	0.05	0.12	0.17

PCG satisfaction with the level of emotional support received from extended family members_{bc}	5.47	5.28	5.41	5.76	5.86
(SD)	0.04	0.10	0.05	0.14	0.15

No. of Observations	2,589	1,105	1,163	183	138

Notes: Values are percentages unless otherwise noted. Values are weighted to account for the complex multistage clustered design of the PSID. Total for the time-varying characteristics is the child-year average. _aBlack-White difference significant at p<0.05. _bBlack-Hispanic difference significant at p<0.05. _cHispanic-White difference significant at p<.05. No.=Number. SD=Standard deviation. PCG=Primary caregiver.

Table 2.2. Odds ratios from logistic regression models predicting on-time high school completion, Panel Study of Income Dynamics, Child Development Supplement (CDS), Transition into Adulthood Supplement (TAS), 1985-2015

	Model 1 OR	Model 2 OR	Model 3 OR	Model 4 OR	Model 5 OR
Proportion of childhood with single mother	0.466***	0.231***	0.428**	0.294***	0.462*
	(-3.141)	(-3.858)	(-2.055)	(-3.220)	(-1.837)
Single mother X Black		3.049**	2.254	2.896**	2.239
		(2.219)	(1.557)	(2.119)	(1.547)
Single mother X Hispanic		1.750	1.473	1.673	1.388
		(0.667)	(0.449)	(0.619)	(0.376)
Proportion of childhood with mother and non-biological partner	0.233***	0.271***	0.446*	0.312***	0.459*
	(-4.309)	(-3.118)	(-1.752)	(-2.795)	(-1.695)
Mother and non-biological partner X Black		3.822*	2.889	5.264**	3.596
		(1.723)	(1.325)	(2.157)	(1.621)
Mother and non-biological partner X Hispanic		0.726	0.374	0.698	0.362
		(-0.267)	(-0.763)	(-0.289)	(-0.795)
Race/ethnicity (vs. White)					
Black	0.473***	0.280***	0.412***	0.310***	0.424***
	(-3.701)	(-4.614)	(-3.114)	(-4.319)	(-3.074)
Hispanic	0.600**	0.578*	0.927	0.688	1.016
	(-2.179)	(-1.797)	(-0.209)	(-1.174)	-0.044
Female	1.676***	1.652***	1.728***	1.675***	1.738***
	(3.774)	(3.686)	(3.856)	(3.687)	(3.836)
Child's age	0.938***	0.943***	0.935***	0.946***	0.937***
	(-3.163)	(-2.924)	(-3.055)	(-2.687)	(-2.927)
Proportion of childhood spent living in the South	0.790	0.807	0.839	0.831	0.855
	(-1.564)	(-1.414)	(-1.142)	(-1.236)	(-1.027)
No. of children	0.798***	0.783***	0.854**	0.792***	0.856**
	(-3.034)	(-3.329)	(-2.018)	(-3.131)	(-1.996)
Parents' education (vs. BA or higher)					
Less than high school			0.495**		0.509**
			(-2.522)		(-2.416)
High school			0.366***		0.384***
			(-4.737)		(-4.488)
Some college			0.522***		0.520***
			(-2.958)		(-2.955)
Family wealth without home equity			1.001		1.000
			(0.095)		(-0.022)
Proportion of childhood mom is employed			1.099		1.060
			(0.393)		(0.245)
Neighborhood quality (vs. excellent/very good)					
Good			0.796		0.784
			(-1.243)		(-1.320)
Poor			0.781		0.784

	(1)	(2)	(3)	(4)	(5)
				(-1.146)	(-1.121)
>50% of neighbors own their home_abc				1.153	1.189
				(0.713)	(0.872)
Neighborhood is completely or fairly safe				1.357	1.295
				(1.456)	(1.244)
Mother's age at child's birth					
20-29				2.201***	2.109***
				(3.598)	(3.325)
30 and above				2.108***	2.000***
				(3.008)	(2.737)
Proportion of childhood mom is in good health				3.526***	3.501***
				(3.691)	(3.707)
Extended family coresidence (vs. never lived with an extended relative)					
Lived with an extended relative for <1/4 of childhood				0.705*	0.839
				(-1.822)	(-0.911)
Lived with an extended relative for >=1/4 of childhood				0.613**	0.820
				(-2.456)	(-0.972)
No. of extended relatives living in R's neighborhood by quartile (vs. below 25th percentile)					
25th-50th percentile				1.025	1.172
				(0.074)	(0.456)
50th-75th percentile				0.689*	0.715
				(-1.848)	(-1.614)
75th-99th percentile				1.071	1.067
				(0.329)	(0.300)
Frequency of contact with extended relatives (vs. less than once a month)					
One to three times a month				1.458*	1.425
				(1.721)	(1.590)
Greater than or equal to once a week				1.387**	1.280
				(2.006)	(1.503)
PCG satisfaction with practical support received from extended family members				0.954	0.970
				(-0.707)	(-0.444)
PCG satisfaction with practical support received from extended family members				1.088	1.048
				(1.286)	(0.680)
Wald Test *p*-value		0.003***	0.002***	0.002***	0.001***
Constant	50.663***	51.588***	8.333***	31.266***	6.847**
	(7.009)	(7.187)	(2.886)	(5.140)	(2.380)
Observations	2,589	2,589	2,589	2,589	2,589

t-statistics in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Notes: "Other" race category omitted. Analyses use sample weights to account for the complex multistage clustered design of the PSID. The Wald test provides evidence for whether the family structure-race/ethnicity interactions are jointly significant. No.=Number. OR=Odds ratios.

Table 2.3. Odds ratios from logistic regression models predicting college enrollment, Panel Study of Income Dynamics, Child Development Supplement (CDS), and Transition into Adulthood Supplement (TAS) 1985-2015

	Model 1	Model 2	Model 3	Model 4	Model 5
	OR	OR	OR	OR	OR
Proportion of childhood with single mother	0.429***	0.348***	0.915	0.450**	1.007
	(-3.302)	(-2.853)	(-0.213)	(-2.048)	(0.016)
Single mother X Black		1.663	0.928	1.631	0.906
		(0.974)	(-0.131)	(0.921)	(-0.173)
Single mother X Hispanic		0.510	0.264	0.470	0.239
		(-0.803)	(-1.416)	(-0.845)	(-1.498)
Proportion of childhood with mother and non-biological partner	0.228***	0.208***	0.435*	0.241***	0.445*
	(-4.497)	(-3.845)	(-1.762)	(-3.492)	(-1.727)
Mother and non-biological partner X Black		1.811	1.044	2.489	1.215
		(0.680)	(0.043)	(1.061)	(0.198)
Mother and non-biological partner X Hispanic		6.623*	3.404	7.594*	3.812
		(1.800)	(1.028)	(1.806)	(1.084)
Race/ethnicity (vs. White)					
Black	0.740	0.552*	0.975	0.638	1.052
	(-1.363)	(-1.841)	(-0.073)	(-1.389)	(0.146)
Hispanic	1.009	0.991	1.966*	1.180	2.160*
	(0.035)	(-0.028)	(1.739)	(0.487)	(1.924)
Female	1.737***	1.739***	1.841***	1.803***	1.867***
	(3.884)	(3.878)	(4.077)	(3.985)	(4.056)
Child's age	1.020	1.023	1.022	1.025	1.019
	(0.989)	(1.127)	(0.941)	(1.224)	(0.844)
Proportion of childhood spent living in the South	0.834	0.862	0.902	0.861	0.889
	(-1.090)	(-0.893)	(-0.597)	(-0.903)	(-0.683)
No. of children	0.782***	0.777***	0.888	0.778***	0.882
	(-3.207)	(-3.331)	(-1.363)	(-3.292)	(-1.447)
Parents' education (vs. BA or higher)					
Less than high school			0.270***		0.280***
			(-3.903)		(-3.823)
High school			0.214***		0.223***
			(-6.413)		(-6.221)
Some college			0.373***		0.374***
			(-3.948)		(-3.952)
Family wealth without home equity			1.046***		1.047***
			(2.965)		(3.056)
Proportion of childhood mom is employed			1.087		1.050
			(0.303)		(0.176)
Neighborhood quality (vs. excellent/very good)					
Good			0.890		0.888
			(-0.605)		(-0.613)
Poor			0.837		0.826
			(-0.731)		(-0.781)
>50% of neighbors own their home[abc]			1.323		1.364
			(1.322)		(1.456)
Neighorhood is completely or fairly safe			1.381		1.405
			(1.411)		(1.477)
Mother's age at child's birth					

