

The Disparate Effects of Family Structure

Melanie Wasserman

Summary

In this article, Melanie Wasserman reviews the latest evidence about the causal link between family structure and children's economic and social outcomes. Going beyond the question of whether family structure affects child outcomes—a topic that's already been covered at length, including in previous *Future of Children* volumes—she examines how family structure differentially affects children. One important finding from recent studies is that growing up outside a family with two biological, married parents yields especially negative consequences for boys as compared to girls, including poorer educational outcomes and higher rates of criminal involvement.

Wasserman describes mechanisms that may link family structure to children's outcomes, in terms of both the main effect and the differences between effects on boys and on girls. These include same-gender role models in the household and in the neighborhood, parental resources (including money, time, and more), parenting quantity and quality (with attention to how parents allocate their time to children of different genders), and the differences in how boys and girls respond to parental inputs, among other hypotheses.

What can be done to ameliorate the effects of family structure on children's outcomes? Wasserman encourages policy makers to supplement the educational, parental, and emotional resources available to those children who are most at risk of experiencing the negative effects of nontraditional family structures.

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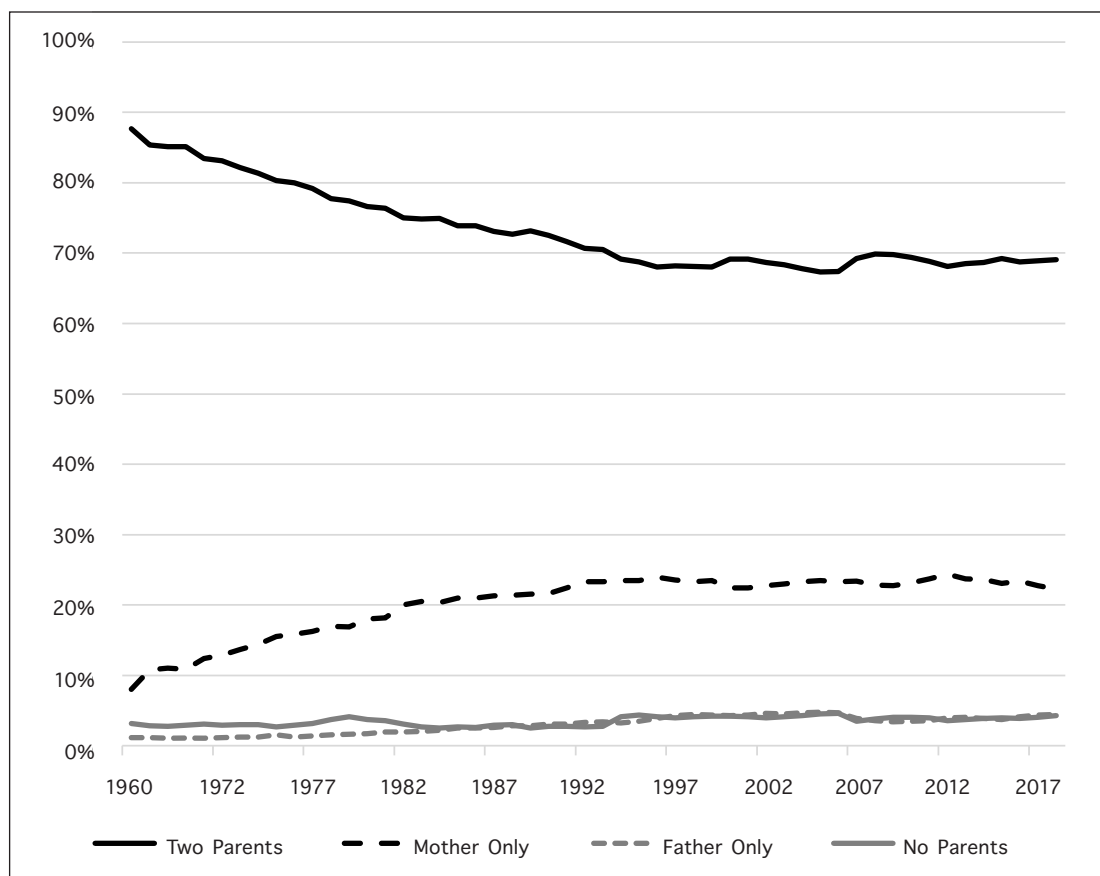
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Less than half the children in the United States today will grow up in a household with continuously married parents. This fact reflects the considerable changes the American family has undergone over the last several decades. Divorce, nonmarital childbearing, and nonmarital cohabitation have all been on the rise. In 2017, for example, 40 percent of births were to unmarried mothers, more than double the percentage in 1980.¹ New family structures have emerged, including unmarried cohabiting parents; blended families that may encompass step-parents, step-siblings, and half-siblings; and families

that experience frequent transitions and instability. As figure 1 shows, this vast transformation has led to a steep increase in the fraction of children who are raised in a household with only one parent, and a commensurate decrease in the fraction who live with two parents (whether biological, step-, or adoptive parents). The declining share of children raised in continuously married two-parent families has attracted a great deal of attention in academic and public policy circles, and in the popular media. This interest is substantiated by evidence that children who grow up in households without two biological married parents experience more behavioral issues,

Figure 1. Living Arrangements of Children, 1960-2018



Sources: US Census Bureau, Decennial Census, 1960; and Current Population Survey, Annual Social and Economic Supplements, 1968-2018.

attain less education, and have lower incomes in adulthood.²

Yet the changes in family circumstances haven't been uniform across demographic groups. The composition of minority and white children's families show profound differences. As figure 2 illustrates, white children are almost twice as likely as black children to grow up in a two-parent family. In 2017, almost 60 percent of black children were living in a household without two parents, and an even higher fraction lived without two biological parents. In contrast, only 25 percent of white children and 33 percent of Hispanic children were living in households without two parents. Family patterns also differ substantially based on parents' educational attainment. Among children of highly educated mothers, the married, two-biological-parent household remains the most common family structure and indeed comprises the vast majority of such households. In contrast, in 2014, almost half the children of mothers with less than a high school degree were being raised in a single-parent household.³ This deficit of parental resources represents another dimension of inequality for minority children and children of less-educated parents.

