Institutional Determinants of Child Protection Systems in the United States

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A dissertation
submitted in partial fulfillment of the requirements for the degree of

Doctor of Philosophy

University of Washington

2017

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Program Authorized to Offer Degree:
Sociology
Abstract

Institutional Determinants of Child Protection Systems in the United States

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Child protection is a highly consequential social institution that simultaneously supports and regulates marginalized families. This dissertation shows that child protection systems are largely a product of the institutional environments in which they are enmeshed. Rates of child welfare intervention are closely tied to the character of a state’s social policy regime. Places with aggressive police forces and punitive criminal justice systems are likely to produce higher volumes of reported child abuse and neglect, and are likely to place more children into foster care. Places that exhibit high levels of racial inequality in their criminal justice systems are also likely to exhibit high levels of racial inequality in their foster care systems. Places with relatively generous social welfare systems are likely to place fewer children into foster care, and are likely to institutionalize fewer children in their foster care system. Taken as a whole, these findings show that child protection is sensitive to both feedback effects from criminal justice and welfare systems and to the political and institutional forces that guide policy design and implementation.
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ACKNOWLEDGMENTS

I have been the beneficiary of a series of supportive and intellectually challenging mentorships. Hedy Lee, Jake Rosenfeld, Alexes Harris, Heather Hill, Chris Wildeman, and Becky Pettit have all provided invaluable advice and support throughout the development of the works that add up to this dissertation. The combined wisdom of this group has been invaluable in pulling this project together. They’ve helped me to sharpen these analyses and taught me how to do both theoretically relevant social science and research that has an impact on public policy. Thank you.

A special thanks are due to Becky, Jake and Hedy for successively advising me through the first, middle, and final thirds of the project. For the record, Becky gets the first paper, Jake gets the second, and Hedy gets the third. These three have been incredible advisors and mentors.

I have the (bad?) habit of asking everyone for advice, and I’m very grateful that UW Sociology has accommodated this behavior. Katherine Beckett, Kyle Crowder, Bob Crutchfield, Jerry Herting, Steve Pfaff, Sarah Quinn, Kate Stovel, and Stew Tolnay have all provided valuable feedback and guidance on this project and on navigating the field. I’ve also been fortunate to have a brilliant set of graduate and postdoctoral colleagues. Lindsey Beach and Christina Hughes have been tremendous friends and co-conspirators from day one. Angela Bruns is the best office-mate one could ever hope for. Michelle O’Brien, Gonzalo Guzmán, Brian Sargent, Annie McGlynn-Wright, Emily Knaphus, Sarah Diefendorf, Mike Esposito, Yuan Hsiao, Andre Stevens, and Mahesh Somashekhar have all been good friends and provided helpful advice and feedback along the way. Thanks also to Rebecca Ferrell and the Center for Statistics and the Social Sciences for methodological guidance and support. I’m
also grateful to the UW Graduate School and the UW Department of Sociology for providing financial support for this research.

Thanks also are due to my early mentors Michael Young and Maya Charrad at the University of Texas. Ken Ward and Gerald Voorhes played a key role in nudging me into academia as an undergraduate. Traci Schlesinger, Julian Thompson, and Meggan Lee were great friends, colleagues, and mentors while working through the MA. I’m also grateful to Mariame Kaba, Mia Henry, Laurie Jo Reynolds and the good folks at AREA Chicago for always finding ways for me to plug in, do good work, and learn.

My mom has sacrificed a tremendous amount of time and energy pushing my education forward and showed unwavering confidence in my ability to do high-quality academic work. This dissertation would certainly not exist without her unfailing encouragement. My dad never has questioned my choice of career and has always been supportive of my work, though I’m sure he’s grateful to know that I’m finally done with being a student. Lisa Matthews introduced me to working in the difficult, rewarding, and heartbreaking foster care system, and I’m deeply grateful for that opportunity.

Catherine Clepper will always have had a PhD longer than I have, despite being a year younger than me, so she wins. There is absolutely no way I could have done this without her.
DEDICATION

For the young people who have grown up and aged out of foster care in Texas. They deserve far more than we’ve been able to provide.
Chapter 1

INTRODUCTION: CHILD PROTECTION, SOCIAL WELFARE, AND SOCIAL CONTROL

How do governments respond when they see that a child has been assaulted by a parent? Or when there isn’t enough to eat in the pantry and the utilities have been shut off? Or when a young child is left unattended? Across the United States, state and local governments are required to intervene forcefully into family life when they become aware that a child has been (or is likely to be) abused or neglected. To protect children from serious harm, child welfare agencies are granted among the more disruptive powers of the state; the ability to separate children from their families.

Child welfare agencies operate with a two-fold mission. First, and foremost, they are tasked with improving child well-being and reducing the incidence of severe child abuse and neglect. They are charged with delivering services and support to families in crisis, and intervening when children’s safety is compromised. At the same time, they are tasked with the formal social control of parenting. They are charged with administratively defining the boundaries of acceptable parenting and with punishing parents deemed to be unfit. These twin missions, promoting child welfare and regulating parental behavior, are in constant tension.

This tension, between providing for and protecting vulnerable children, on the one hand, and identifying and punishing deviant parents, on the other, animates the range of approaches that states have pursued to address the problems of child welfare and family violence. This dissertation shows that the strategies that states and local governments use to address poverty and regulate the poor broadly structure their child welfare systems. The
relative weight of punitive or supportive approaches to child protection are, in large part, a function of the local policy regimes in which child protection systems are embedded.

1.1 Child protection and U.S. social policy

In the United States, the social construction of parental fitness and the best interests of children is inextricably tied to class, gender, and race. American policy makers have historically favored paternalistic and targeted social welfare policies. In contrast to universalistic and unconditional approaches to welfare program design, both state and federal US governments tend to prefer social programs that are stratified by class, with anti-poverty programs providing limited benefits that are narrowly targeted and conditional on the behavior of beneficiaries. These behavioral conditions have been motivated by an enduring American obsession with the moral character and social pathology of the poor.

Longstanding perceptions of the poor as lazy, sexually promiscuous, and irresponsible are intimately tied to racist ideologies and middle and upper class gender and family norms (Gilens 2000; Gordon 1998; Roberts 1997). This fundamental ideological belief – that poverty is in large part caused by the moral failure of the poor – has led to the development of a relatively weak set of welfare state institutions that have a keen focus on surveilling and regulating the behavior of the poor (Piven and Cloward 1993). Accessing state benefits provides critical resources to struggling families at the same time as it opens them to the scrutiny of the state (Fong 2017; Gordon 1998; Roberts 2008). Child protection agencies act as a central and forceful component of this paternalistic style of welfare provision and family regulation.

While child welfare institutions emerged as a progressive and feminist reform intended to support families and respond to extreme forms of family violence (Gordon 1986; Sutton 1996), they have always balanced a fundamental tension between saving children from violence and neglect and defining the boundaries of family autonomy. Child welfare agencies are tasked with deciding when a government can legitimately break up a family. Like in many other policy domains, the degree of respect granted to families and their ability to care for their
children has often been a function of their race, class, and family structure. The development of this policy system has been geographically uneven and closely tied to regional politics and political economies. Until the late 20th century, there were no federal mandates for states to systematically protect children from abuse and neglect, and contemporary state child protection systems bear traces of the early histories of the regionally specific trajectories of welfare state development.

The political economy of white supremacy in the South and Southwest led to the systematic underdevelopment of welfare state institutions and the exclusion of African Americans and Latinos from eligibility for Progressive and New Deal era social programs (Fox 2010; Quadagno 1994). In the industrial Northeast and Midwest, robust welfare infrastructure was developed through the efforts of social reformers and private charities, though families of color were often formally or informally excluded or restricted to lower-quality services (Billingsley 1972). During the same period in the Midwest, Southwest and West, the federal government – in collaboration with state and local governments and a range of Christian and private organizations – developed an aggressive and culturally genocidal boarding school system designed to rapidly assimilate American Indian children into the white middle class mainstream (Adams 1995; Jacobs 2009, 2014).

Beginning with the formation of the U.S. Children’s Bureau, and dramatically accelerated with the passage of landmark federal child welfare legislation in the 1970s (most importantly, the Child Abuse Prevention and Treatment Act and the Indian Child Welfare Act), the federal government has become increasingly active in defining the minimum requirements and boundaries of what states must and must not do in their child protection systems. However, as with criminal justice and anti-poverty programs, states have tremendous discretion in legislating and implementing child welfare policy. This federal structure continues to have consequences for children and families.

As supportive and redistributive anti-poverty programs continue to come under assault through dog whistle racism and neoliberal anti-welfare politics (Gilens 2000; Lopez 2015; Quadagno 1994; Soss, Fording, and Schram 2011), and mass incarceration persists as an
engine of social and family inequality (Pettit and Western 2004; Sykes and Pettit 2014; Wakefield and Wildeman 2014), the role of child protection systems is unlikely to diminish. Despite efforts to improve equity for children and families of color in the child welfare system, and broad reforms aimed at reducing the utilization of disruptive out-of-home foster care placements, child protection systems themselves are intimately bound up and caught between the expansive and race-making carceral state and the increasingly austere and paternalistic welfare state (Gottschalk 2008; Lerman and Weaver 2014; Meiners 2017; Roberts 2012; Soss et al. 2011). The racial and political geography of criminal justice and social welfare policy (Gilmore 2007; Roberts 2008) drive demographic feedbacks and structure institutional environments that delimit state responses to child abuse and neglect.

1.2 The structure and operation of American child protection systems

Child welfare cases involve a series of complex decisions made by street-level workers generally subject to significant resource constraint (Lipsky 1980). At each decision point, workers weigh their assessment of the risks faced by children against the capacity of their agencies to intervene in a way that might help. The typical trajectory of a child protection case is illustrated in Figure 1.1. A child’s pathway through the child welfare system depends on a series of bureaucratic and legal decisions from a diverse cast of social policy actors, including police, teachers, doctors, social workers, lawyers, and judges.

Caseworkers are empowered to physically separate children from their families if they believe they have been or are likely to become victims of child abuse or neglect (statutory definitions vary by jurisdiction). This decision can result in the removal of a child from a dangerous situation. In extreme cases, such removals can be a lifesaving intervention. While being removed from one’s parents and placed into the care of strangers or an institution is nearly always a traumatic experience for a child, the emotional costs are often outweighed by the benefits of removing a child from a dangerous or harmful environment. This dual-character, at once a system of benefits provision and a system of social control, presents agencies with a complex policy calculus of balancing the known harms of aggressive
intervention against the unknown risk of non-intervention (Gainsborough 2010).

Of course, not all interventions are equal. Many children remain at home while parents and caseworkers enact a case plan and secure needed services. Some children experience only brief periods of separation from their families as caseworkers and social service providers work with caretakers to pursue family re-unification, the default preference for most child maltreatment cases. These short interventions can provide an opportunity to connect families with resources that may ultimately enhance the stability of a family and well-being of children. Some states prioritize systems of intensive service delivery with the explicit goal of family preservation through alternative response programs. This kind of focused supportive effort is widely endorsed by child welfare advocates (for cases in which maltreatment is not extreme) to minimize the harms of agency intervention for children and families.

However, preventive services and stabilizing resources for families are often underfunded
or difficult to access, and the success of family reunification efforts depend heavily on the perspectives of family court judges and caseworkers and the local accessibility of needed services and resources such as housing support or mental health treatment. Many children experience very long stays in the foster care system, and are often shuffled between families or institutions. At the extreme, some children will cycle through dozens of foster care placements by the time they reach the age of emancipation (generally between 18 and 21). These problems become especially pronounced for older children deemed behaviorally difficult by agencies or substitute care providers.

Children who experience long and unstable trajectories through the foster care system reach adulthood with few adults or peers with whom they have built loving and trusting relationships. Such network deficiencies leave young adults without relationships that can provide emotional or financial support (Perry 2006). While studies that demonstrate causal effects of long-term foster care on child outcomes are rare (Doyle Jr. 2007), a study that follows a cohort of youth that have aged out of the foster care system finds that they experience dramatically higher likelihoods of an early death, of incarceration, and of violent victimization than do their peers who did not experience foster care (Courtney et al. 2011).

Poor families make up an overwhelming majority of those investigated on suspicion of child abuse and neglect, and families of color are far more likely than their white peers to become subject to a child welfare investigation or to have children placed into foster care (Harris 2014). Intervention is concentrated among an already marginalized set of families. In many communities child protection caseworkers form part of a ‘carceral continuum’ (Shedd 2015) that subjects poor families of color to exceptionally high levels of state scrutiny and paternalistic regulation (Roberts 2008).

The lifetime risks of interacting with the child welfare system are dramatically higher for African American and American Indian children than for white children (Kim et al. 2016; Wildeman and Emanuel 2014). At the same time, there is tremendous variation in the magnitude of inequalities in child welfare systems across places, and these inequalities are poorly explained by spacial variation in family disadvantage and child well-being (Wulczyn
Figure 1.2: Child poverty and foster care caseloads per capita by quintile, US States 2014 et al. 2013). While much of the micro-level association between race and child welfare intervention can be explained by exposure to poverty and child maltreatment (Putnam-Hornstein et al. 2013), aggregate levels of child and family disadvantage fail to explain spatial variation in total rates of intervention and racial disparities in rates of intervention. Figure 1.2 shows the distribution of foster care entries and child poverty across the United States. States with the highest levels of child poverty per capita place children into foster care relatively infrequently, while states with lower rates of child poverty often place a greater share of their child population into the foster care system.

Contact with the child welfare system is highly consequential for children and families. The ambivalent character of child welfare agencies — charged with both rescuing children and policing the behavior of parents — positions the child welfare agency as simultaneously benevolent and threatening to marginalized families. Intervention may both protect a child from harm from their parents and caretakers at the same time as it disrupts relationships and exposes a child to a new set of risks in the foster care system. The resources available to child protection agencies, the availability of less-disruptive alternative to foster care, the
magnitude of family disruption caused by mass incarceration, the racial geography of family surveillance (Roberts 2008), and the institutionalization of either supportive or coercive welfare strategies all play a role in affecting the likelihood of child welfare intervention.

1.3 Understanding the relationship between institutions and child protection

This dissertation directly explores how and why systems for child protection vary across places. Both the quantity and quality of services and interventions experienced by children and families depend on the political and institutional environments in which child welfare systems are embedded. The probability of an abused or neglected child becoming the subject of an investigation and receiving critical services depends, in part, on the place in which they live. At the same time, the probability that a family experiences excessive disruption from child welfare officials is partially explained by the magnitude of surveillance and routinization of disruption in state and local policy systems.

Rather than treat child welfare intervention as evidence of family pathology, I treat action by child welfare agencies as a distinctly institutional artifact. By recognizing that a child abuse report is as much a trace of the action of organizations as it is an indication of family crisis, we can evaluate how the structure of family surveillance affects the organizational pathways through which children come to the attention of the state. By treating foster care placement as one among many hypothetical choices available to policy makers and street-level bureaucrats, we can explore how social policy regimes structure the magnitude of disruption experienced by marginalized families. Child maltreatment and family inequality are interactively bound up with historical institutions and the contemporary politics of social policy.

This dissertation consists of a series of statistical analyses of federal data on child abuse and neglect investigations and children in foster care that explore how and why child protection systems vary across places. It addresses three primary empirical questions:

1. Do state foster care systems vary as a function of state social policy regimes?
2. Are state policy systems coherently racialized across distinct policy domains?

3. Does variation in the structure and operation of law enforcement affect the intensity of family surveillance?

In chapter two, I explore how state policy regimes structure foster care systems. Using administrative data on child protection, criminal justice, and social welfare interventions, I show that children are separated from their families and placed into foster care far more frequently in states with extensive and punitive criminal justice systems than in states with broad and generous welfare programs. However, large welfare bureaucracies interact with welfare program enrollment to create opportunities for the surveillance of families, suggesting that extensive and administratively complex welfare states engage in “soft” social control through the surveillance and regulation of family behavior. The chapter further shows that institutionalization, a particularly restrictive form of foster care placement, is least common in states with broad and generous welfare regimes and generally more common under punitive regimes. Policy regimes influence the interaction between families and the state through their proximate effects on family structure and well-being and through institutional effects that delimit the routines and scripts through which policymakers and street-level bureaucrats intervene to protect children.

Chapter three examines whether the dramatic and durable racial inequalities in American child protection systems are a feature of local racialized policy regimes. This chapter shows that states with high levels of disparity in rates of African American and Native American incarceration are also likely to have high levels of racial disparity in child protection interventions and outcomes, conditional on disparities in exposure to known risk factors for child abuse and neglect. These results strongly suggest that state social policy regimes are coherently racialized in a manner that produces unequal levels of coercive intervention across formally distinct policy domains. These systematic relationships between inequalities in distinct forms of coercive state intervention encourage a multi-institutional approach to theorizing the relationships between race, formal social control, social policy,
and family inequality. Race, punishment, the welfare state and family regulation are tightly bound up with the ways that local policy regimes institutionalize and reinforce racial difference.

Chapter four investigates whether child welfare system involvement is a partial function of the intensity of police surveillance. As sentinels for child welfare systems, contact with police can trigger contact with a range of other state agencies and may result in additional interventions targeted at family members not directly subject to criminal suspicion. Given the clear associations between criminal justice and child protection outcomes demonstrated in chapters two and three, this analysis explores whether the organization of policing functions as a mechanism for spacial variation in child welfare intervention and inequalities in child welfare intervention. Using administrative data on investigated reports of child abuse and neglect, I model the relationships between volumes of reports filed by police and the local organization of police agencies, measured as enforcement activity, budgets, and staffing levels. Patterns of policing may play a direct role in magnifying childhood inequality through affecting which children and families become subject to child maltreatment investigations. Results from this analysis show that rates of arrest, staffing levels, and operating budgets are closely associated with police maltreatment reporting across places, but only for children of color. However, these results do not identify a clear within-county longitudinal relationship between policing and maltreatment reporting. These suggest that both criminal and family surveillance are intertwined and that these linkages may be an institutional cause of racial disparities in child welfare case outcomes.

Taken as a while, the findings from this dissertation show that state intervention is not merely a mechanical response to the incidence of a social problem. Action by the state is a social, political, and organizational product. No model of policy intervention is complete without a nuanced treatment of the social construction of the target population, the political process of making policy and allocating resources, the institutional environments in which routines develop, and the organizational processes through which decisions are made (Lipsky 1980; Pierson 1994; Schneider and Ingram 1993; Skocpol 1995). Child protection systems are
directly influenced by the local configurations of both welfare and carceral systems. Child protection systems are also embedded in the same institutional environments that structure how policy makers and front-line workers explain and respond to poverty and family crisis. The findings from this dissertation show that local policy institutions play a powerful role in determining which children come to the attention of child protection systems.

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Chapter 2

PUNISHMENT, REDISTRIBUTION AND STATE FOSTER CARE SYSTEMS

2.1 Abstract

This study shows that state efforts at child protection are structured by the policy regimes in which they are enmeshed. Using administrative data on child protection, criminal justice, and social welfare interventions, I show that children are separated from their families and placed into foster care far more frequently in states with extensive and punitive criminal justice systems than in states with broad and generous welfare programs. However, large welfare bureaucracies interact with welfare program enrollment to create opportunities for the surveillance of families, suggesting that extensive and administratively complex welfare states engage in “soft” social control through the surveillance and regulation of family behavior. The article further shows that institutionalization, a particularly restrictive form of foster care placement, is least common in states with broad and generous welfare regimes and generally more common under punitive regimes. Taken together, these findings show that policy regimes influence the interaction between families and the state through their proximate effects on family structure and well-being and through institutional effects that delimit the routines and scripts through which policymakers and street-level bureaucrats intervene to protect children.

2.2 Introduction

Child protection is the dominant means through which states seek to control the behavior of parents and ensure the welfare of children. Foster care, in which children are separated from their parents or guardians and placed with an alternative caregiver, is one of the
principal tools states use to address child abuse and neglect. This form of coercive welfare intervention has an exceptionally broad reach. Between 2002 and 2011, an average of 1.4 percent of children in the United States came into contact with the foster care system each year. Recent estimates suggest that 5.9 percent of all U.S. children experience foster care at some point during their childhood; 15.4 percent of Native American children and 11.5 percent of African American children enter foster care at some point between birth and age 18 (Wildeman and Emanuel 2014). States vary tremendously in their frequency of intervention. For example, children in Iowa enter foster care at a rate 4.5 times greater than do children in neighboring Illinois, and children in Wyoming enter foster care at a rate 4.8 times greater than do children in Virginia (see Figure 1). This study shows that a key force driving variation in child protection intervention is the structure of a state’s social policy regime. The extent to which a state prefers punitive or redistributive strategies for addressing social problems affects both the frequency of child protection intervention and the character of those interventions.

Despite the consequential roles assigned to child welfare agencies and the impact that intervention has on families, few sociological investigations directly examine the causes and effects of child protection (exceptions include Perry 2006; Reich 2005; Swartz 2005; Wildeman and Emanuel 2014; Wildeman and Waldfogel 2014), and fewer still consider why states differ in their implementation of child protection (Swann and Sylvester 2006). Prior research has evaluated the role that incarceration and cash welfare programs have on increasing or decreasing rates of foster care entry by increasing or decreasing the likelihood of child abuse or affecting families’ capacity to care for children (Andersen and Wildeman 2014; Swann and Sylvester 2006). However, no prior studies have leveraged the insights of comparative social policy research to examine how differences in the general strategies states use to address social problems, frequently characterized as policy regimes (Beckett and Western 2001; Esping-Andersen 1990; Foster and Hagan 2015; Fox 2010; Sutton 2013), structure variation in the

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1 Author’s calculation using AFCARS 2002 to 2011 data (Children’s Bureau 2013a).
2 Author’s calculation using AFCARS 2002 to 2011 data (Children’s Bureau 2013a).
implementation of child protection between states. Child protection agencies are tasked with the dual, and frequently contradictory, tasks of coercive social control of parenting on the one hand, and provision of supportive services and resources for struggling families and children on the other (Gordon 1989; Pelton 1989). This ambivalent functional role and administrative structure makes child protection a novel case to explore how the character of a state’s policy regime may broadly structure social policy in domains beyond criminal justice (Sutton 2013) and entitlement or means-tested welfare programs (Esping-Andersen 1990).

Unlike prior studies that consider relationships between social policy and foster care intervention through their micro-level impacts on family structure, resources available to families, or parental behavior, this study suggests that responses to the problem of child abuse are institutionally and politically constructed through the formal and informal interactions of families, street-level bureaucrats, agency administrators, advocacy groups, politicians, courts, and the public (Burstein 1991; Ellermann 2009; Haney 2000; Swartz 2005). These structured relationships can become crystallized as a social policy regime, routinizing and institutionalizing particular styles of intervention (Esping-Andersen 1990; Foster and Hagan 2015; Sutton 2013). State preferences for social policy interventions can be characterized along a continuum, with exclusive and punitive policies at one extreme and inclusive and redistributive approaches at the other (Beckett and Western 2001; Bourdieu 1998). These institutionalized affinities for punitive or redistributive responses to social problems are significantly related to the frequency of family separation and the experiences children have while in the care of the state.