20-29				1.820**	1.780**
				(2.463)	(2.325)
30 and above				1.870**	1.756**
				(2.230)	(1.988)
Proportion of childhood mom is in good health				1.410	1.407
				(0.898)	(0.897)
Extended family coresidence (vs. never lived with an extended relative)					
Lived with an extended relative for <1/4 of childhood				0.572***	0.738
				(-2.891)	(-1.545)
Lived with an extended relative for >=1/4 of childhood				0.581**	0.834
				(-2.550)	(-0.798)
No. of extended relatives living in R's neighborhood by quartile (vs. below 25th percentile)					
25th-50th percentile				0.963	1.254
				(-0.102)	(0.570)
50th-75th percentile				0.767	0.846
				(-1.140)	(-0.705)
75th-99th percentile				1.155	1.253
				(0.690)	(1.056)
Frequency of contact with extended relatives (vs. less than once a month)					
One to three times a month				1.227	1.135
				(0.851)	(0.513)
Greater than or equal to once a week				1.134	1.015
				(0.736)	(0.083)
PCG satisfaction with practical support received from extended family members				0.928	0.940
				(-1.108)	(-0.844)
PCG satisfaction with practical support received from extended family members				1.085	1.026
				(1.211)	(0.344)
Wald Test *p*-value		0.209	0.501	0.191	0.451
Constant	5.891***	5.820***	1.540	4.951**	1.921
	(3.226)	(3.287)	(0.546)	(2.473)	(0.747)
Observations	2,436	2,436	2,436	2,436	2,436

t-statistics in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Notes: "Other" race category omitted. Analyses use sample weights to account for the complex multistage clustered design of the PSID. The Wald test provides evidence for whether the family structure-race/ethnicity interactions are jointly significant. No.=Number. OR=Odds ratios.

Table 2.4. Average partial effects of socioeconomic stress and extended family embeddedness on children's educational attainment, Panel Study of Income Dynamics (PSID), Child Development Supplement, and Transition into Adulthood Supplement, 1985-2015

	Socioeconomic stress		Extended family embeddedness	
Family structure	Mother and non-biological partner	Single mother	Mother and non-biological partner	Single mother
On-time high school completion				
Reduced model	-0.176***	-0.221***	-0.177***	-0.220***
	(0.024)	(0.039)	(0.025)	(0.039)
Full model	-0.102***	-0.173***	-0.151***	-0.192***
	(0.027)	(0.040)	(0.026)	(0.041)
Percentage change	42.0%	21.7%	14.7%	12.7%
Observations	2,589	2,589	2,589	2,589
	Socioeconomic stress		Extended family embeddedness	
Family structure	Mother and non-biological partner	Single mother	Mother and non-biological partner	Single mother
College enrollment				
Reduced model	-0.155***	-0.169***	-0.157***	-0.170***
	(0.025)	(0.039)	(0.026)	(0.040)
Full model	-0.082***	-0.109***	-0.128***	-0.148***
	(0.027)	(0.041)	(0.027)	(0.040)
Percentage change	48.4%	35.5%	18.5%	12.9%
Observations	2,436	2,436	2,436	2,436

Standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Notes: Table 2.4 describes the average partial effect of family structure on on-time high school completion and college enrollment in the reduced (baseline) and full models, estimated using the Karlson, Hohm and Breen (KHB) method for decomposing total effects (Kohler, Karlson and Holm 2011).

Fig 2.1. Predicted Probabilities of On-Time High School Completion by Proportion of Childhood Spent with a Single Mother—Differences by Race/Ethnicity
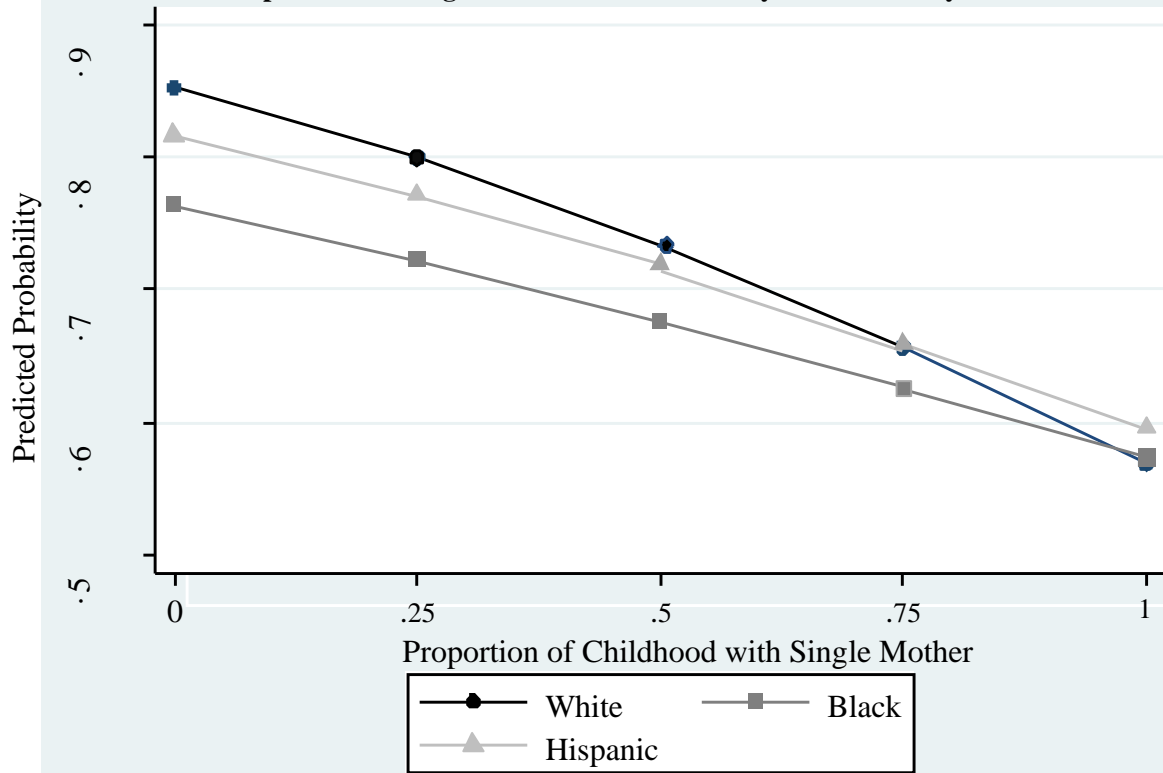
CHAPTER IV