Alongside the different patterns of family structure across race and educational categories, recent research shows that certain groups of children experience particularly adverse outcomes in response to growing up outside a stable, two-parent married family. Why might the effects of family structure differ systematically across children? This article provides an overview of the theory and evidence of how family structure shapes children's outcomes, focusing on the *disparate* effects—how the effects of family structure may depend on children's

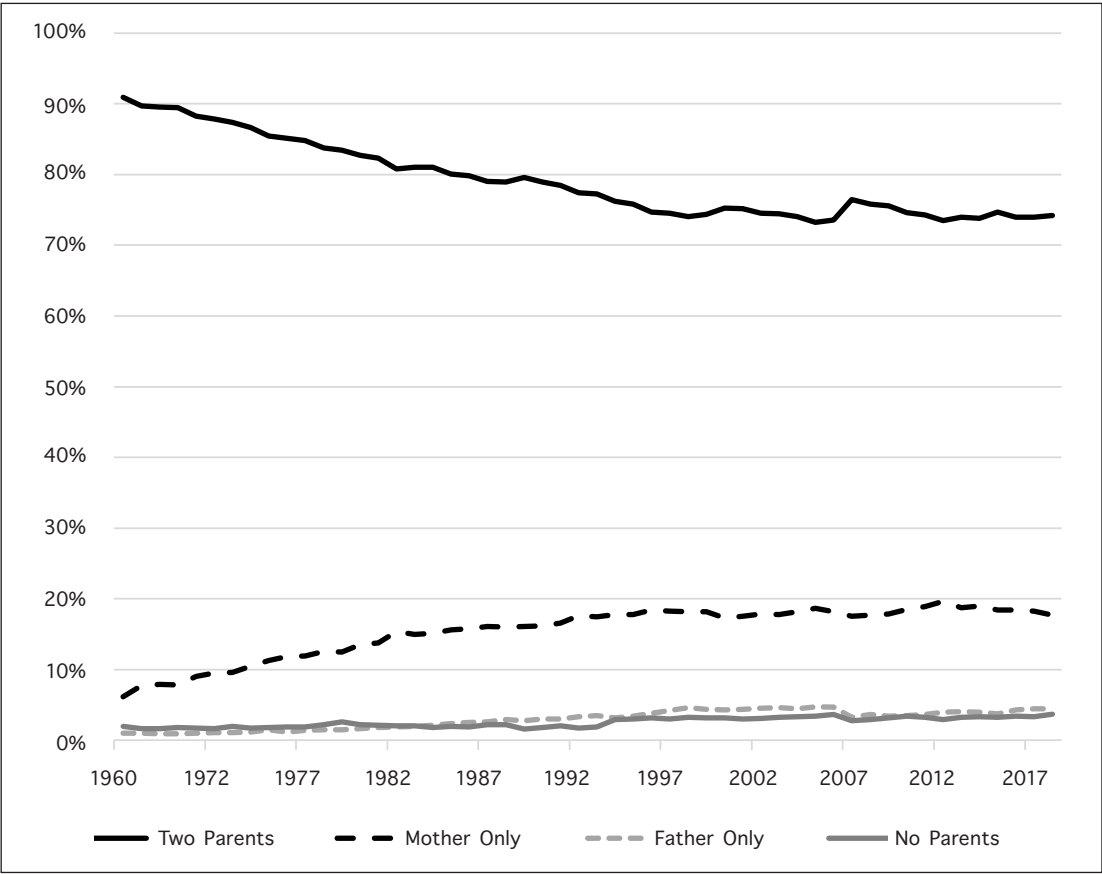
characteristics, such as gender, and on parents' characteristics, such as education level or race/ethnicity. To understand the diverse effects of family structure on boys and girls, we'll peer into the family's inner workings—how parents allocate financial, time, and emotional resources among their children—and examine the implications for child development, educational attainment, engagement in risky behaviors, and transitions to the labor market. We'll also step outside the family to study how family structure determines where children live and go to school, and the consequences for children's outcomes.

A detailed look at three recent studies contextualized by broader evidence reveals the emerging consensus that the absence of a biological father in the home yields especially negative consequences for boys. These consequences are seen in disruptive and delinquent behavior, and they persist into adult educational attainment and employment. In contrast, the evidence is less conclusive when it comes to how the effects of family structure vary with other attributes. For example, white and minority youth respond similarly to growing up in two-parent versus single-parent families, with some exceptions pertaining to the criminal behavior of African American boys.

Researchers have only recently begun to study the mechanisms that lie behind boys' and girls' differential responses to family structure. The evidence so far indicates that gender gaps in resources within the family—such as parents' time—don't vary meaningfully across family structures. And to the extent that boys and girls are allocated different resources in the family, these differences don't appear to account for boys' particularly negative response to growing

Figure 2. Living Arrangements of Children, 1960-2018, by Race of Child

A. White Children



up outside a two-parent home. Recent scholarship has also examined the diverse experiences of boys and girls who grow up in the same neighborhoods and attend the same schools. The evidence shows that these factors external to the family exert their own effects on boys and girls, and also mediate the gender difference in the effects of family structure on children’s behavioral, educational, and labor market outcomes. But even after accounting for the role of schools and neighborhoods, the differential effects of family structure on boys remain.

A principal challenge for researchers, then, is to understand the divergent educational,

behavioral, and labor market outcomes for male and female children growing up in seemingly similar family environments. The answers can help guide the way policy makers spend their efforts and resources. I conclude the article with examples of policies that have been effective in addressing the resource gap that differentially disadvantages boys.

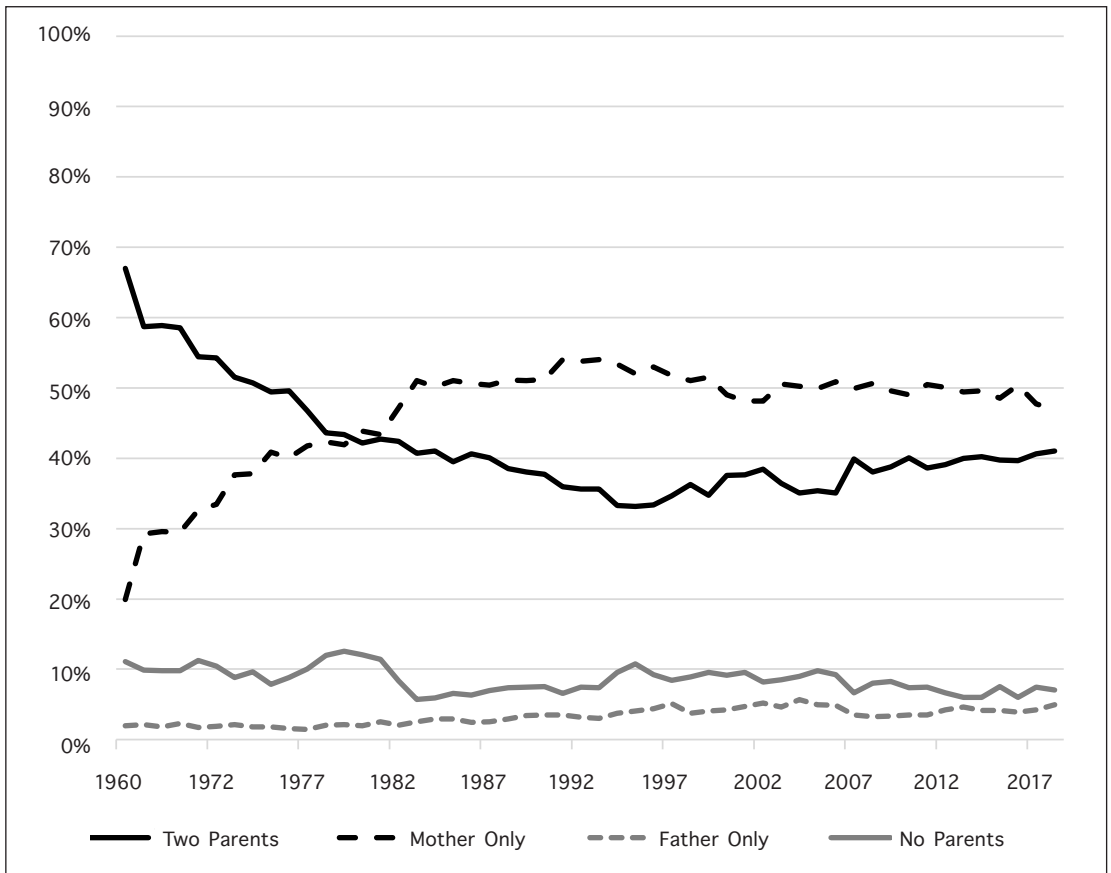
Theory of Disparate Effects

How Family Structure Affects Children’s Outcomes

Basic conceptual framework: I start with a basic framework for the mechanisms by

Figure 2. (continued)

B. Black Children



Sources: US Census Bureau, Decennial Census, 1960; and Current Population Survey, Annual Social and Economic Supplements, 1968-2018.

which family structure affects children's outcomes. In a previous issue of the *Future of Children*, University of Melbourne economist David Ribar discusses these mechanisms in detail.⁴ I'll briefly summarize them here before turning my attention to theories of disparate effects.