Using panel data on patterns of state child protection constructed from the Adoption and Foster Care Analysis and Reporting System (AFCARS), this study shows that after controlling for relevant demographic, social, and political contexts, states with expansive and generous welfare regimes place fewer children into foster care than do states with expansive and punitive criminal justice systems. However, the administrative complexity of a state’s welfare bureaucracy interacts with welfare program enrollment to produce higher rates of foster care entry, likely through increased opportunities for the surveillance of marginalized
families by street-level bureaucrats. This analysis further shows that states with broad and generous redistributive programs place fewer children in restrictive institutional settings than do states that pursue punitive approaches to social problems. Placing a child into foster care is not merely a mechanical response to the incidence of child maltreatment. The frequency and coerciveness of child protection is institutionally structured by a state’s embrace of punishment or redistribution as an appropriate intervention to address social problems.

The findings of this study suggest that disruptive methods of child protection are institutionally aligned with punitive forms of social control. The results also provide evidence that coercive strategies for the regulation of families and children are generally suppressed in regimes that adopt inclusive or redistributive approaches to social problems. Despite ambitious theoretical claims of the broad effects of social policy regimes, comparative scholars typically examine only a small subset of social policy outcomes at the theoretical extremes of the social policy distribution—transfer-based welfare programs and criminal justice (Barker 2009; Beckett and Western 2001; Fox 2010; Soss, Fording, and Schram 2011; Sutton 2013). This study confirms that policy regimes have broad and powerful relationships to the strategies states pursue to achieve social control and provide social welfare.

2.3 The Structure of Child Protection in the United States

States conduct formal social control over parenting through child welfare agencies (Reich 2005). They do so by enforcing prohibitions against legally codified unacceptable parenting behavior, establishing a system for the surveillance of child maltreatment, providing a formal process through which violations can be investigated and classified, and intervening in a manner that both sanctions parents and protects children. These agencies also act as conduits through which services aimed at supporting and preserving families in crisis are delivered. Street-level child protection workers assist families in accessing medical, mental health, entitlement, and in-kind resources and are tasked with actively working to reunify children separated from their families when courts deem these efforts feasible and safe (Bartholet 1999; Lindsey 2004). Placing a child into foster care simultaneously punishes parents
deemed inadequate or dangerous and provides children and families in crisis with protection and services.

Child welfare agencies rely on a diffuse surveillance network of voluntary observers and various categories of professionals required by law to report suspected child abuse or neglect. Statutes and procedures vary, but if children are perceived to be in imminent danger, caseworkers are empowered to remove children from their families and take them into state custody. After removal, the state generally assumes legal guardianship of the children and assigns them to a temporary home with either a member of their extended family (over 22 percent of cases), a non-relative foster home (approximately 40 percent of cases), a group home (approximately 7 percent of cases), or a more restrictive institutional setting such as a residential treatment center (approximately 9 percent of cases). A family or juvenile court decides on the appropriateness of either reunifying children with their families or permanently separating a child from the family and terminating parental rights, “freeing” a child for adoption (Bartholet 1999).

Within the constraints set by the funding incentives and requirements of federal policy, states have broad discretion in the legislation and implementation of child protection policy. States are guaranteed federal funding for foster care and limited family preservation services through Title IV-E and Title IV-B of the Social Security Act; many state and local governments commit additional resources to child protection or maltreatment prevention services (DeVooght 2014). Within states, child protection investigation and intervention can be either fully administered at the state-level or decentralized to county agencies. Some

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3Data from AFCARS suggest that over 95 percent of foster care entries happen against the wishes of parents or caretakers, although this is likely an underestimate of the true number of involuntary placements. Some states, such as New Jersey, where approximately 60 percent of placements are reported as voluntary, appear to coerce parents into signing voluntary placement agreements.

4The sum of these figures is less than 100 percent. I exclude other potential locations for children, such as having run away or being otherwise unaccounted for, being in a pre-adoptive home, being in supervised independent living for older youth, or trial home visits. Figures are author’s calculation using AFCARS 2002 to 2011 data.

5States also routinely fund foster care services through Medicaid and TANF, but these figures are difficult to identify and compare systematically (DeVooght 2014).
states take the further step of privatizing the administration and supervision of foster care services, which affects the relationship between politics, public concern, and agency activity (Gainsborough 2010).

Child protection agencies depend on the bureaucracies and street-level workers from neighboring social policy fields for their day-to-day operation. States have wide latitude in establishing statutory definitions of abuse and neglect, as well as in identifying categories of mandated reporters of child maltreatment (Connelly 2014). Surveillance of child abuse and neglect depends on the detection and reporting of suspected maltreatment to state agencies by police, teachers, social workers, and medical professionals. Between 2007 and 2011, these types of professionals accounted for 75 percent of non-anonymous reports and 58 percent of all reports (Children’s Bureau 2013b). The nature and frequency of contact between at-risk children and families and various categories of mandated reporters depends directly on the structure and breadth of state services in criminal justice, entitlement welfare, education, and public health.

2.4 Child Protection and Policy Regimes

Variation in state criminal justice and welfare programs affects the risk that families may abuse or neglect their children (Courtney et al. 2005; Swann and Sylvester 2006; Wakefield and Wildeman 2014). However, variation in social policy also signals differences in how states define and respond to social problems. Social policy is broadly structured by institutional and political forces that lead states to diverse packages of policy outcomes. These policy regimes create institutional pathways that make collaboration, isomorphism, or drift across domains more likely (DiMaggio and Powell 1983; Hacker 2004). Regimes structure the ideological frameworks and schemas that policymakers, bureaucrats, and the public use to narrate the causes of social problems and orient their attitudes toward particular styles of intervention or governance (DiMaggio 1997; Foucault 2003; Garland 2001; Simon 2009). Policy regimes have clear effects on states’ approaches to social welfare (Brown 2013b; Esping-Andersen 1990; Fording, Soss, and Schram 2011; Fox 2010; Hooks and McQueen 2010) and criminal
justice (Barker 2006; Beckett 1997; Beckett and Western 2001; Campbell and Schoenfeld 2013; Gottschalk 2006; Lacey 2010; Lynch 2009; Page 2011).

Despite ample theoretical reason to suspect that the effects of policy regimes should extend broadly to the social policy landscape, we have little comparative evidence to assess how regimes structure state programs that are neither explicitly redistributive nor punitive. Comparative analysis of coercive welfare programs, such as child protection, can provide a useful test to evaluate whether the schematic logics and feedback effects produced by policy regimes drive heterogeneous policy outcomes. Historians and theorists have long argued that regimes broadly structure the diverse regulatory and disciplinary components of welfare states (Donzelot 1997; Foucault 1995, 2003; Garland 1987; Gordon 1986; Piven and Cloward 1993; Platt 1969; Polsky 1993; Roberts 2012), but to date few comparative studies empirically test these claims.

2.4.1 Child Protection and Social Welfare Policy

Child protection is motivated by a desire to prevent harm to children caused by parents or other caregivers. It has deep historical ties to progressive social policy reform (Gordon 1989; Tanenhaus 2004), and its professional discourses are grounded in improving children’s well-being (Lindsey 2004). Advocates of child protection argue that states have an affirmative obligation to provide safe and secure accommodations for children when parents are unable or unwilling to do so themselves (Bartholet 1999). They argue that these interventions are a regrettable but necessary component of a broad and generous welfare state and that current efforts do not go far enough to protect children (Epstein 1999). Critics counter that child protection is a vehicle through which states monitor and punish parents and families who fail to conform to hegemonic parenting standards (Abramovitz 1988; Roberts 2012). Given research demonstrating that the construction of the social problem of child abuse depends on the demonization of families that deviate from normative parenting ideals (Best 1993; Nelson 1986; Pfohl 1977), these critics suggest that child protection agencies’ primary task is the regulation of marginalized families and parents (Donzelot 1997; Roberts 2002). The links
between welfare policy and child protection suggest a complex set of relationships between the scale and character of redistributive welfare services and child protection intervention.

As the ease with which families can access entitlement benefits and the value of benefits increase, the incidence of child abuse and neglect cases that are primarily a function of material deprivation should decrease, as poverty is among the key risk factors for child maltreatment (Sedlak et al. 2010). Several studies suggest that as welfare benefits decrease and welfare eligibility becomes more restrictive, foster care entries increase as a function of families’ increasing inability to care for their children (Courtney et al. 2005; Swann and Sylvester 2006). Generous social policy regimes are also likely to dedicate more resources to the prevention of child abuse and neglect as part of a general effort to address and ameliorate social problems associated with poverty (Epstein 1999).

Caseworkers and agencies may be faced with difficult decisions about child removal when supportive resources are scarce or funding for services is institutionally contingent on the state’s custody of a child. Because federal funding for many services for children and families is made available only when children are in out-of-home foster care (DeVooght 2014), street-level child protection workers frequently face a perverse incentive to remove children to trigger funding for needed services. States with expansive welfare services are less likely to rely on foster care as the sole mechanism to provide resources to children and families, as they provide street-level bureaucrats with a wider and more palatable menu of options for routine intervention to address abuse and neglect. These two potential mechanisms—the effects of welfare programs on the risk of child maltreatment and the availability of alternatives to foster care for caseworkers—suggest a negative relationship between welfare generosity and foster care entry.

**Hypothesis 1:** Foster care entries will decrease as the breadth and generosity of a state’s welfare programs increase.

However, the increasing administrative breadth of the welfare state, coupled with increased enrollment of eligible families, may increase the frequency of opportunities for the
surveillance of low-income families by street-level bureaucrats. The development of social welfare policy creates a proliferation of state opportunities for the social control of populations (Bourdieu 1998; Donzelot 1997; Foucault 1995, 2003), particularly of marginalized groups (Gilliom 2001; Gordon 1998; Simon 1993). As more families come into contact with service providers, nearly all of whom are mandated reporters of child maltreatment, there is an increase in the opportunity for the detection and reporting of child abuse and neglect. Welfare state services may then become a gateway for more coercive and intrusive forms of social control. The detection of child abuse and neglect likely increases as a function of the interaction between the enrollment of families in state services and the administrative capacity of the state to surveil enrolled families.

**Hypothesis 2**: Foster care entries will increase as opportunities for surveillance of families by street-level welfare bureaucrats increase.

Child protection interventions will likely be less coercive and less disruptive under generous social policy regimes. These states are more likely to pursue minimally disruptive approaches that preserve family ties (Bartholet 1999; Gainsborough 2010), when feasible, and avoid the use of restrictive institutional settings for out-of-home placement of children in state custody. Redistributive regimes have historically not been averse to utilizing coercive institutional interventions (Polsky 1993), but critiques of institutionalization and coercive confinement (e.g., Platt 1969) have likely been effective in undermining contemporary support for institutionalization under redistributive regimes. Child welfare advocacy organizations have publicly argued against restrictive foster care settings; these efforts have likely been more successful in states with redistributive policy regimes (Shatzkin 2015).

**Hypothesis 3**: The rate of institutionalization of children in foster care will decrease as the breadth and generosity of a state’s welfare programs increase.
2.4.2 Child Protection and Criminal Justice Policy

Child protection also has a complex set of relationships to state criminal justice policy. First, a parent’s incarceration can have immediate and long-term consequences for a family’s stability and structure. Parental incarceration has a clear disruptive effect on a family’s ability to care for a child (Braman 2007; Comfort 2008; Geller et al. 2009; Wakefield and Wildeman 2014) and increases the likelihood of foster care entry by increasing the risk of child maltreatment (Andersen and Wildeman 2014; Swann and Sylvester 2006; Wildeman et al. 2014). Because incarceration strains the resources of individuals who share ties with multiple incarcerated individuals, foster care caseloads and entries are likely to increase as relatives available for informal kinship care reach their capacity for helping (Comfort 2008; Sykes and Pettit 2014; Western and Wildeman 2009). Moreover, incarceration is concentrated in low-income communities of color (Pettit 2012), so these effects are likely to disparately affect already marginalized groups. These direct impacts on families are not the only ways that state punishment structures foster care, however.

Punitive social policies seek to inflict pain in response to the violation of informal or formal rules (Golash 2006). Substantial evidence from qualitative research shows that punitive sanctions are a major part of the toolkits used by street-level child protection caseworkers and judges in family courts (Reich 2005; Roberts 2008). Deference to formal authority and compliance with case plans, rather than children’s best interests, are frequently used in official assessments of parental fitness and may have substantial impact on judicial decisions about foster care entry and parental reunification (Reich 2005). In communities that are under intense surveillance and subject to routine intervention, mothers of color frequently perceive child protection agencies as a threat rather than a resource (Roberts 2008). Both the negative impacts of incarceration on families and the institutional affinity between punishment and family separation suggest a positive relationship between foster care entry and the punitiveness of social policy regimes.

Hypothesis 4: Foster care entries will increase as the utilization of expressive punishment,
the scale of policing, and incarceration rates increase.

By definition, states with punitive social policy regimes prefer coercive strategies to manage social problems. Most institutional settings for foster care rely on involuntary confinement, regimented discipline, and structured treatment. Coercive confinement in contexts beyond criminal justice will likely be considered less objectionable in states that more routinely rely on punishment than in states that do not. Policymakers operating within punitive regimes may also be less sympathetic to reformers’ efforts to reduce the use of these kinds of settings for foster care (e.g., Annie E. Casey Foundation 2009). As such, I expect punitive states will utilize institutional settings for the foster care of children in their custody more frequently than will states with less punitive social policy regimes.

**Hypothesis 5**: The rate of institutionalization of children in foster care will increase as the utilization of expressive punishment, the scale of policing, and incarceration rates increase.

### 2.5 Analytic Strategy

This analysis provides a first empirical test of the relationships between social policy regimes and child protection intervention. By modeling counts of foster care entries and the frequency of institutionalization of children in foster care, I provide evidence that policy regimes influence both the scale of child protection intervention and the character of care that children in state custody receive. These findings suggest that the institutionalization of redistributive or punitive approaches to social problems affect child protection outcomes both mechanically, through affecting the risk of child maltreatment, and institutionally, through structuring the preferences, norms, and rules that influence decisions by policymakers and street-level bureaucrats.

I provide a descriptive summary of the scale and character of foster care intervention nationally and between states in the United States for the years 2002 through 2011, followed by a series of multilevel regression models that test relationships between regime characteristics and foster care outcomes. First, I model foster care entries at the state-year level
as a function of a state’s policy regime\textsuperscript{[6]} controlling for relevant demographic and political variables. Second, I model the frequency of the institutionalization of children in foster care in residential treatment centers or other restrictive environments as a function of variation in social policy regimes. I then compute a series of predicted rates of foster care entries and rates of institutionalization based on theoretically motivated counterfactuals and parameter estimates drawn from simulated replications\textsuperscript{[7]}

2.6 Data and Measures

States are required by law to report information about all children involved in foster care to the U.S. Department of Health and Human Services through the Adoption and Foster Care Analysis and Reporting System (AFCARS), providing a case-level description of all children involved in state-supervised foster care or adoption (Children’s Bureau 2013a)\textsuperscript{[8]} For the years under consideration here, 2002 to 2011, AFCARS reports a national average of 1,026,583 contacts with foster care per year, or a total of 12,319,001 case-years. To measure the scale of foster care intervention, I constructed state-year level counts of foster care entries from case-year level AFCARS data. Entries are counted as all children that came into foster care during the reporting period. AFCARS reports the current setting of a child’s foster care placement, including a code for institutions such as detention centers, residential treatment centers, and inpatient mental hospitals. Disaggregating this range of institutional placement settings might reveal qualitative variation in institutionalization between places, but such distinctions are not possible with currently available data. I rely on these counts of children in institutional foster care to provide a measure of the frequency of a state’s utilization of restrictive forms of child protection, an important qualitative indicator of the kind of foster

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\textsuperscript{6}For a detailed discussion of the complexities and debates surrounding strategies for constructing operational measures of state policy regimes, see Appendix A.

\textsuperscript{7}All R scripts written for the analyses described in this article are available at https://github.com/f-edwards/fc-entries.

\textsuperscript{8}Data quality concerns with Connecticut’s reports led them to be excluded from AFCARS reports for the years 2002 to 2005.
care states provide to children in their custody.

To triangulate a state’s social policy regime (Meyers, Gornick, and Peck 2001), I rely on three categories of measures: expressive policy action, policy extensiveness, and administrative breadth. The punitiveness of a social policy regime is measured through the issuance of new death sentences in state courts, incarceration rates, and the number of full-time state and local police officers employed in a state per capita. Incarceration rates, a measure of the extensiveness of a state’s punitive social policy, include persons held in state and local correctional facilities per capita, obtained from the Bureau of Justice Statistics’ National Prisoner Statistics (U.S. Department of Justice 2013). Counts of issued death sentences by state and year, a measure of a state’s utilization of expressive punishment, are compiled by the Death Penalty Information Center (2015) from the Bureau of Justice Statistics’ Capital Punishment Annual Reports, included here as rates of new death sentences issued per prison admission at the state-year level. Data on the number of full-time officers employed by state and local law enforcement agencies are provided by the Annual Survey of Public Employment and Payroll conducted by the U.S. Census Bureau, and are included here as officers per capita to capture the administrative breadth of state criminal justice regimes.

The expressive generosity of a state’s welfare regime is measured through the maximum benefit for a family of three available through TANF, adjusted for state regional price parity (obtained from the Bureau of Economic Analysis) and inflation. The extensiveness of a state’s welfare regime is measured by enrollment per children in poverty for TANF, and enrollment per persons in poverty for SNAP and Medicaid. These measures are compiled by the University of Kentucky Center for Poverty Research (UKCPR) (2014). Finally, I measure the administrative breadth of a state’s welfare regime with data on full-time public welfare workers per capita, obtained from the Annual Survey of Public Employment and Payroll. I handle the small proportion of missing data for policy regime measures through multiple imputation, using adjustments for the panel structure of these data (Honaker and King 2010; Honaker, King, and Blackwell 2011; Rubin 1996).

Regional and temporal heterogeneity in population characteristics associated with crime,
poverty, child maltreatment, and political processes all likely influence social policy outcomes. Prior research has established that family structure, parental employment, and socioeconomic status are correlated with child abuse and neglect (Sedlak et al. 2010). To capture the exposure of a state’s population to risk factors for child maltreatment, I include measures for rates of child poverty, unemployment, single-parent-headed households, and adults over age 25 with less than a high school education using the 2000 Decennial Census and 2001 through 2011 American Community Survey (ACS) (Ruggles et al. 2010). I also include a measure of food insecurity, calculated as an index of responses to questions about access to food and hunger from the Current Population Survey and compiled as three-year rolling averages by the UKCPR (2014). Gross state products per capita, adjusted for inflation, also provided by the UKCPR through the U.S. Department of Commerce, act as a control for the relative prosperity of a state. I calculated crime rates from the FBI’s Uniform Crime Reports as the sum of violent and property index crimes known to police per capita.

Political ideology may play an important role in structuring a state’s response to perceived social problems, so I include a measure of state legislative ideology lagged by one year (Berry et al. 1998). Political ideologies play a key role in structuring criminal justice and welfare regimes (Gilens 2000; Jacobs and Helms 2001; King 2008), but child protection has a more ambiguous and under-examined relation to political partisanship (Gainsborough 2010). I also provide a measure of the proportion of a state’s population that is black, providing a limited control for the role of racial politics on foster care policy. During this time period, black children entered foster care nearly 3.9 times as frequently as white children and research suggests that racial hostility and paternalism play an important role in structuring

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9 ACS one-year samples produce significant measurement error for states with small numbers of people in groups of interest. To reduce this problem, I calculate three-year moving averages of state characteristics from single-year surveys for the years 2002 to 2006, and include three-year moving averages provided by the Integrated Public Use Microdata Series (IPUMS-USA) for 2007 to 2011 (Ruggles et al. 2010).

10 I use a NOMINATE measure of state legislative ideology provided by Berry and colleagues (1998) for this analysis. Because Nebraska has a nonpartisan legislature and the ideologies of legislators within the same party likely differ significantly between places, I chose to focus on this measure of ideology rather than measures of partisan composition of state legislatures.

11 Author’s calculation using AFCARS data 2002 to 2011.
social policy (Brown 2013a; Bruch, Ferree, and Soss 2010; Keen and Jacobs 2009; Roberts 2002; Welch and Payne 2010).

2.7 Statistical Methods

I model expected counts of total foster care intervention and counts of outcomes for children within foster care as Poisson distributed with state and year random intercepts, an exposure term to adjust for the size of the relevant eligible population, and an overdispersion term (Harrison 2014). The inclusion of state and year random intercepts adjusts for clustering of observed outcomes caused by repeated measurements of states over time and correlations induced by year-to-year national trends (Gelman and Hill 2007). I chose these partially-pooled multilevel models to account for both between and within state variation in child protection outcomes in parameter estimates. This multilevel approach, in which state- and year-level random intercepts are simultaneously modeled with population average fixed effects, partially pools the estimates of random effects toward their group average, down-weighting extreme values that occur with classically estimated intercepts (as group dummy variables) due to the limited number of observations available in the relatively short time-span covered in these data. This approach is a better theoretical and methodological fit for this analysis than are alternative approaches that exclusively model within-state changes over time, or fully pooled models that fail to correct for autocorrelation and heteroscedasticity induced by including repeated measurements of states over time. These models enable an examination of how differences in the structure of policy regimes relate to foster care outcomes between states, as well as how shifts in the orientation of regimes within states affect child protection efforts.

12 All models are estimated in R (R Core Team 2014) using the glmer() function from the lme4 package for mixed-effects models (Bates et al. 2014), estimated by maximum likelihood. Overdispersion is estimated as an observation-level intercept, following Bolker and colleagues (2009); Gelman and Hill (2007); and Harrison (2014).

13 Measures of social disadvantage and population well-being (child poverty, food insecurity, educational attainment, unemployment, and single-parent family structure) are correlated with each other (.4 .8). Variance Inflation Factor (VIF) values for all measures are less than 10, and for all models VIF values for
Expected values of outcome variables are modeled as follows:

\[ y \sim \text{Poisson}(X, \text{exposure}) \]

\[ \log(E(y|X)) = \beta_0 + \beta X + \delta + \gamma + \theta + \log(\text{exposure}) \]

\[ \delta_s \sim N(0, \sigma^2_\delta) \]

\[ \gamma_t \sim N(0, \sigma^2_\gamma) \]

\[ \theta_{st} \sim N(0, \sigma^2_\theta) \]

Where \( y \) is a vector of observed counts of child protection outcomes, \( X \) is the matrix of observed state-year level values for predictors, \textit{exposure} is the size of the eligible population from which \( y \) is drawn (the state-year child population for foster care entries and the foster care caseload for institutionalization), \( \delta \) is a vector of state-level random intercepts, \( \gamma \) is a vector of year-level random intercepts, and \( \theta \) is an observation-level overdispersion term.