Beyond the Binary: Intraracial Diversity in Family Organization and Black Adolescents' Educational Performance

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ABSTRACT

Scholars have long pointed to racial differences in family organization to explain socioeconomic disparities between Black and White Americans. Typically, black families are classified as disorganized or superorganized relative to white families. Recently, however, there has been growing recognition of the need for scholarship that transcends binary approaches to investigating family organization and its relationship to individual wellbeing. Using a nationally representative sample of black adolescents from the National Survey of American Life Adolescent supplement (NSAL-A), I examine intraracial diversity in two key dimensions of family organization—family structure and family integration—and their association with African American and Black Caribbean youths' educational performance, namely, grades, grade repetition, and number of suspensions. Results indicate that family organization has a more limited and inconsistent relationship with black adolescents' educational outcomes than implied by early scholarship. Family structure is related to youths' reported grades but is not associated with grade repetition and number of suspensions. Additionally, two aspects of family integration—emotional support and negative interaction—are associated with these three outcomes, though this association varies by ethnicity. Results affirm the need for scholarship that considers within-group heterogeneity in family organizational patterns and its impact on individual wellbeing.

Introduction

For over a century, the organization of black family life has been of central importance to academic debates related to social inequality, race/ethnicity, and individual wellbeing. Since as early as the late 19th century, social scientists have pointed to linkages between the two key dimensions of family organization—family structure and family integration—and the socioeconomic wellbeing of Black Americans (DuBois, 1899, 1909; Frazier 1932; 1939). On one side of the debate, researchers have argued that slavery resulted in the disorganization of black families, citing as evidence the higher rates of single parent families among blacks, relative to whites (Frazier, 1939; Moynihan, 1965; Patterson, 1998). Scholarship in this vein asserts that the deterioration of black family life has led to higher rates of poverty and unemployment, worse educational outcomes, and lower life chances for blacks compared to whites (Moynihan, 1965). On the opposite end of the debate, scholars have argued that proponents of the disorganization argument have it backwards: the socioeconomic disadvantages faced by Black Americans are not a consequence of higher rates of single parenthood, but rather the cause. They maintain that black families are, in fact, *superorganized*, emphasizing the higher levels of family integration and kin support among blacks relative to whites, which they assert, aids Black Americans in coping with their uniquely disadvantaged structural position (Allen, 1979; Billingsley, 1968; McAdoo, 1980; Stack, 1974; Sudarkasa, 1996)

Notably, some scholars have suggested that neither side of the disorganization versus superorganization debate fully captures racial distinctions in family organization, pointing to the substantial within-group heterogeneity in family organization that exists among blacks and whites (e.g., Jarrett & Burton, 1999; Sarkisian & Gerstel, 2004).

Consequently, they have called for scholarship that "transcends the binary approach to black families implicit in the disorganization versus superorganization debate" (Sarkisian & Gerstel, 2004:829). This call speaks to a key limitation of scholarship focused on black families' relative level of organization: it obscures within group diversity in family structures and dynamics, making it difficult to identify what aspects of family organization are positively or negatively related to outcomes for Black Americans, or altogether inconsequential. Among studies focused on the organization of black family life, however, responses to such a call are rare.

The current study uses a nationally representative survey of Black Americans to examine intraracial diversity in family organization and its association with black adolescents' educational performance, namely reported grades, grade repetition, and number of suspensions. I have chosen these three factors because they are important predictors of future life outcomes for black youth such as educational attainment, employment, and even incarceration (Leventhal, Graber, and Brooks-Gunn, 2001; Rocque and Paternoster, 2011; Shollenberger, 2015; Yang, Harmeyer, Chen, and Lofaso, 2018). This study extends prior work in several key ways. First, rather than focusing on cross-racial differences in levels of family organization, I explore intraracial heterogeneity in family structure and family integration. In doing so, I seek to identify aspects of family organization that enhance individual wellbeing within a group that is at an elevated risk of experiencing negative life outcomes, as well as what aspects of family organization that are unrelated or even detrimental to wellbeing. Relatedly, due to the predominance of race categorization in the U.S., previous research often overlooks ethnic differences in family organization. However, group differences in social origins,

histories, and cultures among black ethnic groups may lead to distinct patterns of family organization and outcomes for youth (Cross, Taylor, and Chatters, 2018a; Lincoln and Chae, 2012; Lincoln, Taylor, and Chatters, 2013; Thomas, 2012; Waters, 1997). Thus, in this study, I conduct all analyses separately for the two largest black ethnic groups in the U.S., African Americans and Black Caribbeans. Moreover, previous research primarily uses family structure as a proxy for family organization. While important, this work provides only partial insight into how the family is organized and tells us little about dynamic features of family relationships that may impact wellbeing (Burton and Jarrett, 2000; Yabiku, Axinn, and Thornton, 1994). Therefore, I explicitly focus on the multiple dimensions of family organization, specifically family structure, support, closeness, contact, and negative interactions to assess how each factor relates to educational performance. Given its focus, this research should be of interest to family sociology, with its concern for understanding the consequences of family structure and dynamics; the sociology of race and ethnicity, with its emphasis on expanding notions of blackness; the sociology of education, with its focus on identifying predictors of educational success; and the sociology of children and youth, with its attention to child and adolescent wellbeing.

Background and Theoretical Perspectives

The Organization of Black Family Life

While some ambiguity exists in the use of the term "family organization", scholarship in this area generally refers to two dimensions of family life: (1) family form, specifically, family structure, and (2) family function, namely family integration (Rose, Joe, Shields, and Caldwell, 2014; Sarkisian and Gerstel, 2004; Yabiku, Thornton, and

Axinn, 1991). Commonly used indicators of family structure are rates of marriage, divorce, cohabitation, single parenthood, and coresidence with extended relatives. Indicators of family integration typically involve some measure of kin support; some studies also include factors such as family closeness and contact. Researchers generally regard 'intact' nuclear families (i.e., households including both biological parents and only their shared children) and high family integration as signifiers of 'better' family organization (Sarkisian and Gerstel, 2004).

As early as the late 19th century, social theorists pointed to racial differences in family organization to explain persistent racial inequality in America. Early theorists such as W.E.B. DuBois (1899; 1909), E. Franklin Franzier (1932; 1939), and Gunnar Myrdal (1944) argued that a long history of slavery and racial discrimination led to the separation of black families and high rates of single parenthood and widowhood. In fact, in reflecting on the consequences of slavery for the black community, W.E.B. DuBois wrote: "The essential features of Negro slavery, were 1) No legal marriage; 2) No legal family life; 3) No legal control over children…This is what slavery meant, and no amount of kindliness in individual owners could save the system from its deadly work of disintegrating the ancient Negro home" (Du Bois, 1909:21,37). This line of thinking culminated with publication of *The Negro Family: The Case for National Action*, commonly referred to as the Moynihan Report (1965). This report concluded that a legacy of slavery and continued discrimination led to a rise in single parent families, welfare dependency, and a self-perpetuating "tangle of pathology" within the black community.