To simplify the discussion, I focus on two family types: two-biological-parent, heterosexual, married families; and single-parent families. A single-parent family may encompass varying levels of involvement by the nonresident parent, which I discuss below. Of course, there are other family structures

that can have different ramifications for children relative to a two-parent home. Along the same lines, a two-parent married family isn't the only kind of stable, long-term partnership. But empirical evidence about other family types, including unmarried cohabiting couples, shows that the attributes and stability of such relationships more closely resemble those of single-parent families than of two-parent married families.⁵ The timing and duration of family structure experiences may also affect children's outcomes. While the theoretical discussion focuses on just two family types, I include other family

types when I discuss the empirical evidence on the effects and disparate effects of family structure.

Compared to other family types, two-parent families have more economic and parental resources on average.

Let's consider a "production function" for child wellbeing, where *child wellbeing* takes on an expansive definition that includes children's academic, educational, behavioral, emotional, and psychological health outcomes, as well as their adult labor market outcomes. Through the production function, child wellbeing depends on various inputs, including the resources of the parents (whether or not they live with their children), schools, neighborhoods, extended family networks, and peers. Resources include goods and services that can be purchased, such as food, housing, clothing, schooling, and health care. But resources also comprise the quantity and quality of parents' nonmonetary investments, including their skills and time, as well as psychological inputs such as the incidence of stress or conflict. It's useful to divide inputs into those *within* the family and those *external* to the family, a distinction I'll expand on when I discuss the theoretical and empirical ramifications of family structure for children's wellbeing. Inputs external to the family encompass neighborhoods and schools, including the quality of teachers and peers, plus access to social and professional networks, community safety, and local job opportunities.

Effects of family structure, through mechanisms in the family: When considering how family structure affects children's outcomes, a natural starting point is how resources are provided and allocated in the family. Compared to other family types, two-parent families have more economic resources on average, including higher family income, greater wealth, and less exposure to financial volatility. Two-parent families also have access to more parental resources, including the quantity and quality of parents' time. (Elsewhere in this issue, Ariel Kalil and Rebecca Ryan examine in detail how parenting practices vary with family socioeconomic status, and consider how these differences contribute to childhood development.) In single-parent households, the nonresident parents, most of them fathers, tend to spend less time with their children and devote fewer material resources to them.⁶ A two-parent family also means more adult role models. In addition, two-parent families are, on average, more highly educated, which may have implications for the quality of parental inputs. Two-parent continuously married households exhibit more stability and less conflict and stress stemming from precarious relationships, the dissolution of relationships, and transitions to other types of family structures. These features of two-parent families relative to other family structures imply that children in these families receive more of the various financial, parental, and psychological inputs that enhance child wellbeing.

Effects of family structure, through mechanisms external to the family: Resources external to the family include neighborhood attributes, such as criminal and job opportunities; social and professional networks; and the availability of role models. (See Melissa Kearney and Phillip Levine's

in-depth look at role models and mentors in this issue.) These resources also extend to school quality, including teachers, peers, and school disciplinary practices. The greater economic resources of two-parent families help determine where families live, the stability of their residential choices, and the neighborhood social and professional networks available to them. In addition, because of the neighborhoods they live in or the parents' capacity to navigate school choices, the children of two-parent families are more likely to attend high-quality schools and to preserve the continuity of schools throughout childhood. A single-parent family is less likely to be able to access and depend on the nonresident father's extended family and social ties to provide informal childcare and financial support. Overall, these factors external to the family could determine the peers with whom children interact, the quality and quantity of educational resources, the harshness of school disciplinary practices, social and professional networks, and real and perceived labor market and criminal opportunities.

How Family Structure Effects Depend on Child Attributes

Thinking back to the production function, child wellbeing can also depend directly on children's attributes, such as gender, in that certain endowed traits may predispose children to higher or lower wellbeing, or may lead them to derive greater or fewer benefits from inputs. For example, boys may benefit more than girls from time spent reading and doing verbal activities. Children's attributes can also affect wellbeing indirectly. This indirect channel occurs through the decisions made by parents, teachers, or other adults about

allocating resources—decisions that may take into consideration a child's characteristics, predisposition for wellbeing, and the potential benefits from investments.

In assessing how family structure could affect boys' and girls' outcomes differently, we look within family environments, seeking differences by child gender in the provision or allocation of inputs. Do boys and girls have different *experiences*, even in the same family structure category? Alternatively, are there gender differences in the benefits derived from inputs? That is, do boys and girls have different *responses* to similar family environments? I'll also discuss how mechanisms external to the family can cause family structure to have different ramifications for boys and girls.

Differential sensitivity of boys and girls: To help illustrate family dynamics, let's focus on families with a son and a daughter. Parents decide how to allocate their financial, time, and emotional resources among their children. Consider a scenario in which the allocation of inputs within a given family type is equal among boys and girls. Thus, if the family structure changes from two parents to one, the resources available to the children decline, but not differentially by the children's gender. Even in this stylized scenario, we can explore why boys and girls respond differently to the same quantity and quality of inputs in their family environment. We'll call this phenomenon *differential sensitivity* based on children's attributes.

On average, compared to two-parent households, single-parent households have fewer resources, including market goods and services as well as parental time and supervision. Boys' differential sensitivity to family inputs may arise from the fact

that most single-parent households don't include the child's biological father. As I've mentioned, nonresident fathers are less involved in their children's lives than are resident fathers. While both boys and girls may be affected by the deficit of parental resources (time, emotional support, supervision) and economic resources (income earned) from having only one parent in the household, boys may be particularly affected if there are additional benefits to interacting with a same-gender parent or having access to a same-gender role model.

Another possibility is that boys are differentially vulnerable to resource-poor environments. This would imply that, although the deficit of parental resources in a single-parent family is detrimental to the development of all the family's children, it may particularly affect boys. In addition, boys are at greater risk of behavioral issues, potentially stemming from a lack of social and emotional skills, motivation, and self-discipline.⁷ Boys' different needs could position them to respond more strongly than girls to the same level of parental resources.