Results from these regression models clarify the statistical significance and direction of relationships between social policy regimes and child protection, but they do not provide easily interpretable information about the magnitude of relationships in terms of expected changes in outcomes of interest for theoretically interesting counterfactual scenarios. I provide visualizations\(^{14}\) of expected rates of foster care entry and institutionalization in Figure 2 for a series of counterfactual states with varying policy regime configurations. These results are produced through an algorithm for estimating expected values of interest and model uncertainty with simulated replications developed by King, Tomz, and Wittenberg (2000)\(^{15}\).

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\(^{14}\) I produced simulation results and Figure 2 in R using packages simcf (Adolph 2013a) and tile (Adolph 2013b).

\(^{15}\) I draw two sets of simulated parameters (\( n = 10,000 \)) from a multivariate normal distribution with means equal to the vector of parameter point estimates provided in Table 2.8.2 Models 1 and 2, and variance-covariance matrices calculated from the observed data. I specify counterfactual scenarios in which predictors are incrementally increased from their observed minima to their observed maxima. Expected values focal measures are less than 2. To improve model convergence and interpretability, I scale all independent measures to \( x = 0, s = 1 \). Alternative specifications using principal components calculated from this set of social disadvantage measures produce results similar to those presented here.
2.8 Findings

2.8.1 Descriptive Findings

States vary considerably in the frequency of foster care entry, the rate at which children in foster care are institutionalized, and the structure of their social policy regimes (see Table 2.8.1). To demonstrate the geographic patterns of this variation, Figure 1 displays a series of maps of state-level 2002 to 2011 average values of focal measures in quintiles. Table 2.8.1 provides a description of outcome and predictor variables between 2002 and 2011. An examination of the ranges and standard deviations of focal measures shows dramatic heterogeneity between states’ child protection systems and the contexts in which they make and implement policy.

Foster care is a relatively common experience for children and families. Between 2002 and 2011, the average state placed about 4.5 children per thousand in its population into foster care per year, and had about 15.7 children per thousand on its caseload. Illinois had the lowest average rate of foster care entry during this period (1.7 entries per 1,000 child population); Wyoming had the highest average rate of foster care entry (8.4 entries per 1,000 child population) (see Figure 1). Virginia had the smallest average foster care caseload (7.1 per 1,000 child population), and Nebraska had the highest average caseload (28.1 per 1,000 child population). About 7 percent of children in foster care in the United States were institutionalized between 2002 and 2011. However, there is dramatic variation in the use of institutional foster care between states. Colorado had the highest average rate of institutionalization of children in its foster care system. Between 2002 and 2011, approximately 19 percent of children in foster care in Colorado, on average, resided in restrictive institutional settings, such as residential treatment centers, juvenile justice detention centers, or inpatient

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16 are calculated using Equation 2, with δs and γt and θst set to their mean value of zero. I do not apply an offset, enabling an evaluation of expected values in terms of rates rather than counts, which are contingent on the size of the eligible population.

Table 2.8.1 displays observed values at the state-year level; this paragraph and Figure 1 report mean 2002 to 2011 values at the state-level.
<table>
<thead>
<tr>
<th>Measure</th>
<th>Mean</th>
<th>Std. dev.</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foster care entries per 1,000 children</td>
<td>4.51</td>
<td>1.82</td>
<td>1.42</td>
<td>10.46</td>
</tr>
<tr>
<td>Foster care caseload per 1,000 children</td>
<td>15.65</td>
<td>5.49</td>
<td>5.67</td>
<td>31.16</td>
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<tr>
<td>Institutional foster care per 1,000 in caseload</td>
<td>70.03</td>
<td>48.59</td>
<td>1.38</td>
<td>334.77</td>
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<tr>
<td>Proportion adults w/ less than HS</td>
<td>0.12</td>
<td>0.04</td>
<td>0.06</td>
<td>0.22</td>
</tr>
<tr>
<td>Food insecurity per capita</td>
<td>0.13</td>
<td>0.03</td>
<td>0.06</td>
<td>0.22</td>
</tr>
<tr>
<td>Unemployment rate</td>
<td>0.07</td>
<td>0.02</td>
<td>0.03</td>
<td>0.14</td>
</tr>
<tr>
<td>Proportion children with single parents</td>
<td>0.36</td>
<td>0.06</td>
<td>0.21</td>
<td>0.55</td>
</tr>
<tr>
<td>Child poverty rate</td>
<td>0.18</td>
<td>0.05</td>
<td>0.08</td>
<td>0.32</td>
</tr>
<tr>
<td>GSP per capita (adj)</td>
<td>$45214.83</td>
<td>$9692.41</td>
<td>$25192.49</td>
<td>$85947.80</td>
</tr>
<tr>
<td>Legislative ideology (NOMINATE)</td>
<td>49.36</td>
<td>23.23</td>
<td>0</td>
<td>91.03</td>
</tr>
<tr>
<td>Index crimes known to police per 1,000 pop.</td>
<td>36.07</td>
<td>9.70</td>
<td>14.94</td>
<td>66.28</td>
</tr>
<tr>
<td>Proportion black pop.</td>
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<td>0.09</td>
<td>0.002</td>
<td>0.37</td>
</tr>
<tr>
<td>Max. TANF for family of three (adj)</td>
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<td>$161.68</td>
<td>$196.57</td>
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<tr>
<td>Medicaid per poverty</td>
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<td>SNAP per poverty</td>
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<td>TANF per child poverty</td>
<td>0.31</td>
<td>0.17</td>
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<td>Welfare workers per 1,000 pop.</td>
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<td>0.52</td>
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<td>Incarceration per 1,000 adults</td>
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<td>11.49</td>
</tr>
<tr>
<td>Death sentences per 1,000 prison admissions</td>
<td>0.15</td>
<td>0.25</td>
<td>0</td>
<td>1.52</td>
</tr>
<tr>
<td>Police per 1,000 pop.</td>
<td>2.19</td>
<td>0.46</td>
<td>1.46</td>
<td>3.94</td>
</tr>
</tbody>
</table>

Table 2.1: Descriptive Statistics
mental health facilities. Montana had the lowest average rate of institutionalization during this period, with only 1.2 percent of its foster care population residing in institutional facilities.

As Figure 1 shows, the rates of foster care entry and institutionalization are consistently high in a cluster of states: Minnesota, North and South Dakota, Nebraska, Nevada, Wyoming, and Colorado. Rates of entry are consistently low in one primary cluster of states in the South—Alabama, Mississippi, Louisiana, Georgia, and Texas—although Illinois, Maine, and Utah also have consistently low entry rates. A cluster of states in New England tend to have low institutionalization and entry rates.

A cluster of Northeastern, Midwestern, and West coast states have the highest TANF benefit levels available to a family of three after adjusting for regional price parity. States in the South have consistently low TANF benefits, even after adjusting for differences in the costs of living between places. Similar patterns hold in the per capita staffing rates of welfare bureaucracies. States in the Midwest and Northeast generally have much larger welfare bureaucracies than do states in the South. States in the South also tend to have higher rates of incarceration than do states in the Northeast or Midwest, and Nevada and Arizona have exceptionally high incarceration rates. In general, states in the Northeast and South have very high police staffing levels, although Illinois, Wyoming, and Arizona also have very large police forces. States in the Northwest and upper Midwest have relatively low police staffing levels. This confirms the frequently observed inverse relationship between punishment and redistribution in social policy regimes within the United States (Beckett and Western 2001; Soss et al. 2011). The bivariate relationships displayed in Figure 1 suggest that states with low welfare benefit levels and high incarceration rates in the South also generally have low foster care entry rates, and states with high TANF benefits and large welfare bureaucracies appear to have higher rates of institutionalization, the opposite direction predicted in this study’s hypotheses. However, underlying relationships between child protection outcomes and regime characteristics are likely masked by confounding demographic and political variables.
Figure 2.1: Average State Child Protection Intervention and Policy Regime Character, 2002 to 2011
2.8.2 Statistical Models

Table 2.8.2 displays regression models examining the relationships between foster care entry, the institutionalization of children in foster care, and social policy regime characteristics. Results from Model 1 show that increases in the breadth and punitiveness of the criminal justice system are associated with more frequent entries of children into foster care. Expansive and generous welfare programs are negatively associated with foster care entry. However, the negative relationship between generous welfare regimes and foster care entry is attenuated through the interaction of administrative breadth and TANF enrollment. These results provide support for Hypotheses 1 and 2. Foster care entry rates decrease with increasing welfare generosity, but foster care entries are positively associated with the interaction of TANF enrollment and welfare staffing levels, suggesting that increasing opportunities for surveillance produce more frequent entries into foster care. These results also provide support for Hypothesis 4: incarceration rates, death sentences, and police staffing levels are positively associated with the scale of child protection intervention at the state-year level. The variance of estimated state intercepts is two orders of magnitude larger than the variance of estimated year intercepts, suggesting there is far more heterogeneity between states than between years in rates of foster care entry, conditional on model predictors.

Results from Model 2 illustrate the relationships between policy regime characteristics and the institutionalization of children in a state’s foster care system. Hypothesis 3 predicts that states with more generous and expansive social policy regimes will institutionalize children in foster care less frequently than states with austere welfare programs, and Hypothesis 5 predicts that states with punitive social policy regimes will institutionalize children in foster care more frequently than will states with less punitive regimes. These results provide evidence in support of Hypothesis 3, but provide only weak support for Hypothesis 5. States with more generous social policy regimes are less likely to place children into restrictive institutional settings once children have entered foster care, and states with punitive policy regimes appear slightly more likely to place children into institutional foster care, although
<table>
<thead>
<tr>
<th></th>
<th>1. Entries</th>
<th>2. Inst. placements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unemployment rate</td>
<td>-0.031</td>
<td>0.028</td>
</tr>
<tr>
<td></td>
<td>(.019)</td>
<td>(.038)</td>
</tr>
<tr>
<td>Single-parent-household rate</td>
<td>0.021</td>
<td>-0.134**</td>
</tr>
<tr>
<td></td>
<td>(.031)</td>
<td>(.055)</td>
</tr>
<tr>
<td>Food insecurity rate</td>
<td>-0.036**</td>
<td>-0.042</td>
</tr>
<tr>
<td></td>
<td>(.016)</td>
<td>(.033)</td>
</tr>
<tr>
<td>Child poverty rate</td>
<td>0.016</td>
<td>0.049</td>
</tr>
<tr>
<td></td>
<td>(.039)</td>
<td>(.083)</td>
</tr>
<tr>
<td>Adults w/ less than HS</td>
<td>0.027</td>
<td>-0.172**</td>
</tr>
<tr>
<td></td>
<td>(.034)</td>
<td>(.078)</td>
</tr>
<tr>
<td>GDP per capita</td>
<td>0.032</td>
<td>0.013</td>
</tr>
<tr>
<td></td>
<td>(.020)</td>
<td>(.044)</td>
</tr>
<tr>
<td>Legislative ideology</td>
<td>-0.002</td>
<td>-0.046*</td>
</tr>
<tr>
<td></td>
<td>(.010)</td>
<td>(.025)</td>
</tr>
<tr>
<td>Crime per capita</td>
<td>0.054**</td>
<td>0.066</td>
</tr>
<tr>
<td></td>
<td>(.017)</td>
<td>(.041)</td>
</tr>
<tr>
<td>Percent black population</td>
<td>-0.370***</td>
<td>0.197</td>
</tr>
<tr>
<td></td>
<td>(.060)</td>
<td>(.117)</td>
</tr>
<tr>
<td>TANF benefit levels</td>
<td>-0.054*</td>
<td>0.035</td>
</tr>
<tr>
<td></td>
<td>(.027)</td>
<td>(.065)</td>
</tr>
<tr>
<td>SNAP enrollment rate</td>
<td>-0.025</td>
<td>-0.198***</td>
</tr>
<tr>
<td></td>
<td>(.020)</td>
<td>(.046)</td>
</tr>
<tr>
<td>Medicaid enrollment rate</td>
<td>-0.029</td>
<td>0.019</td>
</tr>
<tr>
<td></td>
<td>(.025)</td>
<td>(.054)</td>
</tr>
<tr>
<td>TANF enrollment rate</td>
<td>0.009</td>
<td>-0.011</td>
</tr>
<tr>
<td></td>
<td>(.018)</td>
<td>(.045)</td>
</tr>
<tr>
<td>Welfare workers per capita</td>
<td>0.009</td>
<td>-0.123*</td>
</tr>
<tr>
<td></td>
<td>(.022)</td>
<td>(.054)</td>
</tr>
<tr>
<td>TANF enrollment x welfare workers</td>
<td>0.035***</td>
<td>-0.058*</td>
</tr>
<tr>
<td></td>
<td>(.010)</td>
<td>(.025)</td>
</tr>
<tr>
<td>Incarceration rate</td>
<td>0.106**</td>
<td>0.061</td>
</tr>
<tr>
<td></td>
<td>(.035)</td>
<td>(.078)</td>
</tr>
<tr>
<td>Death sentences per prison admission</td>
<td>0.026**</td>
<td>0.028</td>
</tr>
<tr>
<td></td>
<td>(.008)</td>
<td>(.021)</td>
</tr>
<tr>
<td>Police per capita</td>
<td>0.053</td>
<td>0.019</td>
</tr>
<tr>
<td></td>
<td>(.030)</td>
<td>(.061)</td>
</tr>
<tr>
<td>Intercept</td>
<td>-5.499***</td>
<td>-2.901***</td>
</tr>
<tr>
<td></td>
<td>(.051)</td>
<td>(.094)</td>
</tr>
<tr>
<td>Variance of state random effects ($\sigma_f^2$)</td>
<td>0.12</td>
<td>0.42</td>
</tr>
<tr>
<td>Variance of year random effects ($\sigma_g^2$)</td>
<td>0.001</td>
<td>0.00</td>
</tr>
</tbody>
</table>

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table 2.2: Regression results, foster care entries and institutionalization
no single measure reaches the .05 significance threshold in this model. State random intercepts have high variability ($\sigma^2_\delta = .42$), but year intercepts are effectively zero, suggesting that conditional institutionalization rates are strongly clustered within states but not within national time trends. Taken together, these results show that a state’s social policy regime is related to both the frequency of intervention and the kinds of foster care children receive.

2.8.3 Counterfactual Simulation Results

Figure 2 displays predicted child protection outcomes based on six counterfactual regime configurations and parameter estimates from an arbitrarily large number of simulated replications. In scenario one, TANF benefit levels, SNAP enrollment per persons in poverty, Medicaid enrollment per persons in poverty, and TANF enrollment per children in poverty are incrementally increased from their observed minima to their observed maxima, while holding welfare staff per capita and all other measures at their observed mean values. In scenario two, incarceration rates, the issuance of new death sentences per prison admission, and police officers per capita are incrementally increased from their minimum observed values to their maximum observed values while holding all other values at their means. Scenario three systematically varies per capita welfare staff from the observed minimum to the observed maximum while holding welfare program enrollment and benefits at one standard deviation below the mean observed value, and all other values at their mean. Scenario four varies per capita welfare staffing from its minimum to its maximum while holding program enrollment and benefits at one standard deviation above the mean observed value. Scenario five incrementally varies all welfare dimensions, including staffing levels, to examine joint regime effects on institutionalization, and scenario six repeats this procedure for all criminal justice measures. This strategy enables an evaluation of the joint predicted effects of regime characteristics on the scale and character of child protection intervention. A counterfactual state

\footnote{Results from models of these measures are robust to alternative specifications. In particular, modeling foster care caseloads, foster care entries excluding children placed with kin, and foster care entries excluding those attributed to parental incarceration yield substantively similar results and provide further support for the study’s findings. Full model results are provided in Table B.1 in Appendix B.}
with mean values for all independent variables is expected to have 4.1 foster care entries per 1,000 child population [95 percent CI 3.7, 4.5], and the same counterfactual mean state is predicted to have 55.4 children in institutional foster care per 1,000 children in that state’s foster care caseload [44.6, 66.1].

The results displayed in Figure 2, Plot 1 provide further support for Hypothesis 1. As welfare generosity and program inclusiveness systematically increase, the expected number of foster care entries drops. A state with a generous and inclusive welfare regime (SNAP, TANF, Medicaid enrollment and TANF benefits mean + 1 SD) is expected to place 3.7 children into foster care per 1,000 [3.3, 4.2], whereas a state with an austere welfare regime (mean – 1 SD for above measures) is expected to place 4.5 children per 1,000 into foster care [4.0, 5.1]. For a state with a mean child population (1.47 million), an increase in welfare generosity from one standard deviation below the mean to one standard deviation above the mean is expected to reduce foster care entries by approximately 1,100 per year. Plot 2 illustrates the strong positive relationship between punitive regime characteristics and foster care entry, providing clear support for Hypothesis 4. A state with a criminal justice regime that is less punitive than the average state (mean – 1 SD for incarceration, death sentences, police per capita) is expected to have 3.4 foster care entries per 1,000 children [3.0, 3.9], whereas states with broad and punitive criminal justice regimes are expected to place 4.9 children per 1,000 into foster care [4.3, 5.6]. These results predict an increase of 2,200 entries if a state with an average child population moved from a relatively lax criminal justice regime (mean – 1 SD) to a more punitive criminal justice regime (mean + 1 SD).

Plots 3 and 4 of Figure 2 illustrate the estimated interaction between TANF enrollments per children in poverty with the per capita number of full-time public welfare workers in a state. These results illustrate the countervailing effect that surveillance may have on the reductions in caseloads produced by expansive welfare regimes, providing support for Hypothesis 2. A counterfactual state with above average benefits and enrollment rates (+ 1 SD) and a larger than average welfare bureaucracy is expected to place 3.9 children per 1,000 into foster care in a given year [3.4, 4.4], an average difference of .2 placements
Figure 2.2: Predicted foster care entry rates per 1,000 child population and institutionalization rates per 1,000 children in caseload from counterfactual scenarios and simulated replications
per 1,000 children when compared to a generous welfare state with a welfare bureaucracy staffing rate at the observed mean. These estimates predict an increase of approximately 290 children per year in a state with a mean child population. An increase in the opportunities for bureaucratic surveillance of low-income families in generous welfare regimes moderately attenuates the otherwise clear negative relationship between welfare policy and foster care entry.

Foster care institutionalization is significantly lower in states with generous and expansive welfare policies than in states with austere welfare policies, as shown in Plot 5. A state with an expansive and generous welfare policy regime is expected to institutionalize children in foster care at a rate of 39.2 per 1,000 in its caseload [29.8, 50.3], compared to a rate of 78.1 per 1,000 [59.5, 100.4] for a state with narrow and ungenerous welfare programs, providing support for Hypothesis 3. No single measure of expansive and punitive criminal justice policy reaches conventional significance thresholds in models of foster care institutionalization, but joint variation in these measures predicts a positive, but highly uncertain, relationship between punitive policy regimes and foster care institutionalization. A state with a broad and punitive criminal justice regime is expected to institutionalize children in foster care at a rate of 64.9 per 1,000 in its caseload [49.5, 83.2], compared to a rate of 47.4 per 1,000 [35.9, 61.6] in a less punitive state, providing limited support for Hypothesis 5. Based on these models, a state with a robust welfare regime and an average foster care caseload is expected to institutionalize approximately 530 fewer children than a state with an expansive and punitive criminal justice regime.

These counterfactual simulations suggest that policy regime variation has dramatic impacts on foster care entry and institutionalization. They demonstrate that states with generous and broad welfare regimes are expected to have lower rates of foster care entry and lower rates of institutionalization, but increases in the size of welfare bureaucracies attenuate this relationship under generous and extensive welfare regimes. These simulations also demonstrate that punitive social policy regimes are expected to have significantly higher rates of foster care entry. On average, punitive policy regimes are also expected to have
higher rates of foster care institutionalization, although estimates of this relationship are highly uncertain.

2.9 Discussion

These findings show that child protection intervention is most frequent in states with punitive social policy regimes and suppressed in states with social policy regimes that favor redistributive interventions. States with redistributive social policy regimes are also less likely to institutionalize children in foster care than are states with modest welfare policies. These results show that child protection intervention is structured both by the direct effects of social policy on the risk of child abuse and neglect and the influence of a state’s policy regime in defining appropriate styles of intervention and strategies of governance. States with redistributive policy regimes generally utilize disruptive child protection less frequently, but when these states have large welfare bureaucracies, foster care entries increase. This finding suggests that the administrative structure of agencies under generous welfare regimes expands or constrains the opportunities for state surveillance of low-income families.

No prior quantitative studies have evaluated child protection as a component of a complex policy regime for the management of social problems. Earlier studies have made important contributions in establishing causal relationships between incarceration, welfare provision, and foster care entry (Andersen and Wildeman 2014; Courtney et al. 2005; Swann and Sylvester 2006)—mediated by the increased or decreased likelihood of child abuse or neglect—but this study shows that a state’s policy regime structures the preferred or routinized modes of responding to social problems. That is, foster care entry is not only a reflexive response to the incidence of child abuse or neglect; disruptive child protection indicates a particular and paternalistic style of governance (Jackman 1994; Soss et al. 2011). Building on the sociological tradition of comparative welfare and comparative punishment scholarship (Barker 2009; Fox 2010; Sutton 2013), this study shows that identification of and response to social problems is a structured process dependent on social and political forces that are partially exogenous to the underlying issues a policy attempts to address.
Although identification of the forces and processes structuring a state’s policy regime is beyond the scope of this study, prior research suggests that systems of racial stratification and classification (Brown 2013a; Fox 2010; Muller 2012; Quadagno 1994; Soss et al. 2011), political institutions (Barker 2009; Tonry 2007; Weir, Orloff, and Skocpol 1988), the composition of electoral coalitions (Esping-Andersen 1990; Sutton 2013), path-dependent processes of legislation and policy implementation (Hacker 2002; Pierson 2000), and the discourses, organizational strength, and legitimacy of professional and advocacy organizations (Garland 2001; Gottschalk 2006; Page 2011) are important forces in structuring whether states will embrace redistributive, punitive, or paternalistic forms of policy intervention. Future research should consider child protection policy as an additional outcome in analyses of the formation of state policy regimes. Additional research should also evaluate whether deep racial inequities in child protection are a function of the character of social policy regimes. A growing body of evidence shows that racial inequality in foster care is poorly explained by differences in poverty and social disadvantage between groups (e.g., Wulczyn et al. 2013).

This study has some limitations due to the scope and precision of federal data collection. Placing children with a member of their extended family is the least disruptive option available to caseworkers and courts, but measuring the scale of kinship-based foster care is complex. Formal kinship placements are recorded by AFCARS, but as many as 75 percent of all placements arranged by child welfare officials with kin are done without taking a child into state custody (referred to as voluntary kinship care), and hence are not recorded in AFCARS (Annie E. Casey Foundation 2012). These procedures vary widely by jurisdiction (Macomber 2003). A count of kinship foster care placements would enable an alternative measure to examine regime effects on less-disruptive strategies of child protection, but such an analysis is not feasible without substantial new national data collection efforts. However, results presented here are robust to the exclusion of all kinship placements from foster care entry counts (see Table S1 in the online supplement). Additionally, disaggregation of the settings of institutional placements would allow for greater precision in identifying regime effects on qualitative variation in foster care placements. For example, inpatient mental
institutionalization is likely subject to different processes than is placement at a residential treatment center focused on behavior modification through rigid discipline. However, without changes to federal reporting standards or substantial new data collection efforts, such distinctions are not possible.