Since its publication, the Moynihan Report has garnered numerous critiques. Some scholars challenge the report's focus on negative aspects of black family life, and they emphasize the structural and/or cultural resiliency of black families, particularly strong extended kin ties among Black Americans (Allen 1979; Billingsley, 1968; Hays and Mindel, 1973; McAdoo 1980; Stack, 1974; Sudarkasa, 1996). These scholars maintain that due to the structural disadvantages that black families face, and/or enduring African cultural traditions that promote family connectedness, black families rely more on one another for support and have higher levels of integration than white families. Therefore, black families can be thought of as superorganized, as opposed to disorganized. It should be noted, however, that some researchers have questioned the ongoing viability of kin support networks among Black Americans, particularly the black underclass (Garrett-Peters & Burton, 2016; McDonald and Armstrong, 2001; Roschelle, 1997; Wilson, 1987). The idea here is that while support from extended kin can serve as a safety net, it also implies reciprocity, and the contemporary economic condition of poor blacks has deteriorated to such an extent that they are less likely to engage in exchanges of support with family members, because there are fewer resources to share.

Recently, scholars have challenged some of the key assumptions implicit in the organization versus disorganization debate. Importantly, they point out that this binary approach to classifying black family life as disorganized or superorganized assumes a uniformity in family organization among Black Americans (Sarkisian and Gerstel, 2004). Given recent findings documenting considerable within group variation in exchanges of family support, a key aspect of family organization, (Cross, Taylor and Chatters, 2018b; Lincoln, Taylor, and Chatters; 2013; Taylor, Chatters, Woodward, and Brown, 2013),

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there is reason to believe that this assumption is inaccurate. However, even if this assumption were true, a focus on the relative organization of black families as compared to white families does not aid us in identifying what aspects of family organization have significant implications for individual wellbeing. Thus, in my estimation, rather than asking whether black families have a distinct pattern of organization that contributes to their relative deprivation, a more productive question would be "What aspects of family organization enhance the wellbeing of Black Americans, and what aspects are inconsequential or even detrimental to their life chances?". This question is the focus of the current study, which I describe in further detail below.

Family Organization and Educational Performance

Family structure. As I previously mentioned, family organization involves both family structure and family integration. Numerous studies have documented an association between the former aspect of family organization and youths' educational performance. In general, children who are raised by both biological parents fare better academically than those raised in any other family structure (i.e., single parent, cohabiting, and divorced families) (Brown, 2010; Ginther and Pollak, 2004; McLanahan and Percheski, 2008; McLanahan and Sandefur, 1994). Researchers posit that economic resources, parental socialization, and family stability largely account for the positive relationship between the two-parent biological family structure and children's educational outcomes (Brown, 2010; Fomby and Cherlin, 2007; McLanahan and Sandefur, 1994; Wu, 1996). Youth raised in this context typically benefit from access to greater economic resources, a clearer and stronger parental authority structure, and a more stable home environment. Combined, these factors provide children with the

material resources, monitoring and supervision, and emotional security necessary to flourish academically.

It is important to note that a growing body of research finds that the negative consequences of living outside a two-parent biological family are stronger for white youth than black youth (Amato and Keith, 1991; Amato, 2001; McClanahan and Percheski, 2008). If this is the case, then the magnitude of the association between family structure and black adolescents' educational performance in this study may be small or nonexistent. Interestingly, early theorists presume that single parenthood is associated with many of the structural disadvantages faced by the black community. If this is the case, then one would anticipate a strong, negative relationship between being raised in a single parent family and youths' educational performance. To adjudicate between these two disparate perspectives, I use 'single parent' family as my reference category in my analyses and compare all other family structures to this one.

Family integration. While the relationship between family structure and youths' educational performance is well-documented, few studies investigate the association between family integration and educational outcomes, and to the best of my knowledge, this study is the first to examine these two components of family organization side-by-side. Nevertheless, theory on social integration provides compelling reasons to expect family integration to be related to adolescents' educational performance. Social integration theory, developed by Emile Durkheim (1897 [1951), asserts that individuals are social beings whose outcomes are unequivocally shaped by the nature of their social relationships. In the context of his study, Durkheim finds that weaker attachments (i.e., less integration) to social institutions such as family, religious, and political groups

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resulted in higher rates of suicide within a society. Conversely, individuals who were more integrated into social institutions were less likely to commit suicide. His reasoning for this is that social integration, developed through positive and routine exchanges and interactions among group members, provides a guide for appropriate human behavior and promotes a sense of belonging and a supportive environment for individuals, resulting in positive wellbeing. Given that the family is widely regarded as youths' primary institution of socialization, it is reasonable to expect that a higher degree of integration into family life would result in more positive outcomes for youth. Indeed, recent work indicates that black adolescents who report higher levels of family, religious, and school involvement experience better mental health outcomes (Rose, Joe, Shields, and Caldwell, 2014).

Furthermore, in the family solidarity framework developed by Bengtson and colleagues (1991, 1995, 2002), negative aspects of family integration are considered. This framework acknowledges that family integration exists on a continuum. Conflict, they maintain, is an inevitable feature of family relationships that impacts individuals' degree of integration into family life, and subsequently their wellbeing. Increased conflict can decrease family members' sense of belonging and willingness to be involved with and support one another, which can be adversely related to educational performance. While important, few studies focused on family organization consider how conflict among family members potentially impacts adolescent wellbeing. Taking advantage of unique questions related to family conflict available in the NSAL-A, I consider how negative interactions with family members relate to adolescents' educational performance, which represents an improvement upon prior work in this area.

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Empirical predictions. Extant theories and findings indicate that in general, children who are raised by both biological parents will perform better in school than those raised by a single parent. However, given the superogranization perspective's emphasis on high levels of family involvement and support among Black Americans, as well as recent findings documenting a weaker association between being raised in a single-parent family and outcomes for black youth (e.g., Amato, 2001), it is possible that family structure is less predictive of grades, grade repetition, and number of suspensions for black adolescents than the general population. I arbitrate these two perspectives in my analysis. If family structure operates similarly for black youth as the broader population, I expect black adolescents living in a two-parent family to perform better than those raised in a single parent family. If family structure is less predictive of black youth's educational performance, then I anticipate that differences between youth raised in two-parent versus single parent families will be small or not statistically significant. Concordant with previous research, I do not expect to observe significant differences in outcomes between youth raised by a single parent and those raised by a parent and their partner who is not biologically related to the adolescent. Additionally, I expect black youth who feel closer to, are more frequently in contact with, are more supported by, and report fewer negative interactions with their family (i.e., have higher levels of family integration), will perform better academically.

The Current Study

This study uses nationally representative data from the National Survey of American Life Adolescent supplement (NSAL-A) to examine the relationship between family organization and black adolescents' educational performance. Specifically, I

assess how family structure, support, closeness, contact, and negative interactions relate to youths' reported grades, grade repetition, and number of suspensions. Notably, the NSAL-A and its parent study, the National Survey of American Life (NSAL), include the first national probability sample of Black Caribbeans, which represent the largest black ethnic immigrant group in the U.S. (Jackson, et al., 2004). Because prior work has found significant differences in family organization patterns between African Americans and Black Caribbeans (e.g., Lincoln, Taylor, and Chatters; 2013; Thomas, 2012; Waters, 1999), I run my analyses separately for these two groups and test whether ethnic differences exist in the association between family organization and adolescents' educational performance.

Data and Methods

Data

The data for my analyses are drawn from the National Survey American Life Adolescent sample (NSAL-A). The NSAL-A is a supplemental sample of 1,170 adolescents who were attached to adult households from the National Survey of American Life (NSAL) parent study. The NSAL parent study is a nationally representative household survey of approximately 6,000 African American, non-Hispanic White, and Black Caribbean adults. It was collected (February 2001 to June 2003) by the Program for Research on Black Americans at the University of Michigan's Institute for Social Research, as part of the National Institute of Mental Health Collaborative Psychiatric Epidemiology Surveys initiative (Colpe, Merikangas, Cuthbert, & Bourdon, 2004). The NSAL provides extensive data on mental disorders, stressors, and risk

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resilient factors for Black Americans (see Jackson et al., 2004, for more detailed information about the NSAL).