Differential sensitivity could also operate through mechanisms external to the family, if there are gender differences in the benefits derived from the same neighborhood, school, or peer inputs. Compared to two-parent families, single-parent families tend to reside in neighborhoods with a higher fraction of single-parent households, disproportionately headed by women.⁸ Again, male role models may be lacking. Although both male and female children of single-parent families lack male role models in the community, their absence could have worse consequences for boys, who might derive benefits from interacting, observing,

and learning from adults of the same gender.

Differential treatment of boys and girls: Now let's relax the assumption that the allocation of inputs among boys and girls is equal in a given family type. How might the treatment of boys and girls differ in a family? Parents could allocate inputs differentially to sons and daughters for various reasons. We should also draw a distinction between public and private inputs in the family. Public inputs are those from which all children benefit, such as nutritious meals, living in a safe neighborhood, and attending high-quality schools. Private inputs, on the other hand, are tailored to a particular child, such as one-on-one parental time, extracurricular activities such as sports and tutoring, and supervision. Private inputs can exacerbate or attenuate natural differences between children. Public and private inputs can both vary with family structure, but it's more likely that private inputs vary differentially across boys and girls. It's important to note that inequality in child inputs doesn't necessarily lead to inequality in child wellbeing, if children have different needs or derive different benefits from inputs. But such inequality is potentially a mechanism to generate differential responses to family structure among boys and girls.

Suppose parents prefer spending time with children of their own gender. In a two-parent household, as long as mothers and fathers devote the same amount of time to their children, this would result in an equitable allocation of parental time with children. Mothers would spend more time with daughters and fathers more time with sons, but both daughters and sons would receive the same amount of parental time. But in a single-parent household, this same-gender preference could mean that daughters and

sons don't get the same amount of parenting time. The vast majority of single-parent families are headed by mothers, implying that sons receive less parental time than their sisters do.

Even if parents don't prefer to spend time with children of their own gender, parents may allocate time and resources unevenly based on their children's and their own strengths and weaknesses.¹⁰ If some of the returns to parental investments depend on parents' gender and children's gender, then the allocation of resources across boys and girls may hinge on the presence of a particular parent. For example, fathers may have a comparative advantage in teaching their sons, while mothers may be better at instructing daughters. Two-parent families can exploit this comparative advantage: fathers specialize in teaching sons, mothers in teaching daughters. But in a single-parent family, the sole parent must provide all inputs, creating a deficit of parental time. In addition, the absence of a male parent could disproportionately affect sons' wellbeing. Not only are parental resources lower on average in single-parent families relative to two-parent families, but the quality of resources may be lower for male children.

Because of their higher risk of behavioral problems, boys may need additional inputs to produce the same outcome.

Finally, we could see gender differences in the costs or difficulty of childrearing.¹¹ Because of their higher risk of behavioral problems, boys may need additional inputs to produce the same outcome. If parents

allocate resources based on children's needs, then boys could receive more parental or financial inputs than girls do. If mothers and fathers allocate these compensatory inputs differently, the absence of one parent could mean either more or less equitable allocation of resources to sons and daughters.

Now let's consider how the treatment of boys and girls could vary with family structure through inputs external to the family. Family structure could differentially affect boys and girls if the neighborhood and school environments associated with family types vary systematically by child gender. For instance, shifting from a high-quality school with less-punitive disciplinary practices to a low-quality school with harsher punishment could disproportionately affect suspensions and expulsions among boys, who are more likely to engage in risky and disruptive behaviors. In a similar vein, criminal and job opportunities in a neighborhood are likely to be gender-specific. Moving from a neighborhood with a low crime rate to one with a high degree of criminal activity could differentially transform the risk of criminal activity among boys.

The fact that single-parent families tend to live in neighborhoods with other single-parent families suggests a lack of parental resources in the community.¹² And since most single-parent households are headed by mothers, the dearth of parental resources means a lack of male role models. Similar to the discussion of the within-family mechanisms that could generate differential treatment of boys and girls across family types, if there's a preference for spending time with children of one's own gender or a greater allocation of adult time based on

gender-specific returns, the lack of adult males in the community could result in fewer or lower-quality resources devoted to male children.

Effects of Family Structure and Parental Attributes

How might the consequences of family structure depend on such characteristics as parents' education or race/ethnicity? Below I look at why the effects of family structure might differ based on parents' attributes, focusing on the differential treatment of children and mechanisms within the family and external to it. Here, the notion of differential sensitivity is poorly defined, since parents with different attributes often have different levels of resources. For this reason, I focus on the differential treatment of children across these varying parent types as the primary mechanism for generating differences in the effects of family structure.

Differential treatment, by parental attributes:

Economists Melissa Kearney and Phillip Levine recently theorized how the effects of marriage could vary with a mother's resources—specifically, her educational background and age—and the resources the mother's partner brings to the family.¹³ Marriages tend to join people with similar educational and socioeconomic backgrounds: women with relatively few economic and educational resources tend to partner with people with similar resources, and so on. Therefore, the additional inputs a partner brings to a family depend on the mother's characteristics. Specifically, children whose mothers have a high school degree or less are likely to gain fewer resources from a two-parent family, relative to a single-parent family, than do children whose mothers have a college education.

Now consider how the effects of growing up in a two-parent family could differ based on the mother's education. For children whose mothers have a high school degree or less, the additional resources a partner brings to the family may be enough to improve basic educational outcomes, such as completing high school. But the extra resources may not suffice to induce the children to attend or complete college. That's because even with two parents, family resources may not be great enough to alter children's propensity to attend college. Among children of mothers with a college degree, high school graduation rates are likely similar whether they're raised in a two-parent or single-parent family; the mother's resources alone are enough to support her children in attaining a high school education. On the other hand, for mothers with a college degree, the additional resources a second parent brings to the family may improve advanced outcomes such as attending or completing college.

Next we consider how the effects of family structure could differ based on parents' race or ethnicity. One possible mechanism pertains to parental resource disparities between white and minority families, as described above. Even within a family structure category, large differences remain in the educational and financial resources of black families and white families. Take as an example a 2009 study using data from the National Longitudinal Survey of Youth 1997—a nationally representative survey that in 1997 began following men and women who were born between 1980 and 1984. The researchers found that the average income of black single-parent families with a never-married mother was \$15,000 per year, but for otherwise similar white families the average income was

\$29,000. The financial gain experienced by a biological two-parent black family was \$35,000; for two-parent white families, it was \$50,000 (all figures in 2005 dollars). Given that single-parent families have fewer resources, and that black families gain fewer resources by adding an adult partner, the effects of growing up in a two-parent family may be smaller for black children than for white children.¹⁴

Family structure could also affect white and minority children differently through mechanisms external to the family. Even within a family type, black and Hispanic children live in poorer neighborhoods with more criminal activity, on average, than white children do.¹⁵ Furthermore, considerable evidence shows that neighborhoods are segregated by race and ethnicity.¹⁶ Given the average differences in family structure composition among white and minority families, neighborhood segregation could lead to differential access to community resources such as social and professional networks, adult supervision, and male role models. Black and Hispanic children also attend lower-quality schools, on average, than white children do.¹⁸ These disparities mean that minority children may experience fewer changes in neighborhood attributes or school quality when they live in a single-parent family versus a two-parent household. This would counterintuitively imply that family structure differences or transitions are less detrimental for minority children than for white children. Along the same lines, sociologists have emphasized that kinship networks—extended family and close friends—can provide financial, emotional, and practical support for single-parent families, as well as during family disruptions. If these networks are stronger for black and Hispanic single-parent families, family

structure could be less consequential for minority youth's outcomes than it is for white children's.¹⁹

Evidence of Disparate Effects

The Challenge of Isolating Family Structure's Effects

Several issues arise when we try to empirically isolate family structure's role in children's economic, educational, and behavioral outcomes. Imagine an experiment in which the control group consists of two-parent married families and the treatment group of single-parent families. If children were randomly assigned a family type, we would expect the family types to be independent of all other parent- and child-specific characteristics that might affect child wellbeing. The simple comparison of children's outcomes across family types would yield the causal effect of family structure. But even in this unrealistic (and ethically questionable) experiment, family structure remains a multifaceted treatment. As the composition of a family and household changes, the provision of economic and parental resources also changes. When assessing the effects of family structure on children's outcomes, as long as resource differences are *caused by* family structure, I consider these resource disparities as paths that mediate the effects of family structure.