This analysis shows that the extreme variation in rates of child protection intervention between states is not simply a function of differences in population composition that produce higher or lower rates of child abuse or neglect. States respond to the problem of child maltreatment in a manner that reflects deep differences in the ways they identify and manage social problems. Policy regimes structure the scripts policymakers and bureaucrats use to design and implement child protection systems and a state’s infrastructure for surveillance and case processing. Policy regimes play a central role in expanding or constraining coercive social welfare programs, such as child protection. Variation in the character of social policy regimes between states provides a compelling explanation of why some states remove children from their families more frequently than do others.

**Data Note**

The data used in this analysis were made available by the National Data Archive on Child Abuse and Neglect, Cornell University, Ithaca, NY, and have been used with permission. Data from the Adoption and Foster Care Analysis and Reporting System (AFCARS) were originally collected by the Children’s Bureau. Funding for AFCARS was provided by the Children’s Bureau, Administration on Children, Youth and Families, Administration for Children and Families, U.S. Department of Health and Human Services. The collector of the original data, the funder, the Archive, Cornell University, and their agents or employees bear no responsibility for the analyses or interpretations presented here.

2.10 References


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Chapter 3

STATE POLICY REGIMES AND RACIAL DISPARITIES IN CRIMINAL JUSTICE AND CHILD PROTECTION

3.1 Abstract

Both the U.S. criminal justice and child protection systems are characterized by deep racial inequalities. Child protection systems are simultaneously tasked with delivering critical services to children and families in need and defining and policing the boundaries of acceptable parenting. This social control function is highly consequential. Qualitative, historical, and theoretical research has demonstrated that policy approaches toward children and families of color are often distinctly paternalistic and coercive, but few quantitative comparative studies have leveraged these insights to evaluate inequitable child protection outcomes. This analysis shows that states with high levels of disparity in rates of African American and Native American incarceration are also likely to have levels of racial disparity in child protection interventions and outcomes, conditional on disparities in exposure to known risk factors for child abuse and neglect. These results strongly suggest that state social policy regimes are coherently racialized in a manner that produces unequal levels of coercive intervention across formally distinct policy domains. These systematic relationships between inequalities in distinct forms of coercive state intervention encourage a multi-institutional approach to theorizing the relationships between race, formal social control, social policy, and family inequality.

3.2 Introduction

American criminal justice is distinctly racialized (Murakawa and Beckett 2010; Walker 2016). Anti-Black politics and ideologies have been central to the early development of U.S. sys-
tems of policing and incarceration (Muhammad 2011; Muller 2012; Oshinsky 1997), and were critical in the dramatic expansion of the carceral state (Gottschalk 2006; Hinton 2016; Murakawa 2014) that has institutionalized confinement and coercion as a default solution to social problems (Gilmore 2007). Notwithstanding the central role that criminal justice plays in U.S. racial stratification (Pettit 2012; Sykes and Pettit 2014), police and corrections are not the only sets of agencies that constitute contemporary systems of social control. Low-income families of color encounter a battery of state and private agencies tasked with monitoring and regulating their behavior. Child protection agencies are a notable component of state toolkits for social control and family regulation (Roberts 2012). They hold one of the more extreme powers of the state: determining when to separate children from their families.

Though formally separate, processes and outcomes in criminal justice and child protection are tightly coupled at the place-level. While both child protection and criminal justice intervention may co-vary as a function of underlying behavioral differences in populations across places, policy systems themselves also play a central role in structuring both child-wellbeing and the strategies states use to address social problems. Social policy regimes (May and Jochim 2013) reflect diverse political preferences and institutional configurations that help to explain variation in criminal justice (Barker 2009; Sutton 2013), child protection (Edwards 2016) and social welfare policy (Esping-Andersen 1990; Orloff 1993; Soss, Fording, and Schram 2011) across places. Places tend toward isomorphic approaches to social problems through both direct feedback effects of policy choice on populations and through the institutionalization of particular ways of thinking about the causes of and appropriate responses to social problems. This study shows that racial inequalities in formally distinct social policy domains are intertwined, and suggests that social policy regimes tend toward coherent patterns of racialization.

Despite strong evidence that marginalized families encounter the state through the activities of multiple agencies working with greater or lesser degrees of coordination (Fernandez-Kelly 2015; Gilliom 2001), we lack adequate comparative studies of the relationships between
unequal policy outcomes across domains (Foster and Hagan 2015). Much of this gap in comparative quantitative research can be attributed to data limitations; in many cases, data have insufficient geographic coverage, are cross-sectional, or are of dubious quality. Child protection and criminal justice offer a novel case to examine mechanisms of racial inequality in intervention at the state-level. High-quality federal administrative data enables a close examination of variation in racial inequality in policy outcomes both across and within states over time.

This study finds that racial inequalities in coercive social control are tightly correlated across policy domains. Using administrative data on all U.S. children in state-supervised foster care between 2000 and 2014, federal prison data (United States Department of Justice, Office of Justice Programs. Bureau of Justice Statistics 2015), demographic data (Ruggles et al. 2010), and indicators of policy contexts in a series of multilevel models, I show that states that disproportionately incarcerate African Americans are also likely to disproportionately place African American children into foster care, have a disproportionately high number of African American children in foster care caseloads, and exhibit inequity in the rates at which African American children are reunified with their families. Similarly, states with unequal rates of Native American incarceration are likely to have high levels of inequality in the rates at which Native American children enter foster care and remain in foster care caseloads. These relationships show that state social policy outcomes are systematically unequal across domains, and suggest that similar mechanisms may simultaneously account for multiple forms of inequality through processes of policy racialization.

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1The data utilized in this paper were made available by the National Data Archive on Child Abuse and Neglect, Cornell University, Ithaca New York. The data from the Substantiation of Child Abuse And Neglect Reports Project were originally collected by John Doris and John Eckenrode. Funding support for preparing the data for public distribution was provided by a contract (90-CA-1370) between the National Center on Child Abuse and Neglect and Cornell University. Neither the collector of the original data, funding agency, nor the National Data Archive on Child Abuse and Neglect bears any responsibility for the analyses or interpretations presented here.
3.3 Racial inequalities in child protection and criminal justice

The American child protection system, like the American criminal justice system (Lee et al. 2015; Pettit 2012), is characterized by significant and durable patterns of racial inequality (Jacobs 2014; Roberts 2002). Figure 1 displays the percent of children who had a confirmed case of child maltreatment by race in 2014, the percent of children who were in out-of-home foster care by race in 2014, and the percent of adults who were incarcerated under state or federal jurisdiction by race.

In 2014, 1.5 percent of all African American children in the U.S. were confirmed to be victims of child abuse or neglect by state child protection agencies. At the end of the reporting year in 2014 1.2 percent of U.S. African American children were in foster care, and about 1 percent of all African American adults were incarcerated under state or federal jurisdiction. About 1.3 percent of all U.S. Native American children were confirmed to be victims of neglect or abuse by child protection agencies, and nearly 2.5 percent of all Native American children in the U.S. were in out-of-home foster care at the end of the reporting year in 2014. About 1.9 percent of all Native American adults in the U.S. were incarcerated under state or federal jurisdiction on the reporting date in 2014. Lifetime risks of experiencing confirmed maltreatment (Wildeman et al. 2014), foster care (Wildeman and Emanuel 2014), and incarceration (Pettit and Western 2004) are dramatically higher and are also characterized by substantial racial inequality.

Confirmed maltreatment, foster care, and incarceration are all characterized by deep racial inequalities. In 2014, Native American children were confirmed to be victims of child maltreatment by child protection agencies at a per capita rate 1.6 times greater than the rate at which white children were confirmed to be victims of maltreatment, and African American children were confirmed to be maltreatment victims 1.8 times more frequently than were white children per capita. African American children were 2.6 times more likely to be in foster care than white children in 2014, and Native American children were 5.5 times

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2 Author’s calculation using 2014 data from the Adoption and Foster Care Analysis and Reporting System.

3 Victimization rates include substantiated, and confirmed cases of child maltreatment, as well as those cases diverted to alternative response programs.
Figure 3.1: Percent of all children subject to confirmed report of maltreatment, children in out of home foster care, and adults incarcerated under state or federal jurisdiction by race, 2014

more likely to be in foster care than white children.

Inequalities in criminal justice outcomes have been subject to substantial sociological research, and are known to be a function of structural social inequality (Papachristos 2009; Peterson and Krivo 2010; Sampson 2012), the unequal treatment of people of color by criminal-legal system actors (Crutchfield, Bridges, and Pitchford 1994; Harris, Evans, and Beckett 2011; Steen, Engen, and Gainey 2005), and variation in local policy (Harris 2016; B. Perry 2009b; Tonry 2007). The sources of child protection disparities have received far less attention from sociologists, and are subject to substantial debate. Quantitative investigations of the relationship between race and child welfare outcomes generally focus on evaluating whether a gap exists between rates of child abuse and neglect and inequalities in child welfare system outcomes (Drake et al. 2011; Jonson-Reid, Drake, and Kohl 2009; Putnam-Hornstein et al. 2013). This gap between maltreatment risk and inequalities in system outcomes is described as the contribution of system bias to child protection outcomes. This body of research generally suggests that such gaps are small, and that racial inequalities in child protection are primarily a function of inequalities in child abuse and neglect.

At the same time, a number of ethnographic, historical and legal studies illustrate that interactions between the child protection system and poor mothers of color are generally paternalistic and coercive (Jacobs 2014; Lens 2015; Reich 2005; Roberts 2012). Biases among street-level bureaucrats toward families of color may lead to higher levels of scrutiny by the state and higher levels of disruptive intervention from child protection agencies when families become subject to investigation (Ards et al. 2012; Crofoot and Harris 2012; Dettlaff et al. 2011; Roberts 2002). Child protection agencies themselves have been the primary site of statistical examinations of the gap between maltreatment risk and state bias, and evidence of quantitatively identifiable decision-point bias has been mixed (Boyd 2014).

Despite this strong body of research into the family and child level relationships between maltreatment risk, race, and system outcomes, there have been relatively few efforts to explain the enormous variation in child protection inequalities across places, and prior research suggests that spacial variation in poverty rates poorly explains variation in child
protection inequality (Wulczyn et al. 2013). Policy environments themselves likely play an under-appreciated role in structuring family inequalities. States have tremendous discretion in legislating and implementing child protection, criminal justice, and many social safety net programs. The organization of social policy likely plays a direct role in determining which families come into contact with the state and how their cases are processed, at the same time as it produces feedback effects that result in higher or lower levels of child protection inequality.

3.4 Race, poverty and policy regimes

The provision of social welfare and the exercise of formal social control are the products of the activities of multiple agencies, operating in the same spaces among often identical or similar families and communities. Diverse state agencies are coordinated through formal and informal ties and routines, often become institutionally similar through analogous mandates and procedures, and are politically accountable to similar sets of policy makers and constituents. The regulatory, supportive, and coercive actions of these heterogeneous actors overlap to create complex policy environments in which low-income families of color both depend on and are subject to the often onerous demands of multiple state agencies (Fernandez-Kelly 2015; Roberts 2012). Many of the same institutions and ideologies that have routinized suspicion of African Americans and Native Americans (Browne 2015; Meiners 2017; Ross 1998), and many of the same social processes that make the social and economic disadvantage of African Americans and Native Americans durable (Cunneen 2014; Hall, Crowder, and Spring 2015; Hooks and Smith 2004; Western 2006) push agencies tasked with surveillance, social provision and social control toward systematic patterns of racial inequality across multiple policy outcomes.

Routine coercive and paternalistic state intervention is a common feature of life for low-income families and communities of color (Fernandez-Kelly 2015; Gilmore 2007; Rios 2011; Tonry 1996). This social fact has been a historically stable and consequential driver of racial stratification (Adams 1995; Blackmon 2009; DuBois 1899; Muller 2012; Western and Pettit
African American and Native American families often experience intense surveillance and coercion from a complex network of policy actors (Cunneen 2014; Foster and Hagan 2015; Perry and Morris 2014; Rios 2011; Roberts 2008; Welch and Payne 2010). Unequal policing and criminal justice exist alongside unequal treatment by welfare bureaucrats and bias and paternalism in state and community service provision. Concentrated coercive social control creates disparities in access to resources that can strain families and produce damaging collateral consequences (Berger et al. 2016; Lee et al. 2015; Sykes and Pettit 2014; Wakefield and Wildeman 2014). This spacial concentration of formal social control in communities of color is enabled by diffuse systems of surveillance (Brayne 2014; Rios 2011), and reinforces norms under which people of color are routinely treated with suspicion, hostility, or pity (Bruch, Ferree, and Soss 2010; Fernandez-Kelly 2015; Masters, Lindhorst, and Meyers 2014; Soss et al. 2011). Both criminal justice and child protection play an outsized role in the lives of families of color.

African Americans are routinely subjected to high levels of surveillance, punishment, and paternalism as they encounter and are processed through criminal justice systems, social service agencies and schools (Harris 2016; Payne and Welch 2010; Schram et al. 2009). African Americans receive dramatically unequal treatment in the criminal justice system. They are disproportionately likely to be singled out for stops (Gelman, Fagan, and Kiss 2007; Rios 2011), are likely to receive particularly harsh sentences upon conviction (Doerner and Demuth 2010; Eberhardt et al. 2006; Steen et al. 2005), face unequal treatment inside correctional facilities (Walker 2016), and face persistent and widespread discrimination after criminal justice contact (Pager, Western, and Bonikowski 2009). African American children and families face similar forms of institutional and individual marginalization in schools (Kupchik 2010; Nicholson-Crotty, Birchmeier, and Valentine 2009; Shedd 2015; Welch and Payne 2010), medical facilities (Hoffman et al. 2016), and social service agencies (Brown 2013; Fording, Soss, and Schram 2011; Masters et al. 2014). Organizations that ostensibly serve an ameliorative or benevolent goal when interacting with white families and children often rely on coercive or paternalistic tactics when interacting with children and families of
color (Roberts 2002; Soss et al. 2011).

The relationships between Native Americans and U.S. federal and local governments is immersed in a history of violence and coercion. A combination of genocidal and colonial policies have resulted in profound structural disadvantage in Native American communities (Cunneen 2014; Davis, Roscigno, and Wilson 2016; Huyser, Takei, and Sakamoto 2014; Jacobs 2014; Ross 1998). Native Americans are also subject to disproportionately high levels of incarceration and criminal victimization (Archambeault 2003; Perry 2004, 2016; B. Perry 2009a; Rolnick 2016; Ross and Gould 2006), and experience a simultaneous over-policing of perceived Native criminality and under-policing when community members request police protection or assistance (B. Perry 2009b). Boarding schools, whose primary intent was to eradicate the cultural practices of Native Americans by aggressively assimilating Native children toward white values and practices, played a powerful role at the turn of the twentieth century in establishing an especially coercive strand of child and family policy in state and federal approaches toward Native Americans that have an enduring legacy in child welfare today (Adams 1995; Crofoot and Harris 2012; Jacobs 2014). Despite the protections of the Indian Child Welfare Act of 1978, which sought to reduce the extreme rates at which Native American children were separated from their families (Crofoot and Harris 2012; Jacobs 2014), vast inequalities in rates of child welfare system involvement persist for Native American children and youth (Waszak 2010).

While contemporary American criminal justice has a distinctly punitive orientation (Beckett and Herbert 2009; Garland 1993, 2013), US child protection systems have a dual character. On the one hand, these agencies are tasked with delivering critical services to families and children in need and working to reduce the incidence and impact of child abuse and neglect. Poor mothers of color routinely become involved in the child protection system as a function of their efforts to secure resources and services for their families (Fong 2017; 4The primary federal foster care data system does not currently track cases of children that fall under the jurisdiction of the Indian Child Welfare Act, though advocates and administrators have proposed changes to the system that would identify and better track outcomes for children who qualify for ICWA protections.
Roberts 2008). At the same time, child protection agencies play a key role in investigating parents or caretakers suspected of abuse or neglect and are empowered to separate children from families that are deemed unfit or dangerous. They are also central actors in the legal processes that may lead to the termination of parental rights, a powerful “stick” that can be used to coerce parents into compliance with agency recommended case plans. Like systems of criminal justice, child protection systems are empowered to investigate, normatively classify, and punish deviance, and there are strong theoretical and empirical reasons to suspect that racial bias in both the criminal justice and child protection systems have common causes (Roberts 2002, 2012).

States tend toward similar approaches to supporting and regulating the poor across policy domains. Similar sets of policy feedbacks, political pressures, and institutional logics likely lead to coherent patterns of racialization across policy domains within particular policy regimes. The close administrative and functional affinities between systems of criminal justice and child protection are likely to exhibit similar styles and degrees of policy racialization. States with unequal systems of criminal justice are likely to have unequal systems of child protection. States in which particular communities of color are subject to high levels of surveillance and coercive intervention in one policy domain are likely to exhibit high levels of inequality in proximate policy domains. The racialization of social policy likely extends to a broad set of policy areas.

In this study, I evaluate whether state policy regimes display coherent patterns of racialization across formally distinct, but practically intertwined, policy domains. I construct a series of models to evaluate whether disparities in criminal justice system outcomes for African Americans and Native Americans relative to whites predict disparities in foster care entries, caseloads, family reunification exits from the foster care system. This panel of outcomes allows for a general evaluation of whether policy inequalities co-occur through both mechanical relationships to family inequality and through institutional pathways that lead to homogeneity in policy approaches across criminal justice and child welfare systems.
3.5 Analytic strategy

Levels of inequality in the criminal justice system and child welfare systems vary tremendously across states (see Figure 3.3). Prior research has shown that political, institutional, and social structural characteristics of states provide substantial explanatory power in accounting for variation in unequal criminal justice (Bridges and Crutchfield 1988; Fording et al. 2011; Muller 2012; Yates and Fording 2005), but relatively few analyses have explored how foster care inequality varies across places (Wulczyn et al. 2013). Place plays a powerful role in structuring how families live, how institutions work, and the social meaning of race for public policy (Brown 2013; Fording et al. 2011). This analysis exploits the federal structure of criminal justice and child protection systems to evaluate whether inequalities in criminal justice and inequalities in child protection are systematically linked at the place level. This design allows both a description of the geographic distribution of racial inequalities in social control and a multivariate test of whether these inequalities can be explained by inequalities in socioeconomic status, family structure, or the social and political contexts of a state. This chapter does not evaluate whether a causal relationship exists between criminal justice and child protection, though rigorous analyses have demonstrated a causal effect of paternal incarceration on foster care entry (Andersen and Wildeman 2014) and suggest that long-term foster care increases the risk of incarceration (Courtney et al. 2011). This analysis primarily relies on data from the Adoption and Foster Care Analysis and Reporting System (AFCARS) (Children’s Bureau 2013), the National Prisoner Statistics (NPS) (United States Department of Justice. Office of Justice Programs. Bureau of Justice Statistics 2015), and the American Community Survey (ACS) (Ruggles et al. 2010).

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5To the extent that these causal relationships hold, given the high levels of racial inequality in both the criminal justice and child welfare systems, there are likely both causal effects of criminal justice inequality on foster care inequality, and of child protection inequality on criminal justice inequality, though such tests are beyond the scope of this study.

6All analyses were conducted in R (Team 2014) and models estimated using lme4 (Bates et al. 2014). Multiple imputations were computed using Amelia II (Honaker, King, and Blackwell 2011). All scripts used for the described transformations and analyses are available from the author upon request.
Foster care systems have dynamic populations as children enter, exit, or remain in care. Single point-in-time measures may fail to capture the breadth of a system’s reach, or miss important features of the flow of children into and out of the system. To capture inequality at multiple stages of foster care, this study evaluates three foster care system outcomes: entries into foster care, reunification exits from foster care, and foster care caseloads. Entries capture the flow of children into the system, while caseloads (all children in the system in a reporting year) are additionally sensitive to children who remain in foster care for longer periods of time. Children exit foster care through reunification when a parent, kin caregiver, or prior legal guardian regains custody of a child; this is often the preferred outcome for children if the risk for future maltreatment is low.

African American and Native American families experience significantly higher rates of foster care system contact relative to white families, and lower rates of reunification exits from foster care relative to white families. This analysis focuses on African American and Native American inequalities because these are the two groups most consistently over-represented in child welfare caseloads. Latinos do experience over-representation in child welfare caseloads in some places despite national under-representation, but some states fail to reliably record Latino incarceration making a systematic evaluation of the relationships between Latino incarceration and child protection across all states difficult. Asian Americans are consistently under-represented in child welfare caseloads relative to white children, though patterns of inequality across Asian American ethnic groups likely exist and deserve further scrutiny.

Administrative data from state child welfare and criminal justice systems report the race of a subject as that ascribed by agency bureaucrats. This provides affirmative information on how agencies classified children and adults, in contrast to self-reported measures which may provide more accurate information on individual’s identities and backgrounds. These ascribed racial identities recorded by agency actors may provide biased estimates relative to self-reported race or ethnicity measures, but provide valuable information on how state agencies engage in racial classification likely closely tied to processes that generate policy
I construct a series of regression models to explore whether the relationships between unequal criminal justice and unequal child protection are confounded by levels of inequality in family disadvantage, family structure, socio-economic status, crime, or political contexts. I estimate these relationships with multilevel models that include state intercepts, described in more detail below. These models adjust for stable differences between states while enabling a comparison of relationships between policy inequalities both across states and within states over time. The results of these models allow us to evaluate whether policy inequality in one domain is a useful predictor of policy inequality in another domain. If large and precise relationships are observed, conditional on demographic inequality and social and political context, then we can be reasonably certain that inequalities in coercive policy outcomes are linked across domains.

Rather than focus on interpreting regression parameters directly, I construct a series of simulation-based predictions (Figure 3.4) to evaluate the relationships between criminal justice and child protection inequality along the range of observed values of criminal justice inequality in the data. I describe model uncertainty by simulating from model posteriors across imputations, then drawing 95 percent intervals from pooled parameter draws. I use these simulated parameters to compute model predictions for a hypothetical state in which controls are set at their observed median values, and incarceration disproportion is systematically varied from the 5th percentile of the observed data to the 95th percentile of the observed data. This strategy confines predictions to the range within which nearly all states fall. They also describe the magnitude stability of the relationship between unequal incarceration and unequal foster care for a series of foster care outcomes in a counterfactual state.

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7I treat African American, Native American and white racial identities as singular. For children reported as African American, regardless of whether they are reported as any other race as well, I treat them as African American. For children reported as Native American, unless they are also coded as African American (a very small number of cases in these data), they are treated as Native American. Children are treated as white if they are reported as white alone. This strategy likely misses important differences in the outcomes experienced by multiracial or multi-ethnic children and families, but likely effectively captures the effects of African American, Native American, and white racial identities as statuses used by street-level bureaucrats to classify and process cases.
in which social and family inequality is held constant.