To generate the NSAL-A sample, every African American and Black Caribbean household that included an adult participant was screened for an eligible adolescent living in the household, and adolescents were selected using a random selection procedure. In instances where more than one adolescent in the household was eligible for participation, up to two adolescents were selected for the study, and when possible, the second adolescent was of a different gender (Seaton et al. 2008). The data include detailed information about youths' household income, educational background, family structure, and family interactions. My analytic sample includes adolescents who provided complete information on all study variables; this includes 97% of the original adolescent sample (n=1,132). The NSAL-A weight was designed to adjust for non-independence in probabilities of selection within households and non-response rates across households and adolescents. Weighted data were post-stratified to approximate the national population distributions for gender (males and females) and age (13, 14, 15, 16, and 17) sub- groups among African American and Black Caribbean youth. The weighting process allows me to make accurate inferences about the national population of African American and Black Caribbean adolescents.

Measures

Outcome variables. Three outcome variables are used as indicators of youths' educational performance: self-reported grades, grade repetition, and number of suspensions. For self-reported grades, adolescents were asked whether they earned mostly As, Bs, Cs, Ds, or Fs in school. Although actual grade information from

participants' academic transcripts was not collected, prior work has shown strong

correlations (Pearson's r= .76 to .97) between self-reported and actual grades (Cassady,

2001; Hishinma, 2001; Thomas, Caldwell, Faison, and Jackson, 2009). This suggests that

students tend to be fairly accurate and unbiased in their reports of grades earned. Self-

reported grades were coded categorically: 1=F/D, 2=C, 3=B, 4=A. Grade repetition is a

binary variable indicating whether respondents ever repeated a grade (no=0, yes=1).

Number of suspensions is a continuous variable based on the number of times

participants reported being suspended from school.

Independent variable. Family structure and integration are the key independent

variables used to capture the concept of family organization. Family structure is

constructed based on adolescents' reports of the two adults most responsible for their

upbringing. Specifically, respondents were asked "What woman (and man) mostly raised

you?" Responses were open-ended, in recognition of the diverse family configurations

within which black youth are raised. Open-ended responses were coded into the

following categories to account for female caregivers: (1) mother, (2) stepmother, (3)

grandmother, (4) aunt, (5) someone else, and (6) no woman. Similar categories were

constructed for male caregivers: (1) father, (2) stepfather, (3) grandfather, (4) uncle, (5)

someone else, and (6) no man. These two sets of categories were combined to capture the

five types of family structures of youths in the sample: (1) single parent (reference); (2)

both biological parents, (3) biological parent and parent's non-biological partner, (4)

single parent and extended relative, and (5) extended relative(s) and/or nonrelative(s)

only. While these reports of childhood family structure rely on retrospective data, studies

that directly test for recall bias indicate that there is a strong degree of similarity between

information about childhood that is collected retrospectively and information that is collected prospectively (Jivraj, Goodman, Ploubidis, and de Oliveira, 2017). Factors that are known to affect individuals' ability to accurately recall childhood circumstances are length of time since an event occurred, the frequency with which an event occurred, and a person's cognitive ability when asked to recall (Brown, 2013; Havari and Mazzonna, 2015; Schroder and Borsch-supan, 2008). Given the age of respondents and nature of the event (childrearing), one would not anticipate significant levels of recall bias.

Family integration is measured based on three commonly used measures: family support, subjective family closeness, and family contact, as well as a salient aspect of family integration that is often overlooked in previous research, negative interaction. Family support involves the frequency of emotional and instrumental support that adolescents receive from their family members. Emotional support was assessed with a three item index in which respondents were asked how often their family members (both nuclear and extended) (1) "Make you feel loved and cared for?", (2) "Listen to you talk about your private problems and concerns?", and (3) "Express interest and concern in your wellbeing?" Each question used the same response format: (4), fairly often (3), not too often (2), or never (1). Values for the three questions were summed, resulting in a range of 3 to 12. Higher values represent more frequent emotional support received from family members. Instrumental support refers to the tangible assistance that family members provide to each other. In this study, it is measured based on the frequency of financial and transportation help that adolescents receive from their relatives. Respondents were asked how often their family members provided them with transportation and how often their family members help them financially. Response

formats for these two questions used a 4-point Likert scale with a response range of never = 1 to very often = 4. Values for these two questions were combined and summed to produce a range of 2 to 8. Higher values indicate receiving instrumental support from family more frequently.

Subjective family closeness was assessed by the question: How close do you feel towards your family members? Would you say very close (4), fairly close (3), not too close (2) or not close at all (1)?". Family contact was measured by the question: "How often do you see, write, or talk on the telephone with family or relatives who do not live with you? Would you say nearly every day (7), at least once a week (6), a few times a month (5), at least once a month (4), a few times a year (3), hardly ever (2) or never (1)?" Higher scores represented stronger feelings of family closeness and higher frequency of family contact, respectively. Negative interaction is measured based on a three-item index that asks participants how often their nuclear and extended family members (1) "Make too many demands on you?", 2 "Criticize you and the things you do?", 3 "Try to take advantage of you?". The response format for this question ranges from never=1 to very often=4. Higher values indicate higher frequencies of negative interaction.

Ethnicity. This study conducts analyses separately for African Americans and Black Caribbeans. Sample members were identified as Black Caribbean if they racially identified as black, and a) reported that they were of West Indian or Caribbean descent, b) said they were from a country included on a list of Caribbean area countries presented by the interviewers, or c) indicated that their parents or grandparents were born in a Caribbean area country. African Americans were defined as persons who self- identified

as black, resided in the U.S., but did not identify ancestral ties to the Caribbean (Seaton et al. 2008).

Controls. I include several controls in this analysis, some of which pertain to individual characteristics of adolescents that may impact their educational performance (i.e., gender and age). Other controls relate to characteristics of the adolescents' households that may influence how the family is organized (i.e., region, income, and number of children in the household). Gender is measured as female (reference) or male and age is coded in years. Region is classified into four categories: Northeast (reference), North Central, South, and West (given the small percentage of Black Caribbeans living in the West region of the U.S. [Logan, 2007; Thomas, 2012], this category is omitted for this group in my multivariate analyses). Income is coded into five categories: (1) at or below the poverty threshold (reference); (2) 101–200% of the poverty threshold; (3) 201–300%; (4) 301–400%; and (5) greater than 400% of the poverty threshold. These categories are constructed by dividing the reported household income by the poverty threshold for the year that the adolescent was interviewed. Number of children is a continuous measure that takes into account the number of individuals living in the adolescents' household that are under the age of 18. This variable does not include the adolescent her or himself; it was top-coded at four by the data collectors.