In reality, a simple comparison of children living in differing family structures will encompass the causal effect of family structure as well as the effects of many other correlated factors that don't result directly from family type. In fact, these correlates could be causing both family structure and children's outcomes. For example, a household's financial volatility could lead to relationship stress that ends in divorce.

The same financial volatility could lead to adverse educational outcomes for children. It would be misleading to attribute the children's lower educational attainment to family structure when the underlying cause is financial. This concern also extends to the characteristics of parents across various family structures. Parents with certain characteristics, such as psychological or emotional health problems, could be predisposed to relationship instability. These characteristics, instead of family structure per se, could influence children's outcomes. In considering the empirical evidence, then, I'll pay close attention to whether family structure or another correlated factor is driving the association with children's outcomes.

A third challenge concerns the direction of the causal relationship. Children with more behavioral issues could cause additional stress and conflict between parents, resulting in divorce. In this scenario, children's behavioral issues are a cause rather than a consequence of family structure. This issue extends to the investigation of how subgroups, such as boys and girls, respond differently to family types. For example, children's gender can partially determine family structure. Marriages are less likely to end in divorce if the parents' firstborn is a boy. And when unmarried women give birth, they're more likely to get married, primarily to the child's biological father, if their firstborn is a boy. These patterns have implications for children's living arrangements: girls are less likely to be living in a household with either their biological father or any father figure.²⁰ It's important to acknowledge, though, that researchers consider that the role of children's gender in shaping family structure is small, and declining over time.²¹

A final consideration is how to measure family structure, including the timing and specificity. Not only are there many complex types of family structures, but the timing and duration of children's exposure to different family types tends to vary, and that may determine the extent of family stability and disruption. Few studies define family structures in precisely the same way. Furthermore, most studies employ a measurement that's limited to a single childhood observation, which fails to capture the many transitions a child may experience.²² The evidence shows that two-biological-parent married families are substantially less likely than other family types to experience transitions.²³ That said, when examining the evidence that contrasts the outcomes of children in two-parent versus single-parent families, we should acknowledge that only a small fraction of children live continuously in a single-parent family.²⁴

The evidence supports an emerging consensus that growing up in a family without biological married parents produces more adverse consequences for boys than for girls.

In the discussion below of empirical evidence, I highlight research that successfully addresses some of these challenges. Certain concerns, such as the direction of the causal relationship, can be partially circumvented through the timing of the measurement of family structure. Other concerns, such as the parental and

environmental correlates of family structure, remain difficult to resolve.

Evidence that Family Structure Affects Boys and Girls Differently

Three recent studies provide evidence that family structure has different effects on boys and girls. The studies span the first 30 years of life: early childhood, school-age academic and behavioral outcomes, adult employment, and intergenerational mobility based on earnings at age 30. Together, these studies support an emerging consensus that growing up in a family without biological married parents produces more adverse consequences for boys than for girls.

In the two studies that analyze children's outcomes during elementary and middle school, behavioral outcomes—such as disruptive behavior in school and suspensions from school—yield the most striking contrasts in boys' and girls' responses to growing up in single-parent families. University of Chicago economist Marianne Bertrand and National University of Singapore economist Jessica Pan use the Early Childhood Longitudinal Study (ECLS)—a nationally representative survey of children entering kindergarten in the United States in 1998—to assess the implications of single parenthood for boys' and girls' educational and behavioral outcomes from kindergarten through eighth grade.²⁵ Bertrand and Pan measure a child's family structure based on the family members with whom the child lives during kindergarten, divided into three categories: single mother, both biological parents, and other family structures. The authors consider two main behavioral outcomes: teachers' observations of *externalizing*—that is, disruptive or delinquent—behavior in fifth

grade, and school-recorded suspensions in eighth grade. For both of these outcomes, a well-documented gender gap favors girls: boys are more likely than girls to engage in externalizing behavior and to be suspended from school. Bertrand and Pan find that this gap is substantially larger among children who grow up with a single mother. Among the children in the ECLS sample raised in homes with two biological parents, 6 percent of girls are suspended during eighth grade, while the rate among boys is 16 percent. Among children with a single mother, the gender gap in suspensions more than doubles: 15 percent of girls and 41 percent of boys are suspended during eighth grade.

Bertrand and Pan's findings are echoed by an analysis of administrative data from Florida.²⁶ These data link birth certificates for children born from 1992 to 2002 to their public schooling records, providing a detailed longitudinal account from birth through high school. In this study, a child's family structure is defined based on the marital status of the mother as recorded on the birth certificate, and divided into two categories: married and not married. The authors examine child behavioral outcomes encompassing kindergarten readiness, school attendance, and school-recorded suspensions during third through eighth grades, as well as juvenile crimes. The study also comprehensively analyzes whether family disadvantage more generally—including absence of a father, lower maternal education, and receiving Medicaid—differentially affects boys' outcomes.

All these behavioral outcomes exhibit a gender gap favoring girls, who are 7 percent more likely than boys to be assessed as ready for kindergarten and 52 percent less likely to be suspended from school during

third through eighth grades. Moreover, each of these gaps is amplified by being born to an unmarried mother. For example, the gender gap in suspensions grows by 20 percent when the children's mothers are unmarried. The greater negative effects for boys of growing up outside a two-parent married household continue to hold when the analysis statistically accounts for other characteristics—such as maternal education, maternal age, and Medicaid receipt—that might differ between family types. It's important to note that children born to unmarried mothers exhibit more behavioral issues than children born to married mothers; they are 43 percent more likely to be suspended from school. The innovation in these studies pertains to the documentation of the differential consequences of family structure for boys' behavioral outcomes.

In contrast to behavioral outcomes, family structure shows only small differential effects on boys versus girls when it comes to academic outcomes. Girls typically score higher than boys on standardized tests in reading, while boys maintain a small advantage in mathematics. The ECLS and Florida studies both find evidence of these aggregate patterns; in the Florida data, for example, girls outscore boys on standardized reading tests by 0.15 standard deviations (equivalent to being at the 56th percentile instead of the 50th), on average, while boys barely outscore girls on math assessments. But these gender gaps are far less malleable to family structure or to family resources more generally.