3.5.1 Data

I join a series of administrative, demographic, and political datasets to construct a state-year panel for the years 2000 - 2014 (N=750). All outcome variables are constructed from the Adoption and Foster Care Analysis and Reporting System (AFCARS). This dataset, produced by the US Children’s Bureau, contains case-level information on every child in state-supervised foster care in the United States. I use these data to produce state-year counts of all children entering foster care by race (entries), all children in foster for any length of time during an annual reporting period (caseloads), and all children exiting foster care to re-unite with a parent, family member, or legal guardian (reunification exits).

Focal predictors are constructed from the Bureau of Justice Statistics’ National Prisoner Statistics for 2000 - 2014. These data provide annual counts of people incarcerated in federal or state prisons by race. However, a large number of agencies fail to report or significantly under-report the number of Latino prisoners incarcerated in their states.

While criminal justice contact is diffuse and complex, and prison incarceration rates neglect important forms of low-level criminal justice contact such as incarceration in local jails, community supervision, and routine police contact (Harris 2016; Lerman and Weaver 2014; Phelps 2013; Rios 2011), these federal data enable direct annual comparisons of racial inequality in particularly coercive forms of criminal justice contact. From these data, I construct annual measures of African American and Native American incarceration per capita.

I include a series of controls to adjust for population risk of child maltreatment. Child poverty, a single parent family structure, parental unemployment, and low parental educational attainment are well-established predictors of child abuse and neglect (Drake et al. 2011; Sedlak et al. 2010). Using data from the 2000 census, 2001 - 2006 1-year ACS, 2007-2008 3-year ACS, and 2009 - 2014 5-year ACS (Ruggles et al. 2010), I construct state-year disproportion measures by group for child poverty per capita, unemployment per capita, children living with a single parent per capita, adults over age 25 without a high school
equivalent credential per capita, and racial and ethnic population composition.

Because local politics likely affect policy design and implementation, I also include a control for the political ideology of a state’s legislature (Berry et al. 1998). Incarceration rates and maltreatment rates are sensitive to local crime and policing, so I include a measure of disparities in arrests from the FBI’s Uniform Crime Reports. I also include measures of the adequacy and inclusiveness (Meyers, Gornick, and Peck 2001) of state means-tested welfare programs by adjusting the maximum TANF benefit for a family of three for regional price parity and inflation, and dividing the numbers of TANF, SNAP, and Medicaid beneficiaries within a state by the number of children in poverty in a state. While these measures are not accurate estimates of program take-up, they do provide a comparable measure of the accessibility of these important welfare programs. Prior research suggests that welfare program configuration is closely related to foster care system dynamics (Edwards 2016).

3.5.2 Missing data and measurement error

High-quality federal data on African American and Native American children in foster care are available through AFCARS annually from 2000 - 2014 for all or nearly all states. Many important measures of child wellbeing, family structure, and socio-economic status are only annually available through the American Community Survey and the U.S. Census. For the years 2000 and 2007 through 2014, these data can provide reasonably reliable estimates of state-level subpopulation characteristics (i.e. Native American child poverty). However, for 2001 through 2006, in which 3-year and 5-year ACS estimates are unavailable, the 1-year ACS is subject to substantial measurement error for subpopulation estimates when the focal population is relatively small. Relying on these one-year data to estimate rates of child poverty, unemployment, or single-parent households results in both an unrealistically unstable time series, and an unreasonable amount of certainty when relying on these data

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8A very small number of state-years are missing data on these measures (less than 1 percent of observations). I rely on multiple overimputation (m = 15) to handle both these missing data and the data known to be reported with error.
To estimate regression models.

To account for this measurement error in multivariate analysis, I create 15 imputed datasets (Blackwell, Honaker, and King 2015) in which I model subpopulation parameter\(^{9}\) for states with small African American or Native American populations as a function of the observed data and priors based on high-quality observations in the 2000 U.S. Census and 2009 5-year ACS\(^{9}\) Models are separately estimated on each imputed dataset, then combined to account for uncertainty in focal relationships induced by measurement error (Rubin 1996).

### 3.6 Measures

These analyses rely on a series of direct measures of inequalities in the rates at which African Americans and Native Americans experience particular outcomes relative to whites. These ratios of the per capita rates are frequently described as disparity measures (Boyd 2014; Bridges and Crutchfield 1988; Shaw et al. 2008; Yates and Fording 2005). Disparity measures for foster care involvement, incarceration, socio-economic disadvantage, and family disadvantage enable a multivariate evaluation of whether variation in inequalities in policy outcomes are easily attributable to unequal exposure to conditions known to predict child abuse and neglect, or whether inequalities in child protection and criminal justice are associated beyond the relationships we might expect from variation in socio-economic and family

\(^{9}\)All state-year observations with less than 100,000 total African American or Native Americans in the population are imputed for counts of children in poverty, unemployed adults in the labor force, employed adults, children living in single parent households, and adults with low educational attainment.

\(^{10}\)Priors for observations are set at the state-year level. The prior expected value for each observation is calculated as a linear function of the observation for that measure in the 2000 Census for state \(s\) \(x_{s2000}\) and the state-level observation for that measure in the 2009 5-year ACS \(x_{s2009}\), with a linear weight that gives more influence to the 2000 census in 2001 through 2003, and more influence to the 2009 ACS 5-year data in 2004 through 2006. The prior expectation for variable \(x\) observed in year \(y\) and state \(s\):

\[
E[x_{sy}] = x_{s2000}(0.9 - 0.12(y - 2001)) + x_{s2009}(0.9 - 0.12(y - 2001))
\]

The prior standard deviation is set as one half of the observed range of each measure for a state across all observations.

\[
sdx_s = 0.5(Max(x_s) - Min(x_s))
\]
inequality alone.

Disparity measures take the form of ratios of per capita foster care outcomes for two groups. For state \( s \) and year \( t \)

- African American / white disparity \( d_{ast} \)

\[
d_{ast} = \frac{\text{Proportion of African Americans in category}_{st}}{\text{Proportion of whites in category}_{st}}
\]

- Native American / white foster care inequality \( d_{nst} \)

\[
d_{nst} = \frac{\text{Proportion of Native Americans in category}_{st}}{\text{Proportion of whites in category}_{st}}
\]

Disparity measures (or rate ratios) are a convenient tool to compare the relative incidence of a particular phenomenon in a focal and reference group. They are widely used to study racial and ethnic inequality in a variety of policy domains because they enable direct comparisons of the extent to which people of color experience an event or state relative to white people, (Blumstein 1982), and are particularly common in studies of racial inequality in child welfare outcomes (Courtney and Skyles 2003; Shaw et al. 2008).

3.6.1 Statistical models

Given the nested structure of these data (repeated observations of states over time), I rely on a hierarchical modeling strategy. I estimate multilevel linear models of racial disparities as a function of state-year level racial disparities in incarceration, socio-economic disadvantage and family structure, state policy contexts, time, and unobserved time-stable features of

\[\text{11 I report the results of state and state-year fixed effects count models of child welfare outcomes by race in the Appendix. These models estimate the relationship between changes in criminal justice and child welfare outcomes within states. As there is far more variation in racial inequality across states than within states, I focus the discussion of results on the multilevel models that simultaneously model between and within unit variability in the outcome, while adjusting for serial correlation of repeated observations within states.}\]
states. These regression models estimate relationships between racial inequality in child welfare and incarceration both between states and within states over time.

There is far more heterogeneity in racially unequal foster care across states than within-states. For the years included in this analysis, the median variance of within-state African American / white foster care caseload disparity was approximately 0.4, while the median variance of between-state African American / white foster care caseload disparity across states was approximately 5, an order of magnitude larger. For Native American / white foster care disparity, median within state variance was 0.7, while median between state variance was approximately 45. Similar patterns exist for racial disparity in incarceration. This discrepancy speaks to the enormous importance of cross-sectional variation in racially unequal social control, and illustrates that a comparative approach that explicitly models variation across places is essential to understanding the dynamics of inequality in criminal justice and child welfare.

I estimate models of foster care entry disparity, foster care caseload disparity, and foster care reunification exit disparity using the following general specifications:

*African American / white foster care disparity* $d_{ast}$

$$\log(d_{ast}) = \beta_a X_{ast} + \alpha_{as} + \varepsilon_{ast}$$

$$\alpha_{as} \sim \text{Normal}(0, \sigma_{\alpha a}^2)$$

$$\varepsilon_{ast} \sim \text{Normal}(0, \sigma_{\varepsilon a}^2)$$

*Native American / white foster care disparity* $d_{nst}$

$$\sqrt{d_{nst}} = \beta_n X_{nst} + \alpha_{ns} + \varepsilon_{nst}$$

$$\alpha_{ns} \sim \text{Normal}(0, \sigma_{\alpha n}^2)$$

I estimated but do not report models that include a variable time slope by state. The estimated variance for these random slopes were near zero, suggesting that they do not dramatically improve model fit over a single national time trend. I report the more parsimonious state intercept models and focus the modeling on cross-sectional rather than longitudinal adjustments.

---

12\footnote{I estimated but do not report models that include a variable time slope by state. The estimated variance for these random slopes were near zero, suggesting that they do not dramatically improve model fit over a single national time trend. I report the more parsimonious state intercept models and focus the modeling on cross-sectional rather than longitudinal adjustments.}
\[ \varepsilon_{nst} \sim \text{Normal}(0, \sigma_{\varepsilon n}^2) \]

I present the results of six models below. First, I model log African American / white foster care entry disparity as a function of African American / white incarceration disparity, log African American / white demographic and family inequality, violent crime rates, political ideology, and time. Second, I model the square root of Native American / white foster care entry disparity as a function of Native American / white incarceration disparity, Native American / white demographic and family inequality, violent crime rates, political ideology, and time. I then model foster care caseload inequality and foster care reunification exit inequality with identical sets of predictors. To improve model convergence, all measures are mean centered and scaled into standard deviation units.

The rate ratio measures used here have a right-skewed distribution; log and square root transformation of outcome measures improves model fit and reduces the heteroskedasticity of errors. Because some states report zero Native American children in foster care for certain years, I rely on a square root transformation in models of Native American foster care disparities, though substantive interpretations of results are similar in models that drop these small population states and rely on a logarithmic transformation.

Parameter estimates alone, particularly those for measures that are on incomparable scales and transformed, provide little intuitive meaning. Instead, I illustrate the estimated focal relationships and model uncertainty in a series of figures that present predicted values for foster care inequality as a function of variable incarceration inequality with uncertainty estimates produced through posterior simulations (Gelman and Hill 2007; King, Tomz, and Wittenberg 2000).

To explore the robustness of these associations, I estimate a series of alternative model specifications. First, I construct a set of multilevel models that include state average values for all predictors, yielding identical parameter estimates to a fixed effects specification (Bell and Jones 2015). Second, I estimate models that exclude observations from states with small Native American or African American child populations to evaluate whether instability in ratio measures driven by small exposure populations affects the substantive interpretation
of regression parameters. Lastly, I estimate models of foster care outcomes per capita as a function of per capita rates of exposure to incarceration and socio-economic disadvantage by race. These rate models are sensitive to the magnitude of a population’s exposure to the foster care and criminal justice system, not just the levels of inequality evident in those systems. These specifications are described in more detail in the appendix.

3.7 Findings

Rates at which children and families of color experience foster care varies dramatically across the states. The annual proportion of African American children experiencing foster care varies from a maximum over 8 percent of the African American child population in Wyoming and Oregon to a minimum of less than 1 percent of the African American child population in Mississippi and Louisiana (state averages for 2000 - 2014). In the median state, 3.2 percent of African American children experienced foster care annually between 2000 and 2014. The rate of foster care varies from a maximum average of over 12 percent of the Native American child population in Nebraska, Minnesota and Hawaii to a minimum of 0.4 percent of the Native American child population of Virginia and Mississippi, with a state median of 2 percent of Native American children experiencing foster care annually. Consistent with prior research, these data show that the risk for experiencing foster care is very pronounced for Native American and African American children.

The distribution of foster care caseload and incarceration disparities for African Americans and Native Americans in 2014 is displayed in Figure 3.2. These maps demonstrate spatial variation in rates of contact by race in both the foster care and criminal justice systems in quintiles, and illustrate the bivariate correlations between these measures. For African Americans, incarceration rates and foster care caseload rates are correlated at $r = 0.4$. For Native Americans, incarceration rates and rates of foster care have a bivariate correlation of $r = 0.5$. The maps in Figure 3.2 show distinct geographic clusters of states that have high

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13State-level rates of entry and disproportion reported in text are 2007-2014 average values calculated from AFCARS foster care caseloads and ACS child population estimates.
Figure 3.2: Foster care caseloads and incarceration per capita by race and state, 2014 values in quantiles.
foster care caseloads for Native Americans and African Americans, and another that have relatively low African American and Native American caseloads. States in the Midwest and Mountain West generally have very high rates of foster care for these groups of children, while states in the South generally have very low rates of intervention for these groups of children of color, similar to the distribution of incarceration which has been previously described in criminological research (Bridges and Crutchfield 1988; Muller 2012).

Disproportionate contact with the foster care system for children of color relative to white
children also varies dramatically across states. South Dakota had the highest average level of African American / white disparity in foster care during this period, at a rate of 9.6 African American children in foster care per capita for every 1 white child in foster care per capita. Mississippi had the lowest average level of African American / white disparity in foster care, at 1.2. The median level of African American / white foster care disparity between 2000 and 2014 was 4.1. Minnesota had the highest rate of Native American / white foster care disparity at 23.5 Native American children per capita in foster care for every one white child in foster care per capita. Mississippi had the lowest level of average Native American / white foster care disparity, at 0.6\textsuperscript{14} The median state Native American / white foster care caseload disparity was 2.8 between 2000 and 2014.

Disparity in foster care caseloads and incarceration for African Americans and Native Americans relative to whites in 2014 by state is displayed in Figure 3.3. African American children in Wisconsin, Montana, Utah, and South Dakota experience foster care more than 7.5 times as frequently as white children. In Indiana, Nebraska, Minnesota, South Dakota, and Hawaii, Native American children experience foster care more than 10 times as frequently as white children. The spacial distribution of per capita foster care caseloads for African American and Native American children and disparity ratios for foster care caseloads are similar.

For African Americans, caseload rates and disparity ratios are correlated at 0.6, and for Native Americans, per capita caseloads and disparities are nearly perfectly correlated at 0.9. States in which African American and Native American children experience foster care frequently also have high rates of inequality in the rate at which these groups experience foster care relative to white children. These correlations are also strong for incarceration, at 0.5 for African Americans, and 0.8 for Native Americans.

Racial disparity in foster care is strongly correlated with racial disparity in incarceration. For Native Americans relative to whites, the correlation between unequal foster care

\textsuperscript{14}Disproportion values less than one indicate that white children were over-represented in foster care relative to the comparison group.
and unequal incarceration is 0.5, while the correlation between African American / white incarceration and foster care inequality is 0.4. Clusters of states in the Midwest, Mountain West, and Northeast exhibit high inequality for African Americans in both incarceration and foster care caseloads, while states in the South exhibit low rates of both foster care and criminal justice inequality for African Americans. Midwestern and Western states tend to exhibit high levels of inequality for rates of Native American incarceration and foster care, while states in the South tend to have low rates of foster care caseload and incarceration inequality for Native Americans.

Results from models of foster care caseloads are displayed in Tables 3.1 and 3.2. Predicted relationships between inequality in foster care and incarceration across outcomes are visualized in Figure 3.4 based on a hypothetical state with median values for all predictors and systematically varied incarceration inequality, with uncertainty estimated through posterior simulations.

African American / white inequality in foster care caseloads is clearly associated with the unequal incarceration of African Americans relative to whites at the state-year level. Conditional on unequal incarceration, African American / white inequality in child poverty, educational attainment, single parent households, and unemployment have relatively small relationships to foster care caseload inequality. State intercepts, which capture time-stable sources of state heterogeneity on caseload inequality, have a variance of $\sigma^2_\gamma = 0.10$, compared to the much smaller variance of observation-level errors $\sigma^2_\varepsilon = 0.02$. The intraclass correlation of state variance relative to total unexplained outcome variance\(^{15}\) $ICC = 0.83$, indicates that over 80 percent of variation unaccounted for by model predictors is accounted for by features of states that are stable over this 15-year time period, rather than variation within states over time.

Parameter estimates for multilevel models of African American / white inequality in foster care entries follow similar patterns to those described for foster care caseload inequality.

\(^{15}\)I calculate the intraclass correlation as $\frac{\sigma^2_\gamma}{\sigma^2_\gamma + \sigma^2_\varepsilon}$
<table>
<thead>
<tr>
<th></th>
<th>Caseload</th>
<th>Entries</th>
<th>Reunification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Incarceration disparity</td>
<td>0.07***</td>
<td>0.05*</td>
<td>−0.03*</td>
</tr>
<tr>
<td></td>
<td>(0.02)</td>
<td>(0.02)</td>
<td>(0.01)</td>
</tr>
<tr>
<td>Child poverty disparity</td>
<td>0.05**</td>
<td>0.06**</td>
<td>0.00</td>
</tr>
<tr>
<td></td>
<td>(0.02)</td>
<td>(0.02)</td>
<td>(0.02)</td>
</tr>
<tr>
<td>Unemployment disparity</td>
<td>−0.01</td>
<td>−0.00</td>
<td>0.00</td>
</tr>
<tr>
<td></td>
<td>(0.02)</td>
<td>(0.02)</td>
<td>(0.01)</td>
</tr>
<tr>
<td>Single parent HH disparity</td>
<td>0.06***</td>
<td>0.05*</td>
<td>0.00</td>
</tr>
<tr>
<td></td>
<td>(0.02)</td>
<td>(0.02)</td>
<td>(0.01)</td>
</tr>
<tr>
<td>Less than HS disparity</td>
<td>0.01</td>
<td>−0.01</td>
<td>−0.02*</td>
</tr>
<tr>
<td></td>
<td>(0.01)</td>
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</tr>
<tr>
<td>Leg. ideology</td>
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<tr>
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<td>(0.01)</td>
<td>(0.01)</td>
</tr>
<tr>
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<td>0.02*</td>
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<td>(0.01)</td>
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<td>(0.03)</td>
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</tr>
<tr>
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<td>(0.04)</td>
<td>(0.03)</td>
</tr>
<tr>
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<td>0.04*</td>
</tr>
<tr>
<td></td>
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<td>(0.02)</td>
</tr>
<tr>
<td>Year</td>
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<td>0.00</td>
<td>0.01***</td>
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<tr>
<td></td>
<td>(0.00)</td>
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<td>0.02</td>
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<tr>
<td>Var: Residual</td>
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***p < 0.001, **p < 0.01, *p < 0.05

Table 3.1: Results from multilevel models of African American/White foster care disparity
<table>
<thead>
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<th>Caseload</th>
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<th>Reunification</th>
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<td>Child poverty disparity</td>
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<td>Unemployment disparity</td>
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<td>Single parent HH disparity</td>
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<td>(0.01)</td>
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<td>Less than HS disparity</td>
<td>−0.16***</td>
<td>−0.12*</td>
<td>0.03*</td>
</tr>
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<td>(0.04)</td>
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<tr>
<td>Percent pop.</td>
<td>−0.62**</td>
<td>−0.44*</td>
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<td>Leg. ideology</td>
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<tr>
<td></td>
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<td>(0.03)</td>
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<tr>
<td>Arrest disparity</td>
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</tr>
<tr>
<td></td>
<td>(0.06)</td>
<td>(0.06)</td>
<td>(0.01)</td>
</tr>
<tr>
<td>TANF adequacy</td>
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<td>−0.01</td>
</tr>
<tr>
<td></td>
<td>(0.07)</td>
<td>(0.08)</td>
<td>(0.01)</td>
</tr>
<tr>
<td>TANF inclusion</td>
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<td>(0.07)</td>
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<td>Medicaid inclusion</td>
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<td>(0.08)</td>
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<td>SNAP inclusion</td>
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<td></td>
<td>(0.05)</td>
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<tr>
<td>Year</td>
<td>0.01*</td>
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<tr>
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<td>(0.01)</td>
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<td>Var: State (Intercept)</td>
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<td>Var: Residual</td>
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<td>0.19</td>
<td>0.04</td>
</tr>
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</table>

***p < 0.001, **p < 0.01, *p < 0.05

Table 3.2: Results from multilevel models of Native American/White foster care disparity
States with higher levels of African American / white inequality in incarceration tend to have higher levels of African American / white inequality in foster care entries, conditional on family and socio-economic inequality and social and political context. State intercepts account for far more unexplained variance in African American / white foster care entry inequality than do observation-level errors, with an intraclass correlation of 0.75. This suggests that the forces shaping African American / white inequalities in both the flow of children coming into contact with child welfare systems and inequalities in the rates at which children remain in foster care are similar, and closely related to unequal incarceration.

Unequal incarceration is associated with lower levels of equity in the rates at which African American children exit foster care to reunify with a parent, family member, or previous caretaker relative to the rate at which white children exit foster care to reunify with their families. Incarceration inequality is negatively correlated with reunification inequality, but is not significantly different from zero at \( \alpha < 0.05 \). Child poverty inequality is the strongest correlate of reunification inequality at the state-year level. Reunification inequality also appears less stable within states over time, conditional on model predictors. The proportion of residual variance explained by state intercepts is only 0.5, compared to proportions well above 0.5 for entry and caseload models.

Inequality in Native American child welfare outcomes, relative to whites, is also well explained by inequality in incarceration. Unequal incarceration is the only statistically significant predictor with a positive sign in these models of state-year caseload inequality. Surprisingly, Native American / white inequality in child poverty is negatively related to foster care caseload inequality. Combined with other measures of social inequality, these models strongly suggest that socio-economic and family inequality do a poor job explaining why some places have higher rates of Native American / white inequality in foster care outcomes than do others. Variance in time-stable state intercepts between 2000 and 2014 is very large when compared to state intercepts from models of African American inequality, \( \sigma_\gamma^2 = 2.23 \). Nearly all residual variation in Native American foster care caseload inequality is accounted for by stable state characteristics; the intraclass correlation in these models is 0.94.
Native American / white foster care entry inequality is subject to similar relationships. Unequal incarceration is estimated to have a positive relationship to foster care entry inequality. These models suggest that inequality in child poverty, educational attainment, family structure, and unemployment alone do not adequately explain why Native American children enter foster care dramatically more frequently in some places than they do others. Here too, stable characteristics of states play a powerful role in explaining state-year variation in inequality, with state intercepts accounting for 90 percent of residual variation.

These models do a poor job explaining state variation in Native American / white inequality in reunification exits from foster care. No included predictor reach significance thresholds, and state intercepts explain only about 4 percent of residual variation in reunification exit inequality; observation-level errors account for nearly all variation in these models.