Analysis Strategy

I perform three types of analysis to assess the relationship between various aspects of family organization and children's educational performance. Consistent with prior research (e.g., Thomas, Faison, Caldwell, and Jackson, 2009), I treat reported grades as an ordinal variable, and I use ordered logistic regression to examine the

association between family organization and adolescents' grades. I rely on logistic regression to predict the likelihood of having repeated a grade in school. In my analysis of number of suspensions, the outcome is a count variable, and it is skewed toward 0 and has overdispersion (the variance of the variable is greater than its mean). Therefore, I use negative binomial regression. To assess whether indicators of family organization were differentially associated with educational performance by ethnicity, I ran all models separately for African American and Black Caribbean adolescents and then conducted Chow tests on the fully interacted model that compared the two groups. Significant differences by ethnicity in the factors that predict reported grades, grade repetition, and number of suspensions are indicated with footnotes. All analyses used sampling weights to account for the complex design of the NSAL-A sample, non-independence in selection probabilities within households, as well as non-response rates across households and adolescents, to produce nationally representative population estimates and standard errors that are generalizable to the African American and Black Caribbean adolescent population.

Results

Descriptive Statistics

Table 1 shows the distribution of the sample characteristics by ethnicity. Statistically significant differences between African Americans and Black Caribbeans are indicated with footnotes. For both African American and Black Caribbean respondents, the samples are nearly evenly split by gender, with females comprising 50% and 55% of African American and Black Caribbean participants, respectively. The average age in both groups is 15 years. Consistent with prior work (e.g., Thomas, 2012), African

American and Black Caribbean adolescents differ considerably in their geographic

dispersion. Among African Americans, 13% reside in the Northeast, 16% in the North

Central region, 62% in the South, and 9% in the West. Most Black Carbbean adoescents

live in the Northeast (63%), 4% live in the North Central region, and 33% reside in the

South. With respect to household income, both groups have poverty levels well above the

national average (Proctor and Dalaker, 2003), though Black Caribbeans are nearly twice

as likely as African Americans to have incomes 301-400% above the poverty threshold.

Among both African American and Black Caribbeans, the average number of additional

children in the household is 1 (because this variable was top-coded at four, this may be a

downwardly biased estimate).

Turning to family structure, we observe that being raised by both biological

parents was the most common family structure for African American and Black

Caribbean adolescents, with 49% and 57% of youth, respectively reporting being raised

in this context. Among African Americans, the second most common arrangement is a

single parent family (17%); for Black Caribbeans, it is a biological parent and his or her

non-biological partner (19%). The most striking difference in family structure between

African American and Black Caribbean youth is the percentage reporting being mostly

raised by extended and/or nonrelatives. Nearly 10% of African American youth are raised

in this context, compared to 3% of Black Caribbean youth. Altogether, we observe

notable differences in this key dimension of family organization.

In terms of family integration, African American and Black Caribbean

adolescents report similar levels of subjective family closeness, family contact, negative

interaction, and receipt of emotional and instrumental support. For example, the average

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scores for family contact and emotional support are 5 (out of 7) and 10 (out of 12) for both groups, respectively, which would be considered high levels of family contact and emotional support. This is consistent with prior work noting high degrees of family involvement and support among black adolescents (e.g., Cross, Taylor, and Chatters, 2018b).

Turning to the three outcome variables, we observe significant ethnic differences in educational performance. In terms of grades, African American adolescents are significantly less likely to report earning B's and more likely to report earning C's than Black Caribbean adolescents. African Americans also have higher rates of grade repetition, 29%, and report being suspended more frequently, two times, than Black Caribbeans, 22% and one time, respectively. This is concordant with work showing that voluntary black immigrants (e.g., Black Caribbeans) typically perform better academically in high school than involuntary black immigrants (i.e., African Americans) (Giraldo-Garcia and Bagaka, 2017; Pinder, Prime, and Wilson, 2014).

Multivariate Results
    Reported grades. Table 2 displays proportional odds ratios from ordered logistic regressions predicting grades for African American and Black Caribbean adolescents. Log likelihood tests were conducted on unweighted analyses to test the proportional odds assumption; tests indicate that this assumption is not violated. For both groups, family structure and family integration are related to youths' grades, though there are a few key differences in the association between these two aspects of family organization and the outcome variable. African American and Black Caribbean youth who were raised by both biological parents were more likely to earn higher grades than those raised by a

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single parent. Among Black Caribbean youth, those raised by a biological parent and a non-biological partner or a biological parent and an extended relative were also more likely to earn higher grades. This pattern of association does not hold for African American youth (though being raised by a biological parent and an extended relative is marginally significant for this group). Among indicators of family integration, only emotional support is related to this outcome, and only for Black Caribbean adolescents. For each one-point increase in their emotional support score, these youth are 1.36 times more likely to earn higher grades.

Grade repetition. Table 3 shows odds ratios from logistic regression analysis estimating the likelihood of grade repetition. After individual (i.e., gender and age) and household (i.e., region and income) characteristics are taken into account, we observe little association between family organization and grade repetition. Relative to youth raised by a single parent, African American and Black Caribbean youth raised in any other context were no more or less likely to repeat a grade. In considering family integration, negative interaction is related to grade repetition, but only for African American adolescents. Each one-point increase in their negative family interaction score was associated with a 12% increase in their likelihood of repeating a grade.

Number of suspensions. Table 4 presents incidence rate ratios from negative binomial regressions estimating number of suspensions. Similar to results for grade repetition, key indicators of family organization are largely unrelated to this outcome. I observe no statistically significant differences in the rate of suspension among youth raised in single parent families compared to those raised in other family configuration. Again, negative family interactions are related to number of suspensions for African

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American youth (but not Black Caribbean youth): a one-point increase in their negative family interaction score is expected to increase their suspension rate by a factor of 1.12.

Discussion

This study investigated how key dimensions of family organization, specifically, family structure and family integration, are associated with African American and Black Caribbean adolescents' educational performance. It builds on prior research on black family organization in several key ways. First, unlike work that largely focuses on cross-racial differences, I focus on within-group heterogeneity in family organization. Additionally, given that black ethnic groups may have distinct patterns of family structure and integration, which may lead to differential outcomes for youth, I compare differences in family organization and its relation to educational performance between the two largest black ethnic groups, African Americans and Black Caribbeans. Finally, previous studies typically use family structure as a proxy for family organization, without reference to qualitative aspects of family relationships that may also matter for adolescent wellbeing. I consider these factors, namely, family closeness, contact, support, and negative interaction to assess how each factor is related to black youths' grades, grade repetition, and number of suspensions.

Bearing in mind longstanding debates emphasizing the importance of family structure for the wellbeing of Black Americans, alongside recent studies finding weaker associations between family structure and outcomes for black youth (e.g., Amato, 2001), I was interested in adjudicating between these two perspectives. Findings suggest a more limited association between family structure and youths' educational performance than implied by early literature (e.g., Frazier, 1939). We observe that family structure is related to reported grades, with African American and Black Caribbean adolescents who

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are raised by both biological parents earning higher grades than those raised by a single parent. However, it is not associated with grade repetition or number of suspensions. These findings do not preclude the possibility that the association between family structure and wellbeing has decreased for Black Americans over time, but they do show that family structure is an inconsistent predictor of wellbeing for contemporary black youth. Given that current social welfare policies emphasize the importance of the two-parent biological family for child outcomes, particularly among disadvantaged groups (Brown, 2010; House of Representatives, 1996), these findings suggest that perhaps a shift in focus is required. Rather than directing resources towards promoting the two-parent biological family, greater attention should be paid to other aspects of youths' social environment that may facilitate positive outcomes.