These two studies are part of a broader body of evidence documenting that growing up outside a two-parent, continuously married family has particularly adverse consequences for boys' childhood behavioral

and noncognitive outcomes. The effects aren't confined to school behaviors; boys raised in a single-parent household with no father present have substantially higher rates of criminal behavior as teenagers and young adults.²⁷ Boys in single-parent and blended families have also been found to have higher rates of attention deficit disorder diagnoses and treatment compared to boys in two-biological-parent families.²⁸

Do the differential effects of family structure on boys' childhood outcomes translate into a longer-term divergence in boys' and girls' educational and labor market experiences? Recent research emphasizing the role that noncognitive skills play in educational attainment has identified girls' and women's advantage in these skills as a potential explanation for their higher rates of high school and college completion.²⁹ Moreover, middle school suspensions, which boys experience much more often than girls, strongly predict lower rates of high school and college completion.³⁰ These associations suggest that childhood gender gaps in the effects of family structure can lead to gender gaps in educational attainment.

Some research, using recent innovations in access to administrative data, directly examines the long-term impacts of childhood family structure. In the Florida study, for example, the eldest cohorts of children (born in 1992 and 1993) could be followed through high school graduation. A third study uses tax returns for all individuals in the United States born from 1980 to 1982—approximately 10 million people. In that study, a child's family structure was defined based on the marital status of the parent who first claims the child as a dependent on a tax return; families classified as "single parent" were disproportionately headed by women. With

such detailed data, the researchers could observe a person's family structure and family income during childhood and also see whether that person was employed at age 30. Late-adolescent and adult outcomes revealed a gender gap in on-time high school completion that favors women: boys were 10 percent less likely to graduate on time. In contrast, a gender gap in employment favored men.

In both the Florida study and the tax return study, having married parents provided differential benefits for boys. Being born to a married mother or growing up in a household with two biological parents increased boys' propensity to graduate from high school on time and to be employed at age 30. Women's employment at age 30, on the other hand, generally didn't vary by their parents' marital status; this held true across all parental income groups. But men had substantially lower employment rates if they grew up in a single-parent family, at every parental income level—even the very highest. Perhaps the most surprising finding was that among children who grew up with single parents whose income was below the 40th percentile, the employment gender gap was reversed: women were more likely than men to be employed at age 30.³¹

The long-term differential effects of family structure on boys' educational attainment have been documented by several other scholars. Their studies investigated the gap in high school and college completion favoring girls and women, which emerged in the United States starting in the 1980s. For example, researchers found that growing up in a single-parent household has a larger effect on boys' educational attainment than on girls', particularly if the children lived in a single-parent family during the preschool

years.³² Similarly, a study of stepfamilies found that growing up without a biological father reduced the college entrance rates of boys more than that of girls.³³ Moreover, women's advantage in college completion is largest among families with no father present.³⁴

A notable exception pertains to mental health and health behaviors: researchers have found that adolescent girls' rates of smoking and self-reported mental health are more responsive to family structure than are those of boys. Teenage girls, on average, report higher rates of depression than do teenage boys, and this gap widens for teenagers in single-parent and blended families, compared to those in two-parent families. But other studies looking at a range of risky behaviors—such as smoking, substance abuse, and criminal activity—have found no gender differences in response to time spent living with a child's biological father.³⁵ Childhood mental health and the propensity to engage in risky behaviors are relatively understudied outcomes in the research on the differential effects of family structure on boys and girls, and they warrant additional attention.

It's worth noting the different definitions of family structure used in these studies. Administrative data, such as those from the state of Florida and the federal government, tend to measure family structure at or near birth, while survey measures such as ECLS capture it later on in childhood by observing who resides in the household. Each of these is a point-in-time, static measure of family structure. An advantage of measuring family structure at or near birth is that it circumvents concern about reverse causation: it's unlikely that a newborn child's behavior will determine family structure.

Yet none of these static measures of family structure can fully capture the dynamic processes underlying more complex family environments, which may entail transitions, disruptions, and changing household composition. Despite differences in the measurement of family structure, and in the outcomes and cohorts analyzed, the evidence demonstrates that growing up in a family environment without biological married parents has a larger adverse impact on boys, particularly their childhood behavioral outcomes and their adult labor market and educational outcomes.

We should also address the notion that children's gender can affect family structure, which would imply that boys and girls grow up, on average, in different types of families. As we saw above, the evidence on the effect of child gender on family structure appears to favor boys: that is, a marriage is less likely to end in divorce if the couple's firstborn is a boy. Furthermore, families in which boys are raised are more likely to be smaller, to have a father living in the household, and to have larger father investments. Nonresident fathers are more likely to be involved in their children's lives if there is any male child in the family.³⁶ These differences in paternal involvement on the basis of child gender are usually small, but they suggest that, on average, boys grow up with more father involvement than do girls.

The fact that family structure is partly determined by children's gender composition complicates the comparison of boys' and girls' outcomes across different family types. A marriage that stays intact with a firstborn girl may vary in many unobservable ways from an intact marriage with a firstborn boy. One benefit of using administrative birth records in the Florida

study is that they give an opportunity to observe the birth order and gender composition of children born to the same mother. Specifically, the study's authors limit their analysis to families with at least two children, and contrast the outcomes of mixed-sex siblings within the same family. This strategy removes the influence of unobservable family characteristics that don't change over time, implying that we no longer have to grapple with the fact that within a given family structure category, families of boys and girls may differ in unobservable ways, perhaps due to the children's gender composition. Compellingly, the Florida study found that even among children born to the same mother, the behavioral outcomes of sons still differentially benefited from being born to a married mother.³⁷

In summary, recent evidence consistently shows that two-parent married families confer differential benefits for the behavioral, educational, and labor market outcomes of boys relative to girls. The disproportionate effects of family structure appear as early as age five, when children are assessed for kindergarten readiness. Though the effects are primarily concentrated among behavioral outcomes, including school suspensions and delinquency, we also have evidence that such effects persist into adulthood, as measured by high school completion and employment at age 30.

What Accounts for the Disparate Effects?

As discussed in the conceptual framework, there are two broad categories of mechanisms: differential treatment of boys and girls across family structures, and differential sensitivity of boys and girls to a given family environment. So which of the hypothesized mechanisms generates

the disparate effects of family structure on boys' and girls' behavioral, educational, and job outcomes? Although research on these mechanisms is still preliminary, the existing evidence points to factors external to the family, as well as the differential responsiveness of boys and girls to inputs, as being the key forces driving the disparate effects of family structure on boys and girls.