To illustrate the relationships between unequal incarceration and unequal foster care outcomes for African American and Native American children, I estimate the predicted relationship between unequal incarceration and unequal foster care based on model results, displayed in Figure 3.4. I assume a state with median levels of socio-economic inequality, family inequality, and other model predictors, and systematically vary incarceration inequality from the 5th percentile of the observed data to the 95th percentile of the observed data. This approach confines predictions to actually observed values of inequality, while truncating extreme outliers at both ends of the distribution. Uncertainty is estimated through simulations drawn from model posteriors and pooled across imputations (King et al. 2000). These values can be interpreted as the expected level of foster care inequality for a state with median values for all predictors and variable inequality in incarceration, and directly illustrate the magnitude of the modeled relationship between criminal justice and child welfare inequality, assuming other measures are held constant.

Foster care is expected to be unequal for a hypothetical median state for any value of criminal justice inequality. High-levels of foster care inequality for Native American and African American children are the norm, though unequal criminal justice has a clear relationship to the magnitude of this inequality. No states in these data report African American
Figure 3.4: Predicted foster care inequality. Point estimates (solid) and 95 percent prediction interval (dashed). Dotted line indicates equity with whites.
white equity in foster care caseloads, and only 15 percent of state-years observed here are at or below equity for Native American / white foster care caseloads per capita.

The disproportionate incarceration of African Americans and Native Americans has a clear positive relationship to inequality in foster care caseloads and entries. Conditional on median values for all other predictors, a state at the 75th percentile of African American / white incarceration disparity (10:1) is expected to have 4.4 [4.0, 4.8] times more African American than white children in foster care, compared to a 3.4:1 [3.8, 3.1] African American / white foster care caseload ratio for a state at the 25th percentile of African American / white incarceration (5.4:1). A state at the 25th percentile of African American / white incarceration inequality is expected to see African American children enter foster care at a rate 3 [2.6, 3.3] times greater than the rate at which white children enter foster care. At the 75th percentile of incarceration inequality, this counterfactual state is expected to place African American children into foster care at a rate 3.6 [3.3, 4] times greater than the rate at which white children enter foster care.

A state with a high ratio of Native American to white incarceration (75th percentile, 4:1) is expected to have 5.7 [3.3, 8.9] times more Native American children than white children in foster care, while a state at the 25th percentile of Native American / white incarceration (0.9:1) is expected to have 4.5 [2.3, 7.4] times more Native American children than white children in foster care, conditional on median values for all other model predictors. The generally smaller population of Native American children in the states, when compared to African American children, result in less precision in parameter estimates as small annual changes can result in large shifts in ratios, but do still provide clear evidence of a positive relationship between unequal incarceration and unequal foster care entries and caseloads for Native Americans.

Incarceration inequality is not a statistically significant predictor of inequality in the rates of family reunification exits from foster care, but these results do suggest a weak negative association between incarceration inequality and reunification inequality for African Americans. For a counterfactual median state, regardless of levels of incarceration inequality,
both African American children and Native American children are expected to be reunified with their families less frequently than are white children.

Unequal incarceration is a powerful predictor of unequal foster care entries and unequal foster care caseloads. Unequal incarceration accounts for far more variation in levels of inequality in state foster care entries and caseloads for African Americans and Native Americans than do inequalities in common measures of maltreatment risk. These results demonstrate that racial inequalities in levels of formal social control are strongly correlated at the place-level, after controlling for local inequalities in social disadvantage. States systematically vary in the degree to which their social policy systems are racialized. High levels of racial inequality in one domain are strongly predictive of high levels of racial inequality in neighboring domains.

3.8 Discussion

This study provides strong evidence that racial inequalities in the experience of formal social control co-occur within states. Neither policing nor child welfare casework happen in a vacuum. Social control is deeply embedded in politics, policy systems, and community and inter-agency relationships. The social conditions and structural inequalities encountered by street-level actors from one domain are often identical to those encountered from another. Police, caseworkers, and judicial actors routinely intervene in the same communities and families, are subject to similar sets of pressures and incentives, and operate within similar cultural fields that may couple race with presumptions of dangerousness. While this study cannot isolate the causes of the ecological tie between unequal criminal justice and unequal child protection, it does provide strong evidence that the magnitude of racialization in a state’s efforts to control crime and control parenting are tightly linked and are poorly explained by inequality in the incidence of socio-economic disadvantage.

Racial politics structures the distributions of state coercive and redistributive interventions (Fox 2010; Soss et al. 2011). Policymakers and street-level bureaucrats select where to concentrate resources or target coercive social control based, in part, on implicit or explicit
motivations for resource closure (Quadagno 1994), on liberal racial paternalism (Murakawa 2014), or through targeting groups that powerful constituencies perceive as threatening (Jacobs and Tope 2007). These maldistributions are a function of the deep structural inequalities that characterize many African American and Native American communities at the same time as they become mechanisms through which social inequality is reproduced (Pettit 2012; Roberts 2012).

Comparative and historical research shows that path-dependent processes of state formation provide compelling explanations for entrenched racial and ethnic inequalities in both criminal justice and welfare outcomes (Brown 2013; Fox 2010; Muller 2012; Murakawa 2014). Prior treatments of the history of racial inequality in child welfare outcomes have focused on national policy trajectories (Jacobs 2014), and have illustrated how shifting epochs of federal policy and jurisprudence have driven inequalities in child welfare (Roberts 2002). Given the degree of autonomy held by state agencies and policymakers in both the criminal justice and child welfare arenas, future research should evaluate whether a consistent set of political and institutional forces have structured the formation of a coherent set of racialized systems of social control at the state and local levels.

It is notable that population composition plays a powerful role in models of caseload and entry inequality for both African Americans and Native Americans. Though prior work has observed a negative relationship between African American population composition and criminal justice inequality (Bridges, Crutchfield, and Simpson 1987), most prior work comparing criminal justice inequality at the place-level has predicted a positive association between the relative size of the African American population and inequality, through a racial threat mechanism (Blalock 1967). While evidence for threat mechanisms is compelling when examining African American migration as a mechanism for changes in local criminal justice system outcomes (Muller 2012), the link between race, place and historical institutions may help to explain these powerful and consistent relationships between population composition and social control.

Ecological ties between criminal justice and child welfare are partly structured by state
law, policy, and ideology, but there is enormous heterogeneity within states, and much of the
day-to-day operation of police departments and child welfare agencies are structured
by local relationships, routines, pressures and incentives. The structure of the data used
here preclude geographic inference for units smaller than states, but future work should
explore how family regulation and support varies across across counties, municipalities and
neighborhoods. There are profound differences in the operations of police agencies and
child welfare agencies between urban and rural jurisdictions that also deserve much greater
attention. Variation in the structure, law, and resources of tribal governments as well as
their relationships with state and federal agencies also likely play a key role in structuring
inequalities that cannot be evaluated with these data.

Criminal justice and child welfare are closely linked. They share organizational ties, have
similar adversarial legal procedures, and are subject to the same cultural and political forces
that routinize suspicion of people of color. Criminal justice and child welfare agencies are
likely to be most active in identical subsets of communities of color, and overlapping contact
with criminal justice and child welfare systems within families is common (Berger et al.
2016; Roberts 2012). Such overlaps provide evidence that social policy regimes in the United
States are coherently racialized in regionally specific patterns. Diverse social policy systems
are likely uniformly subject to social forces that drive racialized policy implementation and
inequalities in outcomes and interventions across a broad range of policy areas. Places with
high levels of racial inequality in one form of coercive social control are very likely to have high
levels of inequality in other forms of coercive social control. Though agencies and scholars
routinely treat these systems in isolation, the activities of these diverse agencies combine to
produce exceptional concentrations of state coercion in some communities of color.

3.9 References


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Basic Civitas Books.


Chapter 4

FAMILY SURVEILLANCE: POLICE AND THE REPORTING
OF CHILD ABUSE AND NEGLECT

4.1 Abstract

American systems of child protection depend on professional and community surveillance to detect cases of suspected child abuse and neglect. The role of police in conducting family surveillance has received little attention from both criminologists and from child welfare scholars, despite the prominent role police play in originating maltreatment reports and intervening in cases of family violence. In this study, I show that the activities and resources of local police departments are positively associated with the intensity of family surveillance for Black families, but not for white families. Using administrative data on all investigated reports of child abuse and neglect for most non-rural counties between 2006 and 2012, I show that rates of African American arrest, police funding levels, and police staffing levels help to explain why police file more reports in some places than they do others. These findings suggest that family surveillance is structured by the interactions of policing, race, and place.

4.2 Introduction

Contact with the criminal justice system has a host of consequences for families (Braman 2007; Comfort 2008; Roberts 2012; Wildeman and Muller 2012; Wildeman and Wang 2017). The incarceration of a family member strains the emotional and material resources of children’s caregivers in ways that can have complex and disruptive effects (Foster and Hagan 2015; Turney 2014; Wakefield and Wildeman 2014; C. Wildeman et al. 2014). The arrest or incarceration of a parent or caregiver may present both an immediate and a long-term crisis for the care of a child, demanding that either kin, fictive kin, or the state step in to provide
care. Arrest and detention can disrupt families by incapacitating caregivers and by straining the emotional and material resources of other family members (Comfort 2008, 2016).

Aggressive policing may also create ecological conditions that undermine family stability, as the resources of kin and fictive kin who often provide informal solutions for short-term family crisis are taxed with an increasing density of criminal justice contact and an inadequate social safety net (Lee et al. 2015; Pittman 2015). While entanglement with the criminal justice system has known effects on child well-being and family inequality (Foster and Hagan 2009; Turney and Wildeman 2013; Wakefield and Uggen 2010; Wakefield and Wildeman 2014), criminal justice systems have substantial and under-appreciated demographic and institutional intersections with the child welfare system (Andersen and Wildeman 2014; Berger et al. 2016; Roberts 2012).

Child welfare systems are tasked with responding to allegations of child abuse and neglect, and contact with the child welfare system has likely countervailing effects on child and family well-being. On the one hand, child welfare caseworkers can act as a vehicle through which valuable supportive services are delivered to vulnerable families. When caseworkers perceive an immediate threat to a child’s safety, child welfare agencies are empowered to take custody of children and place them into out-of-home foster care. These interventions can protect children from severe abuse and neglect, but also disrupt family ties (Perry 2006) and have long-term negative consequences for some children (Doyle Jr. 2007).

Contact with the child welfare system is incredibly common. About 37 percent of children in the US will experience a child welfare maltreatment investigation before they turn 18 (Kim et al. 2016), about 12 percent will experience a confirmed case of child maltreatment (Wildeman et al. 2014), and more than 5 percent will enter foster care at some point during their childhood (Wildeman and Emanuel 2014). The likelihood of interacting with the child welfare system is dramatically higher for children of color. About half of all African American children will experience a child welfare investigation before their 18th birthday, and about 11 percent will enter foster care at some point during their childhood (Kim et al. 2016; Wildeman and Emanuel 2014). American Indian children face the highest lifetime risk of
entering foster care; about 15 percent can expect to enter foster care during their childhood (Wildeman and Emanuel 2014). In 2014, African American children were 2.6 times more likely to be in foster care than white children in 2014, and American Indian children were 5.5 times more likely to be in foster care than white children.\footnote{Author’s calculation using 2014 data from the Adoption and Foster Care Analysis and Reporting System (AFCARS)}

Through their power to separate families and pursue the termination of parental rights, child welfare agencies have the potential to undermine maternal and family autonomy, which coupled with the extreme levels of racial inequality that have long characterized US child welfare intervention (Crofoot and Harris 2012; Fluke et al. 2011; Harris 2014), may constitute a racialized harm to families of color (Roberts 2002). Indeed, child protection has historically acted as a vehicle through which both American Indian and African American families have experienced concentrated state repression and, in extreme cases, cultural genocide (Jacobs 2014; Roberts 2002).

Despite efforts to curtail racial disparities and enhance family and tribal autonomy (Bussey and Lucero 2013; Miller and Esenstad 2015), significant inequalities persist. Prior work on inequalities in child welfare outcomes has failed to adequately explore how policy inputs outside of the child welfare system itself, such as the organization of family surveillance, may help to explain unequal child welfare (Roberts 2014a). A small, but growing, number of studies have described the substantial variation in child welfare outcomes across places (Russell and Macgill 2015; Wulczyn et al. 2013), and variation in welfare and criminal justice policy provides a powerful explanation for spacial variation in child welfare outcomes (Edwards 2016). This chapter considers how local policing affects the flow of children into the child welfare system.

Child welfare systems lack direct and active surveillance resources. Instead, they rely on a diffuse network of street-level professionals and community members to identify and report suspected child abuse or neglect. Police play a major role in the surveillance of families. Police are legally obliged to report suspected child abuse and neglect, and about one fifth of
all reports of child abuse and neglect originate from law enforcement. In 2015, police filed about 400,000 reports of child abuse and neglect that ultimately received an investigation from a state or local child welfare agency (Children’s Bureau 2016). Police are the central institution in American systems of social control. In this study, I investigate whether and how policing structures the surveillance and regulation of the family.

Because police play such a prominent role in the origination of child maltreatment reports, it is likely that the organization and spacial distribution of policing plays an important role in determining whether a family comes into contact with the child welfare system. Child welfare system involvement may be an important, but under-appreciated, spillover consequence of criminal justice contact. Police contact may directly affect the likelihood of a family’s contact with the child welfare system through the observation and reporting of suspected child abuse and neglect, by incapacitating a caregiver through arrest, through imposing criminal stigma on parents, or through second-order ecological consequences on family stability. The social organization of policing may, in part, determine which children come to the attention of the child welfare system.

Using administrative data on investigated reports of child abuse and neglect in the U.S. from 2006 through 2012, I evaluate whether the organization and activities of police departments help to explain variation in the number of child abuse and neglect reports filed by police across counties. I also evaluate whether short-term changes in policing help to explain longitudinal variation in counts of child abuse and neglect reports filed by police within counties. These analyses clarify whether between-county variation in policing and within-county changes in policing help to explain the quantity and kinds of cases that come into the child welfare system.

\[2\text{The data utilized in this chapter were made available by the National Data Archive on Child Abuse and Neglect, Cornell University, Ithaca New York. The data from the Substantiation of Child Abuse And Neglect Reports Project were originally collected by John Doris and John Eckenrode. Funding support for preparing the data for public distribution was provided by a contract (90-CA-1370) between the National Center on Child Abuse and Neglect and Cornell University. Neither the collector of the original data, funding agency, nor the National Data Archive on Child Abuse and Neglect bears any responsibility for the analyses or interpretations presented here.}\]
These models allow for a broad comparison of police activities across places, capturing legal and institutional variation in the organization of policing. While they do not speak to micro-level relationships between the likelihood of child maltreatment reporting conditional on police contact within families, they do provide evidence of an ecological relationship between policing and maltreatment surveillance. They allow for an exploration of the institutional connections between policing and child protection as they operate across places.

Family surveillance is an inherently multi-institutional affair (Aleissa et al. 2009; Wells et al. 2014). By investigating how the activities of police relate to child maltreatment reporting, this study seeks to clarify the role that criminal justice plays in structuring which families come under suspicion of child abuse and neglect and whether these patterns contribute to family inequality. Contact with law enforcement opens up a family to the scrutiny of both the criminal justice and the child welfare systems. As such, police act as a conduit through which families and children encounter both the potentially life-saving resources and the highly disruptive interventions of the child welfare system.

4.3 Policing and family surveillance

Police conduct active surveillance of individuals and families, driven by their direct observations and perceptions of suspicious or illegal behavior, and reactive surveillance, driven by third-party reports and complaints about suspicious, nuisance, or dangerous behavior. In so doing, they serve as a central institution through which information about deviant or socially problematic behavior is systematically collected and directed to a variety of public and private organizations tasked with documenting and intervening in family and community life (Garland 1987, 1993; Gilmore 2007; Muhammad 2011). The resources available to police departments and their internal organizational priorities and routines play a powerful role in producing information (Rueschemeyer and Skocpol 1996) about social deviance and determining who will become subject to a variety of state actions, including child maltreatment investigations.

While some forms of crime are very likely to be recorded in any context, many other
behaviors or incidents police are tasked with detecting are sensitive to the social organization of policing (Beckett, Nyrop, and Pfingst 2006; Epp, Maynard-Moody, and Haider-Markel 2014). If two places and have identical rates of a particular kind of criminal behavior, the reported rate of this criminal behavior behavior will be a function of the likelihood of detection in each of these places. The production of police reports is sensitive to inputs from police agencies themselves (the organization of patrols, force size, enforcement priorities, routines), from the propensity of community members to report suspicious or dangerous occurrences to the police, and from social constructions of suspiciousness and dangerousness.

Child welfare agencies lack direct surveillance capacities. They receive, screen, and respond to reports of child abuse and neglect filed by a wide range of street-level bureaucrats and community members. This diffuse surveillance system is legally codified through a variety of mandated reporting laws. In all states, professionals who routinely interact with families and children, such as teachers, doctors, and police are required by law to report suspected child abuse or neglect, and a growing number of states have passed universal mandated reporting laws, extending this obligation to the entire population (Drake and Jonson-Reid 2015; Krase and DeLong-Hamilton 2015; Raz 2017). Law enforcement agencies are particularly prominent sentinels for state and local child welfare systems (Pelton 2008; Pence and Wilson 1992). Police report hundreds of thousands of cases of suspected child abuse and neglect annually, and originate on average more than 15 percent of investigated reports of child abuse and neglect.

In many jurisdictions child welfare agencies coordinate with police to co-investigate maltreatment (Garcia et al. 2014), and some jurisdictions have empowered police agencies to independently investigate maltreatment allegations.

The fact of police suspicion itself may also become grounds for maltreatment investiga-

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3 Author’s calculation using 2006 - 2012 NCANDS data

4 Arkansas has created a state police unit to investigate maltreatment (Cross, Finkelhor, and Ormrod 2005) and a small number of counties in Florida have tasked police with conducting maltreatment investigations (Gelles, Kinnevy, and Cohen 2003). Because models include varying state and county intercepts, such practices are unlikely to bias parameter estimates, though could be used to explore heterogeneity in case processing across different kinds of investigation structures in future research.
tions or out-of-home placements (Fong 2017). An arrest may be a consequence of suspicion of criminal activity that itself constitutes child abuse or neglect as defined by law. Police may respond to reports of family violence in which children are victims or are believed to be at risk of victimization (Cross et al. 2015; Roark et al. 2016). Many states require mandated reporters to notify child welfare agencies when they detect prenatal drug exposure, and drug use by pregnant women is often prosecuted (Flavin and Paltrow 2010). In many states, the presence of drugs in a household with children is grounds for additional criminal prosecution and may itself legally constitute child maltreatment (Child Welfare Information Gateway 2016).

In addition to cases in which police are primarily responding to allegations that involve child maltreatment or endangerment, a family may come into contact with police through activities that are unrelated to suspicions of child abuse and neglect such as traffic or patrol stops, serving warrants for arrest, or other investigations (Pelton 2008). Each encounter between a household with children and a police officer is an opportunity for family surveillance. In places where families have more frequent interactions with law enforcement, police have more opportunities to routinely observe children for signs of abuse and neglect. The volume and kinds of cases that come to the attention of child welfare agencies then are likely a function of the distribution of interactions with potential reporters of child abuse and neglect and the likelihood that potential reporters will classify particular circumstances as indicating abuse or neglect. Places with more well-resourced police departments and more frequent contact between officers and families are likely to have higher volumes of reports of child abuse and neglect originating from police as a function of their likely increased rates of contact with the public.

However, police are not dispassionate or objective instruments of social measurement. The social (and spacial) organization of policing is informed by and reproduces entrenched racialized and gendered inequalities (Beckett et al. 2006; Epp et al. 2014; Gilmore 2007; Haney 2010; Lerman and Weaver 2014; Roberts 2012; Soss and Weaver 2017). Because the distribution of policing is not socially uniform (Capers 2009; Carmichael and Kent 2014;
Perry 2009) and criminal-legal decision making is systematically related to race, class, and gender (Haney 2000; Harris 2016; Murakawa and Beckett 2010; Rios 2011; Steen, Engen, and Gainey 2005), policing may play a powerful role in explaining spatial variation in the deep inequalities that permeate the child welfare system (Roberts 2002; Wulczyn et al. 2013). Because race, gender, and class inform both where police are active and how they police (Capers 2009; Desmond and Valdez 2013; Desmond, Papachristos, and Kirk 2016; Perry 2009; Roberts 2012; Soss and Weaver 2017), places in which police more frequently arrest people of color are likely to have higher volumes of children of color reported to child welfare agencies by police, and places in which women are frequently arrested are likely have higher volumes of maltreatment reports originating from police.

Police suspicion is also likely to affect bureaucratic appraisals of the incidence of abuse or neglect within a family through the application of criminal stigma (Pager 2007). Criminal records and arrests without convictions convey a powerful social signal to street-level bureaucrats and other community members. Both prior and present contact with the criminal justice system produce powerful social stigmas that may bias the decision making of both police and child welfare agency caseworkers. Places with more aggressive police forces mark larger proportions of their population with racialized and gendered criminal stigmas. These stigmas carry with them implications of irresponsibility and dangerousness that may connote parental unfitness to street-level officials, and are likely to impact child welfare case processing (Vesneski 2012). Such organizational responses to criminal stigma may be uneven depending on the race, gender, class, and structure of an investigated family.

4.4 Analytic strategy

This analysis considers two primary empirical questions:

1. Does the organization of policing predict differences in rates at which police report abuse and neglect across counties?

2. Do changes in policing within counties predict changes in rates at which police report
abuse and neglect?

To assess the relationships between policing and maltreatment reporting at the place-level, I model how numbers of sworn officers per capita and police force budgets per capita relate to both between and within-county variation in maltreatment reporting. I also consider how patterns of arrest affect maltreatment reporting. Because gender, race, and offense characteristics may impact police and child welfare agency decisions, I evaluate how volumes of arrest by offense type, by gender of arrestee, and by race of arrestee relate to rates of police maltreatment reporting by race of reported child.

I use a series of administrative and demographic datasets to construct regression models for investigated child abuse and neglect reports filed by police at the county-year level. These models allow for an exploration of how policing priorities, staffing levels, and budgets relate to the volume of child abuse and neglect cases that originate from law enforcement. However, these models cannot adjudicate micro-level mechanisms (i.e. whether families who encounter law enforcement are more likely to become subject to a child maltreatment investigation). Instead, I focus on identifying whether places with more or less aggressive and more or less well-resourced police agencies engage in more frequent child abuse and neglect reporting.

I leverage comprehensive federal administrative data systems to explore how local police agency characteristics affect family surveillance. The outcomes for all regression models consist of counts of reports of child abuse or neglect that were ultimately investigated by state or local child welfare agencies initially filed by police. These multilevel models explore both whether variation in policing characteristics help to explain variation in rates of child abuse and neglect reporting by police across counties and whether short-term changes in policing predict changes in rates of abuse and neglect reporting within counties.