In terms of indicators of family integration, I find that emotional support from family is positively related to grades for Black Caribbean youth and that negative interactions with family members increase the likelihood of grade repetition and number of suspensions for African American youth. Given that African American and Black Caribbean adolescents reported receiving similar levels of emotional support and experiencing negative interactions with similar frequency, these findings indicate that the consequences of support may differ by ethnicity. They also highlight the need for more scholarship focused on understanding ethnic differences in family organization among Black Americans. Further, although not all aspects of family organization appear to influence youths' educational performance, significant findings for emotional support and negative interaction demonstrate the need for greater work that considers not only the

role of family structure in adolescent wellbeing, but also dynamic features of family relationships that may also be consequential for youth outcomes.

This study is not without its limitations. First, given the cross-sectional nature of the study design, the author is unable to make causal claims. Second, this study relies on self-reports of grades and retrospective accounts of family structure. While recent work suggests that self-reported grades and family structure are fairly reliable measures (Cassady, 2001; Jivraj, Goodman, Ploubidis, and de Oliveira, 2017), they likely include some level of social desirability and/or recall bias. Third, while this study makes an important step towards documenting ethnic differences in family organization among black ethnic groups, due to sample size, it is unable to consider differences in country of origin and generational status among Black Caribbeans, which may lead to further distinctions in family organizational patterns and outcomes.

Notwithstanding, this study advances extant literature on the organization of black family life by identifying aspects of family organization that enhance, challenge, or are unrelated to the educational performance of black adolescents. Additionally, this study takes a novel approach to identifying ethnic differences in predictors educational outcomes. Given prevailing academic debates and welfare reform's focus on the role of family organization in explaining the wellbeing of Black Americans, this work has important implications for research and policy.

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Table 3.1. Sample characteristics and dependent variables by ethnicity, National Survey of American Life Adolescent Supplement (NSAL-A)

Variables	African Americans M or Percent	Black Caribbeans M or Percent
Female	49.55	54.47
Age (mean, range 13-17)[a]	14.95	15.20
(SD)	(1.22)	(2.74)
Region		
Northeast[a]	13.37	62.84
North Central[a]	15.59	3.80
South[a]	62.00	33.36
West[a]	9.04	(-)
Census poverty index		
At or below 100% of poverty threshold	29.97	27.91
101-200% of poverty threshold	30.47	28.35
201-300% of poverty threshold	18.51	13.29
301-400% of poverty threshold[a]	10.45	20.92
Above 400% of poverty threshold	10.61	9.55
No. of children in household (mean, range 0-4)	0.89	0.80
(SD)	(0.94)	(2.18)
Childhood family structure		
Single parent	16.87	14.27
Both biological parents	49.02	57.01
Biological parent and non-biological partner	15.75	19.01
Biological parent and extended relative	8.83	6.85
Extended relative(s) or nonrelative(s)[a]	9.52	2.86
Subjective family closeness (mean, range 1-4)	3.62	3.57
(SD)	(0.55)	(1.33)
Family contact (mean, range 1-7)	5.44	5.29
(SD)	(1.52)	(3.67)
Emotional support (mean, range 3-12)	10.19	10.08
(SD)	(1.58)	(3.50)
Instrumental support (mean, range 2-8)	6.94	6.83
(SD)	(1.21)	(2.74)
Negative interaction (mean, range 3-12)	6.01	6.56
(SD)	(1.90)	(5.21)
Self-reported grades		
A	15.36	16.52
B[a]	36.83	56.79
C[a]	43.12	21.43
D/F	4.68	5.26
Grade repetition[a]	29.39	21.68
Number of suspensions (mean, range 0-11)[a]	2.10	1.39
(SD)	(2.68)	(5.26)
No. of observations	791	341

Table 3.2. Proportional odds ratios from ordered logistic regression analysis predicting grades for African American and Black Caribbean adolescents

Variables	African American adolescents		Black Caribbean adolescents	
Female[a]	2.559***	(5.974)	5.902***	(6.222)
Age	1.043	(0.724)	0.911	(-1.511)
Region (vs. Northeast)				
North Central	1.230	(0.503)	0.343	(-0.558)
South	1.022	(0.061)	1.267	(0.317)
West	1.330	(0.642)	(-)	(-)
Census poverty index (vs. at or below 100% of poverty threshold)				
101-200% of poverty threshold[a]	1.185	(0.924)	0.422*	(-2.415)
201-300% of poverty threshold	1.119	(0.458)	0.564	(-0.714)
301-400% of poverty threshold	1.183	(0.583)	1.144	(0.221)
Above 400% of poverty threshold	2.300**	(3.309)	0.744	(-0.380)
No. of children in household	0.987	(-0.168)	0.901	(-0.360)
Childhood family structure (vs.single parent)				
Both biological parents	1.677*	(2.172)	2.938**	(3.240)
Biological parent and non-biological partner	1.275	(0.762)	2.293*	(2.770)
Biological parent and extended relative	1.852+	(1.787)	4.046*	(2.586)
Extended relative(s) or nonrelative(s)	0.971	(-0.072)	0.400+	(-1.800)
Subjective family closeness	0.984	(-0.104)	1.765+	(1.862)
Family contact	0.978	(-0.387)	0.992	(-0.114)
Emotional support[a]	1.039	(0.746)	1.355*	(2.762)
Instrumental support	0.993	(-0.145)	1.104	(0.909)
Negative interaction	1.026	(0.783)	0.995	(-0.055)
Cut point 1	0.310	(-0.861)	6.307	(0.787)
Cut point 2	5.122	(1.258)	75.655+	(1.870)
Cut point 3	45.704**	(2.908)	2,834.795**	(3.306)
Observations	789		337	

t-statistics in parentheses

*** p<0.001, ** p<0.01, * p<0.05, + p<0.10

Notes: Analysis uses sample weights to account for the complex design of the NSAL-A sample. [a]African American-Black Caribbean difference is significant at p<.05. (-)=not applicable due to small cell size.

Table 3.3. Odds ratios from logistic regression analysis predicting grade repetition for African American and Black Caribbean adolescents

Variables	African American adolescents		Black Caribbean adolescents	
Female	0.404***	(-5.420)	0.530	(-1.325)
Age$_a$	1.103+	(1.782)	1.631*	(2.866)
Region (vs. Northeast)				
North Central	0.424	(-1.346)		
South	1.055	(0.091)	0.732	(-0.493)
West	0.687	(-0.511)	(-)	(-)
Census poverty index (vs. at or below 100% of poverty threshold)				
101-200% of poverty threshold	0.909	(-0.435)	0.439	(-0.818)
201-300% of poverty threshold	0.357**	(-3.414)	0.101	(-1.635)
301-400% of poverty threshold	0.445**	(-2.768)	0.708	(-0.368)
Above 400% of poverty threshold	0.323*	(-2.363)	0.145*	(-2.262)
No. of children in household	0.927	(-1.124)	0.737	(-0.806)
Childhood family structure (vs.single parent)				
Both biological parents	0.762	(-0.972)	0.415	(-1.711)
Biological parent and non-biological partner	0.878	(-0.502)	1.135	(0.236)
Biological parent and extended relative	0.698	(-0.860)	0.089	(-1.381)
Extended relative(s) or nonrelative(s)	1.506	(1.184)	3.438+	(1.923)
Subjective family closeness	1.336	(1.635)	1.316	(0.602)
Family contact	1.049	(1.066)	1.099	(0.920)
Emotional support	0.987	(-0.235)	0.860	(-1.064)
Instrumental support	1.025	(0.414)	0.717+	(-1.773)
Negative interaction	1.124*	(2.519)	1.114	(1.366)
Constant	0.037**	(-2.899)	0.004+	(-1.886)
Observations	791		341	

t-statistics in parentheses
*** $p<0.001$, ** $p<0.01$, * $p<0.05$, +
$p<0.10$

Notes: Analysis uses sample weights to account for the complex design of the NSAL-A sample. $_a$African American-Black Caribbean difference is signifcant at $p<.05$. (-)=not applicable due to small cell size.