Treatment of boys and girls, within the family: Do boys and girls receive inputs in ways that differ systematically by family type? A key input is parental time allocation, which has been studied extensively with the aid of retrospective time diaries such as those in the US Census Bureau's American Time Use Survey (ATUS), conducted since 2003 to provide nationally representative estimates of how US households spend their time. Among two-parent married families, fathers spend less time, on average, with their daughters than with their sons. In addition, fathers spend more total time with children if a family has at least one son rather than all daughters. Mothers similarly spend more time with their daughters than with their sons, but their total time investment doesn't vary with their children's gender composition.³⁸

The ECLS study documents the differential treatment of boys in single-parent female-headed families, focusing on the resident parent.³⁹ For one thing, single mothers reported feeling less warmth toward their sons than toward their daughters. The authors of the ATUS study also found that single mothers spend about an hour less per week with their young boys than with their young girls. One problem with investigating parental time inputs in single-parent families using ECLS and ATUS is that researchers can't observe the time allocation of the

nonresident parents. The research with data on nonresident parental time inputs finds slightly more involvement of nonresident fathers in their sons' and daughters' lives.⁴⁰ If boys' deficit of mother time in single-parent families isn't offset by other resources—including nonresident fathers' time—then parental time is one possible mechanism through which boys' outcomes are disproportionately affected by family structure.

A few studies explicitly try to control for disparities in the provision of parental inputs across family types. For example, after also accounting for parents' emotional support, time spent reading with children, and disciplinary practices, the ECLS study concludes that differing parental inputs explain only a small share of the larger gender gap in externalizing behavior and suspensions observed among single-parent female-headed families. In the end, then, the current evidence suggests that gender differences in parenting inputs across family types are unlikely to be a key explanation for gender differences in the effects of family structure. But given the sparse research on the issue, this conclusion remains tentative.⁴¹

Treatment of boys and girls, external to the family: Strong correlations exist between family structure and the characteristics of neighborhoods and schools. Compared to two-parent families, other family types tend to live in neighborhoods where people are poorer, crime is more common, and more households are headed by single parents. Children growing up in single-parent families are more likely to report feeling less safe, and they attend lower-quality schools. These associations could be due to the fact that families without two continuously married parents have less money for

housing, on average, or due to segregation on the basis of poverty or race.⁴²

Do boys' and girls' experiences in their communities and schools differ? In a qualitative study entailing extensive in-person observations of children growing up in 12 households of varying socioeconomic levels, University of Pennsylvania sociologist Annette Lareau found that the extent of children's exposure to neighborhood risks and peer groups is contingent on both the family's financial resources and the child's gender.⁴³ Specifically, children raised in families with fewer resources tend to have more unsupervised time to play with neighborhood peers. And boys are given more latitude to explore the neighborhood, in terms of both distance from the home and the extent of parental supervision. Boys raised in single-parent families may have more exposure than girls do to neighborhood risks and criminal opportunities. These qualitative observations are backed up by quantitative studies of parenting practices showing that boys spend more time unsupervised in their neighborhoods and are monitored less intensively by parents.⁴⁴

It's possible, then, that the same neighborhoods affect boys and girls differently. A recent series of influential studies by Harvard economists Raj Chetty and Nathaniel Hendren uses information from tax return filings on the entire US population born between 1980 and 1991 to estimate how childhood residential location affects the extent of intergenerational mobility, as measured by the correlation in the income ranks of parents and children. Overall, location has a similar influence on the upward mobility of both boys and girls: places that offer more mobility for girls tend to do the same for boys. Yet the effects

of residential location are larger for boys than they are for girls, and this is primarily driven by areas that yield particularly adverse outcomes for boys in low-income families.⁴⁵ Chetty and Hendren, along with a team of other researchers, extended this analysis by examining the employment of individuals born from 1980 to 1982; they found that among people who grew up in low-income families, men's employment rates varied more than women's did with the neighborhood of their upbringing.⁴⁶ Neighborhoods where men had particularly low employment rates relative to women were those that had more racial and income segregation, as well as a higher fraction of families with single mothers.

Are the effects of family structure on boys and girls explained by factors external to the family? The ECLS study finds no evidence that school environments differentially affect boys and girls, and therefore concludes that schools can't explain the disproportionately negative effects of single-parenthood on boys' externalizing behavior and suspensions. The Florida study, on the other hand, finds that boys particularly benefit from attending better schools.⁴⁷

The same researchers directly tested whether other environmental correlates—such as neighborhood attributes and school quality—might explain the differential effects of family disadvantage on boys' and girls' behavioral and educational outcomes. They found that gender differences in response to these other environmental attributes can explain at most 24 percent of the gender gap in the effect of family disadvantage on children's outcomes.⁴⁸ Overall, research indicates that factors external to the family that are correlated with family structure can only partially explain the differential effects of family structure on boys.

Sensitivity to resources, within the family and external to it: Pinpointing differences in boys' and girls' sensitivity to the same circumstances is a difficult empirical task. It requires adequately measuring children's experiences of various environmental influences and then gauging whether the children react differently to these inputs. Even comparing mixed-sex siblings in the same family doesn't completely resolve the concern that boys and girls may have different experiences within the same family structure, because the family may treat boys and girls differently.

To see whether boys and girls are differentially sensitive to parental inputs, researchers generally correlate the degree of parental involvement with children's outcomes, calculating separately for boys and girls. Of course, it's a major concern that researchers can't observe children's needs and the potential returns from parental inputs. For example, if parents increase their level of involvement based on boys' deficiencies, we might expect to see no relationship—or even a negative relationship—between parental time and boys' outcomes. Alternatively, if parents invest more in girls because of higher expected benefits, we would expect a positive relationship. It would be a mistake to characterize these positive and negative correlations as evidence of gender differences in sensitivity, since the relationships arise from parental strategies for allocating resources.

We also need to be certain that boys aren't predisposed to greater difficulties from birth because of a dearth of resources. As a test, the authors of the Florida study show that boys' differential response to family environments is a post-birth phenomenon; the gender gap in health measurements taken at birth

is stable among families of different types. The first observation of children's outcome post-birth, however, reveals that the gender gap in kindergarten readiness (measured at age 5) is substantially larger among children born to an unmarried mother. This supports the notion that the post-birth environment is differentially shaping boys' and girls' outcomes.

The differential effects of family structure on boys persist after accounting for the diverging experiences of boys and girls outside the family.

With these caveats in mind, let's proceed to the research on gender differences in responses to parent inputs. Looking at nonresident fathers' involvement with their children, a *meta-analysis*—a statistical procedure that combines data from a number of studies (63 in this case) and re-analyzes them—found no evidence that boys and girls respond differentially to fathers' investments.⁴⁹ Mothers' involvement tells a different story, however. Evidence from the ECLS study shows that boys' externalizing behaviors and eighth grade suspensions are more responsive to maternal warmth and disciplinary acts such as spanking. Thus, the lower degree of parental warmth and higher incidence of spanking in single-parent families, though experienced by both boys and girls, could result in disparate effects for boys.⁵⁰

While numerous studies have documented that growing up outside a two-parent, continuously married family has differential

effects for boys and girls, the research is far more limited on the mechanisms that generate these gender differences. The evidence so far suggests that in single-parent families there may be a gender gap in resident parent inputs that favors girls, but such a gap is not present in two-parent families. This gap in maternal inputs alone could produce the differential adverse effects of single-mother families for boys. Yet the picture is complicated by the fact that paternal involvement appears to favor boys in both single- and two-parent environments, so that fathers' resources may offset the deficit of maternal resources for boys in single-mother families.

Outside the family, the evidence shows that boys and girls have very different experiences depending on their neighborhoods and school quality. Local criminal opportunities and police and school disciplinary practices particularly disadvantage boys growing up in poor neighborhoods. Indeed, research demonstrates that boys are more affected by these factors external to the family, with the most prominent effects being in their behavioral, educational, and employment outcomes. But the differential effect of family structure on boys persists after taking these factors into account.