To capture both between and within-unit relationships, I estimate parameters for the average level of each county-level predictor across all periods, as well as a parameter for within-county differences from the cross-period mean (Bell and Jones 2015; Gelman and Hill 2007). Evidence for short-term within-county relationships may provide stronger evidence
of a potentially causal relationship, while cross-county relationships identify whether variation in policing regimes across places helps to explain high-levels of geographic variation in maltreatment reporting.

Different kinds of enforcement may be more or less likely to result in police interaction with families, and are subject to greater or lesser degrees of agency discretion. Police responses to violent and property offenses are often reactive, in response to public calls or complaints. By contrast, police departments have higher levels of flexibility in deciding whether, where, and how to enforce drug laws (Beckett et al. 2006). They also have considerable flexibility in deciding whether to engage in aggressive policing of low-level violations, in strategies frequently described as broken windows or quality-of-life policing (Fagan and Davies 2000; Gelman, Fagan, and Kiss 2007; Soss and Weaver 2017). We may be more likely to quantify discretion in law enforcement through comparing rates of drug and quality-of-life arrests.

Because both policing and child protection are deeply racialized and gendered legal and administrative practices (Rios 2011; Roberts 2012), there may be substantial heterogeneity in the relationships between policing and family surveillance for families of color relative to white families, and for women relative to men. Ideas about parental fitness are deeply intertwined with race, class, and family structure (Haney 1996; Roberts 1997, 2012) in ways that are likely to profoundly affect the likelihood of a maltreatment report conditional on police contact.

To explore this possibility, I construct separate models for relationships between policing and maltreatment reporting based on counts of arrests at the county-year level by the kind of offense, as well as the race and gender of arrestees. Police may appraise families of color to be more dangerous to children’s well-being than they would similar white families. Such heterogeneity in risk of reporting would produce varying functional relationships between policing and reporting by race even after accounting for racial inequalities in rates of police contact. Women who are subject to arrest may be more likely to be appraised as a danger to their children by police and child welfare agencies than would similarly situated men.
The arrest of a woman is also more likely to trigger an immediate crisis of care for a child. Women of color are likely subjected to particularly extreme bias in law enforcement and child welfare agency labeling of parental unfitness, however, available national data provide counts of arrests by gender or by race, not by both gender and race.

Spatial variation in child maltreatment reporting is likely a function of variation in actual rates of child abuse and neglect, and variation in rates of arrest is partially explained by variation in actual rates of crime. To control for heterogeneity in child well-being, I include controls for rates of child poverty by race and rates of infant mortality by race. To provide a partial control for heterogeneity in crime across counties, I include a control for homicides known to the police per capita. This measure provides information about actual rates of the most severe violent offending at the place-level that is less directly dependent on law enforcement priorities and organization than are arrest rates.

4.4.1 Data and measures

Child maltreatment reports data and measures

Outcomes for this study are constructed from the National Child Abuse and Neglect Data System (NCANDS) (Children’s Bureau 2013). NCANDS records case-level information on all investigated reports of child maltreatment annually with data reported from state and local child welfare agencies. 44 states voluntarily reported data on these abuse and neglect investigations and their outcomes between 2006 and 2012.\footnote{Pennsylvania only reports substantiated (confirmed) cases of abuse and neglect during these years of NCANDS reporting, making their reports incomparable to total counts from other states. As such, I exclude Pennsylvania counties from these analyses.} From these case-level data, I construct counts of investigated reports of child abuse and neglect filed by police at the county-year level (the smallest unit of geography reported in NCANDS).

These data do not capture reports of child abuse and neglect that are screened out as not requiring an investigation by child welfare agencies. Screening processes do vary by jurisdiction, but are not possible to quantify with current federal administrative data.
While reports by police are likely to be treated by child welfare staff as more credible than those reported by non-professional reporters (Cross et al. 2005), it is not currently possible to measure patterns of report screening across counties. As such, the analysis below is restricted to only those cases reported by police which eventually receive a child welfare agency response in the form of an investigation. These data do include investigations that both confirm or fail to confirm child maltreatment.

The NCANDS public-use file de-identifies counties with fewer than 1,000 reports of child abuse and neglect filed annually. This censorship systematically excludes low-population low-reporting counties, potentially biasing population and regression estimates. If we assume a very low reporting rate of 2 children per 1,000 (the fifth percentile of the observed data), a county would need to have 50,000 children in its population to meet these inclusion criteria in the NCANDS data. To reduce the possibility of bias induced by this left censorship, I restrict the analysis to counties with more than 50,000 children in their population. As such, all multivariate inferences presented below are restricted to non-rural counties.

Of the 835 counties included in the 2006 - 2012 NCANDS public file, 560 have fewer than 50,000 total children in their populations and are excluded from the analysis. Of the remaining counties, 31 are missing more than 50 percent of data on the source of maltreatment reports and are excluded. These procedures result in a final set of 284 counties, and 1775 county-year observations that are included in the analysis. For 2012, this set includes counties representing about 59 percent of the total child population of the U.S., 77 percent of the African American child population, and 49 percent of the U.S. non-Latino white child population.

Crime, policing, and arrest data and measures

Focal predictors are constructed from the Uniform Crime Reports (UCR) County-Level Detailed Arrest and Offense data and the UCR Arrests by Age, Sex, and Race annual data for

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Future research should explore the viability of multilevel imputation to address these measurement problems, though missing reporter or race data may not be missing at random.
2006 through 2012 (United States Department of Justice. Federal Bureau of Investigation 2014a). The UCR, collected by the FBI and maintained by the National Archive of Criminal Justice Data, provides the only time series data on law enforcement activity available at the jurisdiction level and covering the period of interest for this study. The UCR Arrests by Age, Sex, and Race series provides data on arrests for age groups by sex and race at the police agency level, which can be aggregated to the county-level as sums of agencies within particular counties.

I group offenses into sets that are subject to higher or lower levels of police discretion in enforcement, then create county-year sums for all arrests, and for arrests by gender and race. Violent offenses include murder, manslaughter, rape, robbery, aggravated assault, and other assaults, following the FBI’s classification of violent offenses in the UCR index crime classification system. I also rely on the UCR’s classification of drug offenses, a set which includes either possession or sale of opiates, marijuana, synthetic narcotics, and other dangerous non-narcotic drugs. Quality of life policing captures a more diffuse set of offenses that are generally low-level and subject to high levels of officer and agency discretion in enforcement. These include vandalism, liquor law violations, drunkenness, disorderly conduct, vagrancy, general suspicion, loitering, and various gambling offenses. This schema results in four categories of offenses: all arrests, arrests for violent offenses, arrests for drug offenses, and arrests for quality of life offenses. About 13 percent of included counties fail to report arrest data to the FBI for the Uniform Crime Reports. I assume these data are missing at random, and construct imputation models ($m = 4$) to avoid bias induced by listwise deletion (Honaker and King 2010; Honaker, King, and Blackwell 2011). Sensitivity analyses excluding cases with missing data yield substantively similar results.

I obtain information on the number of officers employed by police agencies at the county-year level from the UCR Police Employee Data (United States Department of Justice. Federal Bureau of Investigation 2014c). These data present monthly counts of total officers and employees at the agency level for all years included in this analysis. I aggregate agencies to the county-year level to construct per capita rates of police officer employment. These rates
provide a comparable measure of police force size both across places and within places over time.

The Annual Survey of State and Local Government Finances provides annual data on aggregate state and local operating budgets of police agencies. Because these data are the product of a sample of local governments, time-series estimates of individual police agency budgets are not reliable; the state is the smallest geographic unit available for time-series analysis. I calculate police budgets per-capita at the state-year level and adjust all figures for inflation into 2014 dollars. These data provide a general measure of the resources available to law enforcement within states. Coupled with county-level police employment data, these two variables provide a measure of the resources available to police agencies, and give us some insight into how agencies vary across places and change within-places over time.

Arrest rates reflect both law enforcement and policy decision-making and actual rates of crime. Homicide is among the more reliable measures of criminal offending. To partially control for selection into both arrest and child maltreatment driven by underlying rates of violence across counties, I calculate 5-year moving averages of homicides per capita from the Uniform Crime Reports Offenses Known to Law Enforcement data (United States Department of Justice. Federal Bureau of Investigation 2014b). Importantly, these measures reflect all homicides known to police, not just those for which an arrest was made. As such, they are less sensitive to the resources and organization of police agencies than are arrest rates, and provide a better estimate of actual rates of serious violent offending.

Child and family well-being data and measures

The National Cancer Institute produces annual estimates of the size of populations in counties by race, sex and age through the Surveillance, Epidemiology, and End Results (SEER) program. These population estimates provide a reliable time series of the size of adult and child populations by race for all counties and years available in the NCANDS data. I use these counts of child population size as offsets in regression models, and as denominators for estimated child poverty rates. I use counts of adults by race as denominators for crime
rates, and counts of the total adult population as a denominator for homicide rates. I rely on total population counts as the denominator for calculating rates of police staffing.

Of course, rates of reported child abuse and neglect are sensitive to actual rates of child abuse and neglect. The U.S. Census Bureau’s Small Area Income and Poverty Estimates (SAIPE) provide model-based annual estimates of total population, total child population, persons in poverty, children in poverty, and median household income at the county-level, and provide estimates with far lower error than do estimates constructed from the American Community Survey (ACS). However, the SAIPE do not include information on child poverty by race. I supplement the SAIPE child population estimates with child poverty estimates for children of color from the 5-year American Community Survey data, accessed through NHGIS (Ruggles et al. 2010).

Infant mortality is both a strong predictor and partial subset of child abuse and neglect. I rely on infant mortality data from the National Vital Statistics System, as compiled and reported in the Area Health Resources File (AHRF). These data report the rate of infant deaths per thousand live births for a rolling five-year period at the county-level. Infant mortality data reported through AHRF in the 2015-2016 release are available for five-year periods beginning with 1996 - 2000 and ending with 2010 - 2014. To maximize comparability with NCANDS data, I join the five-year data according to the final year of the reporting period, so 2002 - 2006 infant mortality data are joined with 2006 NCANDS data, and 2008 - 2012 infant mortality data are joined with 2012 NCANDS data. These data are available as infant mortality rates for all children, for white children, and for non-white children. For models of all investigations, I include measures of infant mortality for a county’s full population. For models of maltreatment investigations of white children, I include county-level white infant mortality rates. For models of investigations centering on children of color, I include county-level non-white infant mortality rates.

Because maltreatment reporting and policing likely function differently in rural, suburban, and urban contexts, I include a measure of county-year population density in all models. This measure is constructed from the American Community Survey reports of county land-
area. I then construct a measure of county-year population per square mile using the total estimated population of a county from the SEER population estimates.

4.4.2 Statistical models

The focal outcome for this analysis is the number of investigated reports of child abuse and neglect, reported annually for U.S. counties. I treat these variables as counts, bounded by the size of a county’s child population. The relationships of interest include the associations between child maltreatment reports filed by police and rates of arrest and police force size both across counties and within counties over time. I construct a series of multilevel Poisson regression models to test whether policing itself contributes to the volume of child welfare investigations in a county. These multilevel models adjust for time-stable characteristics of counties and states, while enabling both a between-state and within-state comparison of the relationships between policing and surveillance for child abuse and neglect.

In addition to a model for all investigated abuse and neglect reports filed by police at the county-year level, I construct a series of additional models that explore whether the relationship between policing and maltreatment surveillance vary by the race of the reported child, by the race and gender of arrestees, and for categories of arrest offenses. I estimate separate models for the relationship between police maltreatment reporting and policing for the full population by arrest category (all offenses, violent offenses, drug offenses, quality of life offenses), for maltreatment reports of white children by police by rates of white arrest by arrest category, for reports of African American children by rates of African American arrest by arrest category, for reports of all children by rates at which women are arrested by offense category, and for reports of all children by rates at which men are arrested by offense category.

Models which include both group-mean and group-mean differenced observations as predictors enable a simultaneous estimation of both the across and within-county relationships between policing and maltreatment reporting. This approach preserves the advantages of a fixed effects within-unit model, which produces estimates of unit intercepts that are not
correlated with estimated regression parameters, while enabling direct comparison across units and allowing for measures that do not vary (or are slow-moving) over time (Bell and Jones 2015). Because the mean-variance relationship of a Poisson model is unrealistic for these data, I include an observation level varying intercept to model overdispersion in report counts (Bolker et al. 2009; Gelman and Hill 2007; Harrison 2014). I offset all models by the size of the county-year child population, the exposure population from which maltreatment reports are drawn.

For county $i$, year $j$, state $k$, child population $n$, and predictors $x$, I construct a series of models for counts of investigated maltreatment reports $y$. These models take the general form:

$$y_{ij} = n_{ij}e^{\gamma_i + \beta_1 j + \beta_2 x_i + \beta_3 (x_{ij} - \bar{x}) + \cdots + \beta_n (x_{ij} - \bar{x}_i) + \epsilon_{ij}}$$

$$\gamma_i = \beta_0 + \zeta_i + \nu_k$$

$$\zeta_i \sim N(0, \sigma^2_\zeta)$$

$$\nu_k \sim N(0, \sigma^2_\nu)$$

$$\epsilon_{ij} \sim N(0, \sigma^2_\epsilon)$$

Models are estimated using MCMC\textsuperscript{7} with weakly informative priors\textsuperscript{8}. To assess the marginal effects of policing on police reporting of child abuse and neglect, I simulate posterior predictions for counterfactual scenarios in which arrests, budgets, and police staffing are varied across contexts. I separately evaluate whether average levels of arrests, budgets, or police staffing help to explain variation in police maltreatment reporting across counties.

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\textsuperscript{7}Models are estimated using the R package \texttt{rstanarm} (Stan Development Team 2016). All scripts used in this analysis are available at \url{https://github.com/f-edwards/ncands-fc}

\textsuperscript{8}The package \texttt{rstanarm} flexibly handles prior distributions for regression parameters. Because all model predictors are mean-centered and scaled into standard deviation units, I use weakly informative priors with mean zero for all regression parameters. Intercept priors are set at $p(\beta_0) \sim N(0, 3)$, and linear predictor parameter priors are set at $p(\beta_1 \ldots n) \sim N(0, 1)$. The prior covariance matrix is given an LKJ prior with regularization, concentration, shape and scale parameters set at 1.
in addition to evaluating whether short-term changes in arrests, budgets, or police staffing within-counties predict shifts in the volumes of abuse and neglect reports filed by police.

4.5 Findings

4.5.1 Descriptive Findings

Police were responsible for filing reports for 570,000 of the 3.4 million children who were subjects of child abuse and neglect investigations in 2012 (17 percent). Among professional mandated reporters of child abuse and neglect, only teachers were responsible for filing more reports (about 580,000 in 2012). Nationally, about 9 children per 1,000 in 2012 were subject to a child abuse or neglect investigation because of a report filed by police.

Reports filed by police have several notable differences when compared to reports filed by other sources. Physical abuse is alleged in 14 percent of investigations initiated by a police report to child welfare agencies. For all other reporters, physical abuse is alleged in 21 percent of reports. Police are similar to other reporters in the frequency of reporting neglect; about 50 percent of cases primarily involve allegations of child neglect. Police report medical neglect less frequently than do other reporters (about 0.3 percent for police compared to about 1.4 percent for all reporters). Sexual abuse is reported in about 7 percent of police initiated investigations, compared to about 5 percent for all reporters. Psychological or emotional maltreatment is reported in about 6 percent of cases filed by police, compared to 4 percent from all reporters. Reports initiated by police are more likely than other reports to result in a confirmed case of child maltreatment. In about 36 percent of investigations initiated by a police maltreatment report, child welfare agencies ultimately confirm that a child was a victim of abuse or neglect, compared to a rate of about 16 percent of cases for all reporters.

There is substantial regional variation in the frequency of police reporting of child abuse.

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9All counts of police reports used for these analyses are counts of report-child pairs. A child may be subject to more than one report, and a report may involve more than one child. Alternate specifications could consider only unique reports or only unique children.
and neglect. About 23 percent of investigated abuse and neglect reports in New England states were filed in 2012 by police. In the Mid-Atlantic states, police were only responsible for 12 percent of reports. Police filed about 17 percent of investigated maltreatment reports in Midwestern states, and about 16 percent of reports in Pacific coastal states. In Mountain Western states, police filed about 21 percent of maltreatment reports. In the South Atlantic states, police filed about 20 percent of all reports, while in the East South Central states, police filed only about 13 percent of all reports. In West South Central states, police filed about 15 percent of all reports. Across regions, police are responsible for between 12 to 21 percent of maltreatment reports. Counties vary tremendously in their rates of reporting. Counties in the 25th percentile of observed rates of police reporting had about 5 police reports resulting in an abuse or neglect investigation per 1,000 children, while counties in the 75th percentile had a rate of reporting of about 14 per 1,000 children. In 2012, Brevard County, Florida had a rate of police maltreatment reporting of 31 per 1,000 children. By contrast, King County, Washington had a rate of police maltreatment reporting of less than 3 reports per 1,000 children.

Table 4.1 provides descriptions of policing and child maltreatment reporting measures for the 284 counties included in these analyses. Police were responsible for originating 9 investigated maltreatment reports per 1,000 children on average. They reported white children to child protection agencies at a rate below the population average, about 7 white children per 1,000 were the subject of a police-reported maltreatment investigation. African American children, by contrast, were reported on average to child protection agencies by police at a rate of over 15 per 1,000 children, more than double the rate at which white children were reported in these counties.

Police arrested, on average, about 24 adults per 1,000 per year in the counties included in this analysis. African Americans were arrested at a rate of more than 50 per 1,000 adults, more than double the rate of white arrest. This pattern generally holds for violent, drug, and quality of life arrests. Men were arrested, on average, at a rate of more than 30 per 1,000, while about 8 women per 1,000 were arrested on average in these counties. Men were
<table>
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<th>Category</th>
<th>Mean</th>
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<th>Between SD</th>
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<tr>
<td>Police maltreatment reports per 1,000 children</td>
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<tr>
<td>- All children</td>
<td>8.9</td>
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<td>- African American children</td>
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</tbody>
</table>

Table 4.1: Police and maltreatment reporting in large US Counties. Average values, average within-county standard deviation, and between-county standard deviation
arrested more than three times more frequently than were women for violent, drug, and quality of life offenses in these counties. The average county employed about 2.6 officers per 1,000 population. On average, state, county, and local police agencies spent about $314 per capita on operations.

Variance between counties is far greater than variance within counties for all focal measures. County police practices appear to change within places relatively slowly over time. However, there is sizable variation across counties. The between-county variance in police maltreatment reporting rates (standardized for population size) is approximately twenty times greater than the within-county variance in police maltreatment reporting rates. There is far more heterogeneity in reporting to explain across counties than there is in relatively stable within-county reporting trajectories.

Arrests tend to fluctuate year-to-year within-counties far more than do police staffing levels or budgets. Staffing levels, in particular, changed very little within-places during the relatively short time window included in this analysis (7 years). The slow-moving character of police organizations may compromise the ability of these models to detect meaningful longitudinal relationships between police organizations and police maltreatment reporting.

4.5.2 Regression results

Estimated regression models provide no clear evidence for within-county relationships between policing and maltreatment reporting. However, these models do reveal several notable relationships between policing and maltreatment reporting across counties. I provide estimates of the marginal predicted changes in rates of police maltreatment reporting for changes in year-to-year and cross period arrests by race, gender, and offense in Figure 4.1. I estimate and display predicted changes in police maltreatment reporting by race for counterfactual shocks to annual changes and cross-period average levels of police staffing and police budgets in Figure 4.2. Full regression parameter estimates are provided in Appendix D.

Figure 4.1 illustrates the expected change in the rate at which police file maltreatment reports that are ultimately investigated by child protection agencies for a hypothetical county
that has median values for all model predictors and offsets. For each scenario, I display the
difference between the posterior prediction for this counterfactual median scenario and for
a scenario in which the focal variable is shifted from its median to the 90th percentile of
the observed data. These simulations allow us to examine the model results on the scale of
interest, rates of maltreatment reporting, rather than on the scale of transformed Poisson
regression parameters. Figure 4.2 repeats this procedure for police budgets and rates of
police staffing.

I apply this counterfactual shift from the median to the 90th percentile of the observed
data separately to within-county changes in arrest and to cross-period average arrests. The
within-county measures are defined as the difference of each period’s observation from the
mean value for that county, and capture annual changes in arrest rates holding average
rates of arrest constant. The cross-period measure is defined as the mean for all years for
each county, and can be used to measure the relationship between average levels of arrests
across counties, holding annual shifts constant. These models allow for a distinction between
how maltreatment reporting relates to longitudinal shifts in arrests within counties and to
cross-sectional variation in average levels of arrest across counties.

Though there is strong theoretical reason to suspect a within-county relationship between
shifts in arrests and rates of police reporting, these models provide no clear evidence for such
a relationship, as displayed in Figure 4.1. For all children, African American children, and
white children, these models suggest that annual changes in rates of total arrest, African
American arrest, and white arrest do not have a clear positive or negative relationship to
police maltreatment reporting. Conditional on the data, these models also predict that
short-term changes within counties in the rates at which men or women are arrested are
unrelated to the rates at which police report abuse and neglect for all children. All of these
within-county change in arrest parameter estimates are centered at or near zero (see Tables
in Appendix D) and posterior predictions center on zero with generally narrow uncertainty
intervals.

By contrast, average county-level arrest rates are clearly associated with rates of police
Figure 4.1: Expected marginal changes in police maltreatment reports for increases in year-to-year arrests and cross-period average arrests, posterior predictive simulation, 90 percent posterior uncertainty interval
Figure 4.2: Expected marginal changes in police maltreatment reports for increases in year-to-year and cross-period police staffing levels and police budgets, 90 percent posterior uncertainty interval
maltreatment reporting for some groups and classes of arrest. We can conclude that maltreatment reporting for all children is positively associated with average levels of arrests for all arrests and for violent arrests with more than 95 percent posterior certainty. These models also provide 95 percent posterior certainty that rate at which men are arrested for violent offenses is positively associated with police maltreatment reporting rates. For arrests of women, these models show that the county-average total rate of arrest and the rate of violent arrests are positively associated with police maltreatment reporting. With the exception of drug arrests, average levels of African American arrest are positively associated with the rate at which police report African American child maltreatment. County average levels of white arrest are not clearly associated with rates at which police report white child maltreatment. The standard deviations of state, county, and observation-level intercepts for all models are sizable, and show that there is a large amount of heterogeneity in police maltreatment reporting that is not accounted for by the police organizational measures or by the measures of child well-being and social context included in these models.

I illustrate the magnitude of these relationships in Figure 4.1. These models predict that a county with median levels of police funding, staffing, child poverty, infant mortality, household income, population density, and racial population composition and high average levels of arrest (90th percentile of observed data) will have $0.6 \pm 0.05$ \(0.3\) more investigated cases of child maltreatment originally reported by police per 1,000 children. Counties with high average rates of violent arrests are predicted to have $0.7 \pm 0.01$ \(2.9\) more reports per 1,000 children than a hypothetical median county.