Table 3.4. Incidence rate ratios from negative binomial regression analysis predicting number of suspensions for African American and Black Caribbean adolescents

Variables	African American adolescents		Black Caribbean adolescents	
Female	0.378***	(-8.411)	0.383***	(-5.625)
Age	1.086*	(2.669)	0.979	(-0.425)
Region (vs. Northeast)				
North Central_a	1.043	(0.264)	4.873**	(3.702)
South_a	0.882	(-0.622)	1.461*	(2.914)
West	0.567*	(-2.123)	(-)	(-)
Census poverty index (vs. at or below 100% of poverty threshold)				
101-200% of poverty threshold	1.140	(0.739)	0.728	(-1.008)
201-300% of poverty threshold	0.879	(-0.562)	0.479+	(-1.810)
301-400% of poverty threshold_a	0.987	(-0.054)	0.417*	(-2.906)
Above 400% of poverty threshold_a	0.937	(-0.307)	0.458*	(-2.620)
No. of children in household	1.129*	(2.094)	0.917	(-0.566)
Childhood family structure (vs.single parent)				
Both biological parents_a	0.550***	(-5.253)	0.372***	(-6.443)
Biological parent and non-biological partner	0.788	(-1.370)	0.852	(-0.848)
Biological parent and extended relative	0.671*	(-2.518)	0.490	(-1.178)
Extended relative(s) or nonrelative(s)	0.764	(-1.450)	1.880	(1.152)
Subjective family closeness	1.012	(0.370)	0.967	(-0.657)
Family contact	0.956	(-0.626)	0.859	(-1.026)
Emotional support	0.958	(-1.402)	0.907*	(-2.631)
Instrumental support	0.972	(-0.872)	0.925	(-0.811)
Negative interaction	1.107***	(4.333)	1.110+	(1.868)
Constant	1.352	(0.465)	25.093*	(2.789)
Observations	791		341	

t-statistics in parentheses

*** p<0.001, ** p<0.01, * p<0.05, + p<0.10

Notes: Analysis uses sample weights to account for the complex design of the NSAL-A sample. _aAfrican American-Black Caribbean difference is significant at p<.05. (-)=not applicable due to small cell size.

CHAPTER V

Conclusion

This dissertation examined racial/ethnic and class differences in family structure and dynamics and their association with children's educational performance. Drawing on data from two national surveys, the Panel Study of Income Dynamics (PSID) and the National Survey of American Life Adolescent (NSAL), I employ a variety of quantitative methods to carry out my three research aims. Findings from my three empirical studies provide new insights into how race/ethnicity and social class shape patterns of family formation and their relationship to child outcomes. This chapter discusses key findings from these studies and considers directions for future research.

Summary of Findings

The first study (Chapter Two) investigated the prevalence and predictors of extended family households among children and explored differences by race/ethnicity and socioeconomic status. Overall, I found that more than one-third (35%) of children spent some time living with an extended relative before the age of 18, and that coresidence with an extended relative differs substantially by race/ethnicity and parents' education level. Nearly 60% of black children and 35% of Hispanic children lived in this arrangement, compared to 20% of white Children. Additionally, children whose parents did not finish high school were almost three times (47%) more likely to live in an extended family than those whose parents earned a Bachelor's degree ormore (17%). Notably, at every level of parental education, black and Hispanic children lived in extended family households than white children. These findings suggest that a narrow focus on

the nuclear family overlooks the diverse ways in which minority and/or low-income populations organize family life.

Additionally, results showed that economic capacities, specifically household income, parents' educational attainment, and having employed parents are negatively related to the likelihood of a child living in an extended family. Indicators of family need such as being born to a teenage mother, being a younger child, having at least one parent absent from the home, and having a household member who is not in good health are positively predictive of extended family coresidence. Thus, these findings support the idea that the transition into an extended family is a response to economic and social needs.

The second study (Chapter Three) examined the relationship between family structure and on-time high school completion and college enrollment and tested whether racial/ethnic differences in socioeconomic stress and extended family embeddedness mediate these relationships for white, black, and Hispanic children. I found that children who spend more time living away from their biological father are less likely to finish high school on-time. However, I observed that living in a single-mother family was less negatively impactful for black children than white children who spend similar amounts of time in this family structure. I did not observe racial/ethnic differences in the association between family structure and college enrollment. These findings suggest that the experience of living in a single-mother family for white children has limited generalizability to black children, as the two groups may adjust differently to living in a single-parent family.

Both socioeconomic stress and extended family embeddedness mediate the association between family structure on on-time high school completion and college enrollment, though socioeconomic stress had greater relative influence. Differences in socioeconomic resources

accounted for 22-48% of the gap in these two outcomes, whereas extended family embeddedness helped explain roughly 15-20% of the variance in these outcomes. These results provide greater support for the socioeconomic stress hypothesis, which asserts that the negative impact of familial disruption may be less pronounced for children of racial/ethnic groups facing many socioeconomic disadvantages to begin with. Given the importance of socioeconomic factors in explaining the link between family structure and children's educational attainment, one could argue that welfare funds may be better spent on directly alleviating financial hardships for disadvantaged groups than being used to promote the formation and maintenance of two-parent nuclear families and discouraging nonmarital childbearing (U.S. House of Representatives, 1996).

The third study (Chapter Four) focused on intraracial differences in family structure and integration and their relationship to black adolescents' educational performance. Specifically, it evaluated how family structure, support, closeness, contact, and negative interactions are associated with youths' reported grades, grade repetition, and number of suspensions. I found that family structure is related to reported grades. African American and Black Caribbean adolescents who were raised by both biological parents earned higher grades than those raised by a single parent. However, it was not related to grade repetition or number of suspensions. I also observed that emotional support from family was positively associated with higher grades for Black Caribbean youth and that negative interactions with family members increased the likelihood of grade repetition and number of suspensions among African American youth.

Findings indicate that family structure has a more limited association with youths' educational performance than implied by early literature (e.g., Frazier, 1939 and Moynihan, 1965). Thus, consistent with results from Chapter Three, these findings call into question current

welfare policies' emphasis on promoting the two-parent biological family as the ideal living arrangement for children (Brown, 2010, U.S. House of Representatives, 1996). Moreover, given ethnic differences in the association between indicators of family integration (i.e., emotional support and negative interactions) and grade repetition and number of suspensions, this study affirms the need for more scholarship focused on within-group heterogeneity in family life among Black Americans.

Altogether, findings from these three empirical chapters show that differences in race/ethnic and social class background not only lead to distinct patterns of family formation, but also differential outcomes for youth. Given longstanding academic interest in the relationship between family structure and child wellbeing, results suggest that more attention should be paid to the role of social location in explaining youth outcomes. They also demonstrate the need for greater scholarship explicitly focused on the familial practices and experiences of families of color. What is more, results suggest that current social welfare policies emphasizing the importance of the two-biological-parent family in promoting child wellbeing, particularly among disadvantaged populations, may be misguided. Racial/ethnic minority children and/or those from low-income backgrounds may not be as negatively impacted by the consequences of living outside of this family structure as those from white middle-class backgrounds. Thus, these policies may be less effective than they would be otherwise if they considered racial/ethnic and class differences in family processes and outcomes.

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