Disparate Effects of Family Structure by Parental Attributes

In this section, I discuss research on the heterogeneous effects of family structure based on parents' demographic characteristics, including their education and their race or ethnicity.

Are There Disparate Effects?

First I'll consider evidence for the conjecture that the gains to marriage may depend on a mother's initial resources. To assess this

hypothesis, researchers used data from the Panel Study of Income Dynamics, a survey that follows children born in the 1960s through the 1980s, and measures family structure using a mother's marital status when a child is born.⁵¹ They captured maternal resources using the mothers' educational attainment and age at the time of birth, with the assumption that more-educated and older mothers possess greater resources, on average, than their less-educated and younger counterparts. The child outcomes they analyzed are high school graduation, poverty status at age 25, college completion, and having a high income, defined as 400 percent of the federal poverty threshold or more.

Consistent with the theory, discussed above, that the benefits of marriage are contingent on maternal characteristics, the study found that the effects of family structure depended on both the level of maternal resources and the child outcome analyzed. Children of younger and less-educated mothers reaped few returns from marriage, independent of the outcome analyzed. The low initial level of maternal resources, paired with the minimal resource gain from marriage, wasn't enough to alter children's trajectories. On the other hand, children of mothers in the middle of the age and education distributions benefited greatly from marriage, being more likely to graduate from high school and less likely to be poor. Family structure had little effect on high school graduation rates among children whose mothers had a college degree or more—their mothers generally had enough resources to support them in attaining this objective. But these children benefited most from marriage in their rates of college completion, an outcome for which the large resource gain from marriage is pivotal.

Does family structure have different effects across racial and ethnic groups? The research is far from conclusive. Using the National Longitudinal Study of Youth 1997, a group of researchers analyzed the ramifications of family structure and its disparate effects for black children.⁵² The authors found that growing up without a father present in the household had about the same effect on black children's high school dropout rates, cognitive test scores, and propensity to become unmarried parents themselves as it did on all children. Another study examined the educational attainment of 20,000 children born between 1976 and 1984, using data from the National Longitudinal Study of Adolescent to Adult Health. It found that white children's college graduation rates dropped more than black children's if they grew up without their biological father present, but the opposite was true for high school graduation.⁵³ One exception to this pattern is for black men: the National Longitudinal Study of Youth 1997 study found that for incarceration and employment, the effects of growing up without a father figure were substantially larger for black men than for any other subgroup.⁵⁴

Research on family instability has produced equally ambiguous results. Two researchers used data from the Fragile Families and Child Wellbeing Study, a survey of 5,000 children born between 1998 and 2000 in medium to large cities, and found that experiencing a larger number of family structure transitions increased aggressive and anxious/depressive behavior among three-year-olds. But they found little evidence that the effects differed for black and white children.⁵⁵ Two other studies, using the National Longitudinal Study of Youth's 1979 and 1997 surveys, found that

white children's behavioral outcomes were harmed more by family structure transitions than black children's were. These three studies find conflicting evidence about whether boys or girls are more disadvantaged in their cognitive outcomes by family instability.⁵⁶

In summary, the evidence for disparate effects on the basis of parental attributes is less conclusive than the evidence for effects based on children's gender. For certain parental characteristics, such as education and age, research finds that children benefit more from a two-parent family—especially when it comes to advanced outcomes like college attendance—when their mothers start out with plentiful resources, and when the resource gains from marriage are also substantial. For other parental characteristics, such as race and ethnicity, the findings regarding disparate effects of family structure are mixed.

What Accounts for the Disparate Effects?

The evidence for differential effects of family structure on the criminal and labor market behavior of minority boys suggests that the channels by which family structure disproportionately affects racial minorities may be external to the family, rather than involving parental or financial resources. Along these lines, recent research using US Census data linked to tax records documents the role of neighborhoods in explaining gaps in the incomes, education, and incarceration of black and white boys, conditional on their parents' income. A high rate of black father presence in a locality strongly predicts positive outcomes for black boys, particularly in low-poverty neighborhoods. Notably, these neighborhood characteristics were predictive even after controlling for a child's own

family structure.⁵⁷ This study indicates that family structure may have spillover effects through neighborhood, peer, and school environments: the prevalence of single-parent families in the community where a child lives influences the wellbeing of children—particularly that of boys.

Conclusions

Researchers have long been attuned to how family environments shape children's wellbeing. In this article, my goal was to draw closer attention to the conditions under which children may experience differential benefits—or harm—from growing up in a particular family structure. I focused on how the effects of family structure vary with child and parent characteristics. Research indicates that growing up outside a family with two biological, married parents yields especially negative consequences for boys, with effects evident in educational, behavioral, and employment outcomes. On the other hand, the effects of family structure don't vary systematically for white and minority youth—with the exception of black boys, who appear to fare especially poorly in families and low-income neighborhoods without fathers present. Research also indicates that the benefits of marriage are greater when mothers have more resources to begin with, and that the largest gains from growing up in two-parent families occur in advanced outcomes such as college graduation.

The evidence on the disparate effects of family structure for certain groups of children may help explain certain aggregate US trends. For instance, although boys and girls are raised in similar family environments, attend similar schools,

and live in similar neighborhoods, boys are falling behind in key measures of educational attainment, including high school and college completion. The fact that boys' outcomes are particularly malleable to the family in which they're raised provides an explanation for this disparity.⁵⁸ For researchers, the next step is to understand the mechanisms through which family structure yields differential impacts. Factors external to the family may mediate the differential effects of family structure, but we need more evidence to guide policy.

And when we're considering policy, it's important to emphasize that the benefits of being raised by continuously married parents don't stem from marital status alone. Instead, parents' characteristics, their resources, and children's characteristics all work together. In particular, when their biological fathers have limited financial, emotional, and educational resources, children's cognitive and behavioral outcomes are no better when they're raised by married parents than when they're raised by non-married parents.⁵⁹ Perhaps for this reason, policies intended to encourage marriage or marriage stability among fathers with limited resources are unlikely to generate lasting benefits for children. Rigorous evaluations of federally sponsored policies designed to promote marriage among low-income families have found that these programs produced little improvement either in couples' relationship stability or in children's outcomes.⁶⁰

More encouraging are the efforts to supplement the educational, parental, and emotional resources available to children, particularly those who are most

likely to experience negative effects from nontraditional family structures. One example is the school-based program *Becoming a Man*, designed for at-risk boys in urban high schools. It follows a curriculum to develop socioemotional and relationship skills using cognitive-behavioral therapy techniques, and also incorporates mentorship. The program yielded substantial declines in juvenile arrests and smaller but still significant increases in high school graduation rates.⁶¹ Another example, Career Academies, creates small learning communities in low-income high schools.

This program has produced sustained positive effects on high school graduation, employment, and earnings, particularly for men.⁶²

Intriguingly, Career Academies has had a positive effect on the marital stability of male participants, and also led them to father fewer children outside of marriage. By focusing on children who experience the worst effects of the resource gap induced by nontraditional family structures, such programs may go on to promote child wellbeing in the next generation.

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