These relationships are more pronounced for African American children. I expect a county with high average levels of African American arrest to have $1.7 \pm 0.1$ \(6.9\) more investigated maltreatment reports involving African American children per 1,000 children than will a county with median levels of African American arrest. Counties with high levels of African American violent arrests are predicted to have $2.3 (0.2, 8.6)\) per 1,000 children more reports.

\[1^0\]All intervals reported here are medians and 90 percent credible intervals estimated from 2000 draws from model posterior predictive distributions.
High levels of drug arrest predict a 0.6 ($-0.9, 3.6$) difference in reporting rates, and high rates of quality of life arrests of African Americans predict 1.1 ($-0.5, 4.7$) more reports of child abuse and neglect from police than we would expect in a hypothetical median county. Note that median levels of arrest and maltreatment reporting are dramatically higher for African Americans when compared to the total population, and these predictions are differences from these higher median rates.

Counties with high rates of white arrest do not tend to have higher levels of white child maltreatment reporting. The association between rates of arrest and maltreatment reporting appears to extend only to children and families of color, conditional on these data. Relationships between average levels of arrest for men and women have very similar relationships to rates at which all children are reported by police to child protection agencies. For all offense categories except for drug offenses, arrest rates for both men and women are associated with relatively small increases in rates at which children are investigated by child protection agencies based on a police report.

I show the posterior expectations for the relationship between changes and average levels in police staffing levels and police budgets in Figure 4.2. There is no clear relationship between changes in budgets and staffing levels and police maltreatment reporting (likely a function of the incredibly small within-county variance for these measures). For the full child population and for African American children, counties with high police staffing levels and counties in states that have high average police budgets are expected to have higher rates of police maltreatment reporting than does a county with median values for these measures. Counties in states with large police operating budgets tend to report fewer white children to child protection agencies than do states with lower levels of police spending, holding white child poverty and infant mortality at their median levels.

### 4.6 Discussion

These results show that the activities of police and organizational resources available to law enforcement agencies are related to family surveillance for children of color, but not
for white children. Cross-county variation in the policing of African Americans is closely tied to cross-county variation in the volume of African American children coming into the child welfare system following a report by police. The observed positive association between policing and maltreatment reporting for the full population are driven by the exceptionally strong association between policing and family surveillance for children and families of color. Places with more well resourced police agencies report higher volumes of children of color to the child welfare system, and report lower volumes of white children to the child welfare system, holding ecological levels of family disadvantage constant. This strongly suggests that policing resources are spacially concentrated in particular communities, reinforcing a racialized geography of policing and child protection (Beckett and Herbert 2009; Beckett et al. 2006; Capers 2009; Roberts 2008).

Police agencies are engaged in child protection, and child protection agencies are engaged in policing (Roberts 2014a). In a period of fiscal austerity and neoliberal welfare state reform (Roberts 2014b; Soss, Fording, and Schram 2011), police and criminal justice institutions have increasingly taken on responsibility for tasks previously left to welfare state institutions. While relationships between police departments and child saving organizations are not historically novel (Dohrn 2002; Tanenhaus 2004), future work should explore in more historical detail whether the retreat of the welfare state in the lives of the poor has created an expanded role for police in the surveillance and regulation of families.

Several limitations affect the universe of cases that these results extend to, and may affect the inferences from model results. First, because of small-county censorship, these results do not extend to rural counties. Law enforcement likely plays a very different role in maltreatment reporting in rural counties (Dawson and Wells 2008). Notably, many of these small population counties are home to American Indian reservations. The legal intricacies of tribal, federal, state, and local police jurisdictions and longstanding inequality in the policing of Indian Country are very likely to play a prominent role in maltreatment reporting (Perry 2009; Pevar 2012). Because American Indian children are dramatically over-represented in state child welfare systems (Crofoot and Harris 2012; Jacobs 2014; Pevar 2012), future work
should explore whether policing may help to explain the pathways of Native children into the foster care system. And although the relationship between policing, race, and place likely broadly structures family surveillance for many groups, limitations in criminal justice reporting of ethnicity and race makes cross-county comparisons for Latino, Asian, and Pacific Islander criminal justice outcomes difficult. Work using alternative criminal justice or survey data should do more to explore these patterns and think about how race and ethnicity may broadly structure encounters between states and families.

These data have a relatively small time window and as such, relatively few (7) observations of annual within-county changes in arrests, budgets, and staffing. Most counties saw very small, or zero, changes in officer staffing levels, and generally small or near-zero changes in rates of arrest during the time window included in this study. As additional years of arrest and maltreatment reporting data become available, future work can evaluate whether this narrow time window misses relationships that may be due to relatively slow-moving institutional shifts in policing. Lastly, these data rely on aggregated event counts at the place level, and provide no information about overlapping criminal justice and child welfare involvement within families. All inferences must be restricted to a macro-level relationship between policing and child welfare reporting. Future work should explore micro-level relationships between low-level criminal justice contact and child welfare reporting, in particular, evaluating whether the risk of maltreatment reporting for a child increases conditional on a family member’s contact with police.

The clear racial heterogeneity in the relationship between policing and family surveillance suggest two potential causal mechanisms that should be explored in future research. First, these findings may indicate that concentrated policing has ecological consequences on the stability of families of color that result in more damage to families for marginal increases in police contact. Future work should explore the relationships between the spacial and network density of criminal justice contact and child welfare system outcomes. These findings could also indicate that the meaning of criminal justice contact for the trajectories of children of color through the child welfare system is racialized. Additional research should explore
whether and how race affects the symbolic importance of criminal stigma in formal child welfare procedures.

4.7 Conclusion

American child protection systems are deeply multi-institutional. Lacking their own capacity to monitor children and families for signs of abuse and neglect, they depend on police, medical personnel, teachers, and other professionals and community members to leverage their routine interactions with children and families into a broad and diffuse network for maltreatment surveillance. This dependence turns practices and biases from external organizations into key features of the processes through which maltreatment reports are generated. Inter-relationships between police and child protection agencies appear to transpose some of the race-making characteristics of criminal justice (Lerman and Weaver 2014; Walker 2016) into child protection systems.

The social and spacial organization of policing plays a key role in selecting children and families for scrutiny by child protection agencies. Neither the spacial distribution of police officers, nor the qualitative character of police-public interactions are uniform. Unequal policing has direct implications not only for criminal justice, but also for child protection. The social organization of law enforcement plays a role in determining which children do, and which children do not, come to the attention of child protection agencies.

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Chapter 5

CONCLUSION: TOWARD A MULTI-INSTITUTIONAL THEORY OF CHILD WELFARE

Child welfare agencies do not exist in a political or institutional vacuum. They are simultaneously tasked with saving children and with controlling families. As a social welfare institution, child protection systems deliver often life-saving services and resources to children and families in crisis. As an institution of social control, child protection systems legally and normatively classify parental deviance and punish those parents that are procedurally determined to be unfit. The way that they pursue this dual mission is influenced by the effects of neighboring policy systems on children and families and by the ways that policy makers and agency bureaucrats understand and respond to child abuse and neglect. Child protection systems sit directly at the intersection of the welfare and carceral state.

This dissertation shows that the operations of child welfare agencies are deeply structured by place, race, and institutions. Institutional and demographic feedbacks from the configuration of local welfare and criminal justice systems profoundly affect (and often co-constitute) the operations of child welfare systems. Racialized institutions simultaneously structure inequalities in both criminal justice and child welfare. Police form an integral part of the complex network that subject families of color to high levels of surveillance and child protection system involvement. Taken as a whole, these findings show that state interventions are not simple mechanical reactions to the incidence of social problems. Interventions are, in part, products of systems of surveillance, classification routines, policy feedbacks, and resource constraints.

Prior quantitative research on child welfare system outcomes has focused almost exclusively on demographic and micro-level explanations for heterogeneity in the experiences of
children and families. While this body of research has produced profound insights into the child and family-level mechanisms that drive abuse and neglect and system involvement, few prior analyses have explored whether meso and macro-level social, political, and institutional contexts affect child protection. This dissertation clearly shows that child welfare system outcomes are a multilevel process. For a child maltreatment investigation to occur, a potential reporter must first interact with a child or family, then classify what they’ve seen as abuse or neglect, then choose to file a report, at which point an agency must choose to initiate an investigation. For a child to be placed into foster care, street-level workers have to decide that a child is in imminent danger, decide that there are no safe alternatives to placement, then decide the appropriate foster care placement for that child. Surveillance opportunities, institutional routines, ideological commitments, racialized and gendered biases, resource constraints, and informal network resources all play powerful roles at each of these transition points. Like all state bureaucracies, child welfare systems are structured by historical and contemporary institutions. Future research on child welfare system outcomes must explicitly consider the roles that policy contexts and multi-institutional feedbacks play in structuring the trajectories of children and families through child protection systems.

Comparative sociological research on social policy systems has almost entirely neglected the child welfare system. Leveraging the insights of historical, ethnographic, and theoretical scholarship that has described the nuanced ways that child protection interacts with race, colonialism, gender, and poverty (Fernandez-Kelly 2015; Gordon 2001; Jacobs 2009, 2014; Roberts 2002, 2008), this dissertation shows that paternalistic welfare interventions are broadly structured by policy institutions. Prior work has shown that criminal justice and traditional welfare state systems are profoundly structured by political, cultural and institutional forces (Beckett and Western 2001; Soss, Fording, and Schram 2011; Sutton 2004). This dissertation expands these insights to new domains of coercive welfare state institutions and suggests that future work exploring the joint trajectories of carceral, welfarist, and paternalistic institutions is likely to be fruitful. Unlike with the welfare state, political coalitions and conflicts in child welfare are not strictly a matter of resource closure. And
unlike with criminal justice, expansive child protection systems are not simple indications of a punitive or retributive politics. Child protection is a near ideal-typical paternalistic institution, simultaneously supporting and coercing families. Comparative sociological and political scholarship could draw new insights into the relationships between institutions, place, and race by directly incorporating explicitly paternalistic institutions into theoretical models of state formation, alongside the carceral and welfare states.

Foundational work by Dorothy Roberts has detailed the implications of the widespread involvement of the child welfare system in the lives of Black mothers for family and racial stratification (Roberts 2002). This dissertation builds upon these insights by illustrating how local configurations of racialized social control spill over into child protection outcomes. This evidence further supports Roberts’ findings that criminal justice and child protection systems operate within distinctly racialized geographies (Roberts 2008). Family demographers and criminologists should more seriously consider how this exceptionally common intervention affects racial and family stratification and interacts with criminal justice systems. Ethnographic work strongly suggests that treating any single policy intervention in isolation misses the complex ways that a battery of state institutions become involved in the lives of children and families (Fernandez-Kelly 2015; Shedd 2015). Child protection is one among many exceptionally powerful, and distinctly under-examined, forces in the lives of low-income families of color whose implications for social and family inequality have yet to be fully explored.

5.1 Implications for child and family policy

These findings show that a child’s placement into foster care is not merely a function of maltreatment risk. Child maltreatment risk is endogenous to social policy environments, and child protection intervention is contingent on a host of policy institutions. Efforts to reduce the utilization of the foster care system and diminish the deep racial disparities that have long characterized American child welfare systems require recognition that both the gutting of the welfare state and the rise of mass incarceration are intimately bound up
with contemporary child welfare system outcomes. While the findings of this dissertation do not provide evidence of micro-level causal links between welfare, punishment, race, and foster care, they illustrate how known micro-level relationships between policy inputs and child well-being aggregate to the macro-level, and how institutions themselves play a role in routinizing particular kinds of interventions. These findings provide empirical support for reform efforts that push for broad investment in resources to support marginalized families and a dramatic diminution in the scope of the criminal justice system as necessary pre-conditions for diminishing the role of the child welfare system in the lives of American families. Just as child and family well-being are sensitive to policy, efforts to reform child protection should recognize that these systems are tightly coupled with criminal justice and social policy.

State and local social welfare systems can play a dramatic role in mitigating or exacerbating the stability and well-being of children and families. Following the passage of welfare reform (PRWORA) in 1996, states gained control over the implementation of their income support systems and many proceeded to erect high barriers to entry, motivated by a political environment that rewarded hostility to low-income mothers of color (Quadagno 1994; Roberts 1997). These reforms included caps on the number of children for which a family could receive benefits, drug testing, reduced benefit levels, lifetime enrollment limits, employment requirements, and other reforms designed to slash welfare rolls and shift the role of the state in the lives of the poor (Roberts 1997; Soss et al. 2011). While some of these losses in income support have been offset by the expansion of federal and state Earned Income Tax Credits (Slack et al. 2014), these work-contingent benefits do not extend to many of the most marginalized families, who now are forced to subsist on incredibly meager and wholly insufficient incomes (Edin and Shaefer 2015; Seefeldt 2016).

There are a growing number of rigorous studies demonstrating a causal link between the availability and generosity of cash support with child well-being and child welfare system involvement (Cancian, Yang, and Slack 2013; Wildeman and Fallesen 2017). Public and private programs that provide cash, food, housing, childcare, and healthcare all effect the
well-being of families and children (Desmond et al. 2013; Hill and Shaefer 2011; Hill et al. 2013; Ratcliffe, McKernan, and Zhang 2011), and the quality and accessibility of these resources and services all vary with the place in which a family lives (Allard 2009; Small et al. 2013; Soss et al. 2001). The volume of children experiencing abuse and neglect that can be attributed to resource scarcity, inadequate housing, and failure to provide adequate medical care is a direct function of the availability and quality of supportive services and resources for marginalized families. In Chapter Two, I show that places with welfare systems that are easier to access and more generous place far fewer children into foster care than do states with austere welfare systems. States with generous and accessible social welfare systems are also far less likely to place children in foster care into institutional settings. These findings suggest that expanding access to cash, in-kind, and medical resources for marginalized families will have virtuous consequences for rates of family involvement in child welfare systems and the disruptiveness of child welfare interventions.

Contact with the criminal justice system can have dramatic consequences for families, and the mass incarceration of low-income people of color has become a powerful engine of family stratification (Foster and Hagan 2015; Lee, Porter, and Comfort 2013; Sykes and Pettit 2014; Wakefield and Wildeman 2014). Recent work has shown that paternal incarceration has a causal effect on foster care placement (Andersen and Wildeman 2014) and that the demographic overlap between the criminal justice system and child welfare system is substantial (Berger et al. 2016). Throughout this dissertation, I have shown that the breadth, punitiveness, and racialization of criminal justice systems provides a powerful explanation for variation in the magnitude of inequality and frequency of intervention across state and local child protection systems. Efforts to aggressively reduce the use of police and prisons to address social problems, coupled with efforts to expand programs that support and provide resources to marginalized families and children would likely drive down the utilization of child protection systems by both stabilizing families and undermining the institutionalization of disruptive approaches to family crisis.
5.2 Limitations and directions for future research

These time-series cross-sectional models of child welfare outcomes provide substantial new insights into how place matters for social policy and family inequality. However, they cannot provide rigorous causal tests of the associations between a variety of policy inputs, child well-being, and state intervention. Appropriate micro data for these kinds of analyses are typically limited to a single locale or are only nationally generalizable, undermining the ability of researchers to explore how local policy conditions may effect child welfare outcomes. The increasing development of linked administrative data dramatically expand the possibility for this kind of research, and future work should exploit geographic variation in policy contexts to identify whether policy environments themselves have a causal effect on child protection interventions.

These analyses are also limited by the window of time included in federal child welfare data systems. Complete data for AFCARS are only available after 2000, and NCANDS data have only recently included all states. Crucially, these data are missing important historic eras between the 1970s and 1990s – the eras of welfare reform, the prison boom, and the years following the passage of the Indian Child Welfare Act. The likely greatest shocks to the child welfare system from neighboring policy systems are not possible to examine with current data systems, though some research indicates that welfare reform and prison expansion did indeed have dramatic consequences for state foster care systems (Swann and Sylvester 2006). Comparative historical analyses could explore in detail how heterogeneous state trajectories during the era of welfare reform and mass incarceration affected family policy in ways that may explain divergent outcomes for children and families today.

In Chapter Three, I show that racially unequal social control is tightly coupled across the criminal justice and child protection systems. However, these findings do not provide a direct explanation for how and why state policy systems exhibit varying patterns of racialization. A comparative historical process tracing approach could identify how race was incorporated into welfare, criminal justice, and family policy systems across places and over time. There
are likely path-dependent processes driven by the interaction of local configurations of racial politics with processes of state formation that have durable effects today. The legacies of progressive policy institutions, slavery and the politics of white supremacy, and settler colonial family policy all likely play a role in explaining how and why state social policy systems continue to sharply diverge (Acharya, Blackwell, and Sen 2016; Jacobs 2009; Quadagno 1994; Tanenhaus 2004).

These findings clearly show that multiple institutions constitute the field of social policy and have complex interactions. The experience of being intertwined with multiple state institutions has profound effects on the lives of marginalized children and families (Fernandez-Kelly 2015; Meiners 2007; Shedd 2015). These insights, coupled with the federal structure of criminal justice, child welfare, and social welfare systems suggest that spacial variation in social policy may have a dramatic effect on the life chances of the poor and on social stratification. Future work should explore how variation in multiple system involvement and local policy configurations interactively affect variation in family stability and well-being across places.

5.3 **Concluding remarks**

Child protection systems are both part of and responsive to the welfare state and the carceral state. Child saving bridges the welfarist task of supporting families and protecting children from harm at the same time as it engages in the surveillance, regulation, and punishment of deviant parenting. Tensions between family preservation and child protection continue to animate debates about the appropriate orientation of child welfare, but this tension extends far beyond child protection systems themselves. State child welfare systems are a central part of American social policy systems and are inextricably linked to the institutions and feedbacks that broadly structure policy into coherent regimes. In places where carceral approaches loom large, child protection systems are more pervasive and disruptive. In places where supportive approaches are better funded and more accessible, child protection is far less disruptive. In places that have deep racial inequalities in criminal justice, child protection
systems will exhibit extreme disparity. Though we often analytically and politically treat these systems as if they were independent, their boundaries are incredibly blurry. This multi-institutional structure, coupled with the high degree of autonomy that states and local governments have in implementing social policy in the U.S., leads to profound divergences in the nature of interactions between families and the state. Both the likelihood that an abused child comes to the attention of the child welfare system, and the likelihood that a child who could’ve been safely kept at home is placed into foster care are functions of the political and institutional configurations of local social policy systems.

5.4 References


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ber Incarceration.” *The ANNALS of the American Academy of Political and Social Science.*


Appendix A

MEASURING POLICY REGIMES

Policy regimes are observable only through policy outcomes, which are subject to complex political, legal, demographic, and cultural processes. Providing valid and reliable measures of a state’s general approach to managing social problems presents a significant challenge. Laws and formal policies may demonstrate motivation by legislators, courts, administrators, or the public to express a particular position on a social issue, but have complex and contingent links to the implementation of social programs or bureaucratic procedures (Cole and Ramirez 2013; Edelman, Uggen, and Erlanger 1999). Population involvement rates for particular social programs illustrate the breadth of a program’s contact with a jurisdiction’s population and indicate a prioritization of a particular style of intervention among policy makers, but are highly sensitive to demographic forces and alone do not capture qualitative differences in the experience of policy involvement. Administrative data, such as staffing levels, provide information about levels of investment and frequency of contact between street-level bureaucrats and the public, but lack detail on the qualitative character of interactions. Taken together, these types of measures provide important information about the structure, extensiveness, and character of policy regimes between places.

There is substantial debate about how best to construct an operational measure of a state’s criminal justice regime. Incarceration rates are frequently used to capture variation in the punitiveness of policy regimes between states and nations (Campbell and Schoenfeld 2013; Lacey 2010; Sutton 2013), but are sensitive to a vast array of demographic, political, legal and social inputs. Incarceration rates alone may fail to capture differences in the retributiveness of punishment or the extensiveness of law enforcement surveillance. Many criminal justice researchers propose a multidimensional approach that distinguishes regimes based on
differences in formal policies, actual practices, stigmatization, procedural protections, and community supervision programs (Foster and Hagan 2007; Hamilton 2014; Kutateladze 2008; Phelps 2014; Tonry 2007).

Similarly, there is a rich scholarly debate about how best to describe and measure variation in social welfare regimes. Piven and Cloward argue that the principle of less eligibility, which sets state benefits below market wages for the least desirable jobs, guides the implementation of welfare programs (Piven and Cloward 1993). This argument suggests that a low-income wage to welfare benefits ratio provides a measure of the relative restrictiveness of a state’s welfare regime (Soss, Fording, and Schram 2011). A number of scholars argue that welfare regimes are best understood through the extent to which they allow workers to eschew dependence on the labor market for survival, and suggest a de-commodification index as a preferred outcome to measure welfare regime variation (Esping-Andersen 1990). Others point to variation in the battery of programs and policies that structure labor force participation and the division of household labor (Orloff 1993; Pettit and Hook 2009). Within the U.S., the Personal Responsibility and Work Opportunity Reconciliation Act of 1996 (PRWORA) created significant opportunities for states to modify their cash welfare programs and introduce increased heterogeneity into the administration of welfare programs between jurisdictions (Soss et al. 2001). Researchers have suggested that variation in the eligibility rules, benefit levels, and administrative structure of Temporary Aid to Needy Families (TANF) provides clear information on the character of state policy regimes (Fellowes and Rowe 2004; Soss et al. 2011). However, TANF is a relatively small part of the total effort states make at addressing poverty. Approaches that capture a variety of programs along multiple dimensions provide a more complete picture of policy regime variation between places (Meyers, Gornick, and Peck 2001).

Across comparative social policy research, dominant strategies for the measurement of policy regimes include the construction of complex indices based on rank-orderings of continuous measures and the presence or absence of formal policies (Esping-Andersen 1990; Fellowes and Rowe 2004; Tonry 2007), theoretically motivated selection of measures that are
illustrative of key differences between regimes (Keen and Jacobs 2009; Sutton 2013), data-driven clustering methods (Meyers et al. 2001), or some combination of these approaches (Beckett and Western 2001; Sutton 2013). Additive indices and cluster methods can provide useful descriptive categorizations of policy regimes, but may add unneeded complexity to theoretically motivated regression analyses. Using index-based measures as continuous indicators of regime variation assumes that each addition to the index has equal numerical contribution to the underlying concept of interest, a difficult assumption to sustain for diverse policies. Aggregated measures that capture clustering among multiple measures based on latent structures in observed policy outcome data can be very useful to describe sets of policy configurations, but may lack easy interpretability when underlying measures are not strongly correlated. While these approaches are useful for the description of policy variation and the generation of ideal-typical classifications, they may lack the parsimony required for modeling time-series cross-sectional outcomes. A focused approach using direct policy measures along multiple dimensions from multiple programs allows for the triangulation of the relationship between varying social policy regimes and outcomes in other policy domains.

For this analysis I measure the punitiveness of a state’s policy regime through (1) its incarceration rate, (2) the rate at which death sentences are issued in state courts, and (3) the number of full-time police officers employed by state and local agencies per capita. Despite well-known problems with incarceration rates as a singular measure of policy regimes, when included with alternative measures of criminal justice policy and relevant population controls (especially crime rates), they provide a useful and highly aggregated measure of police, judicial, and legislative activities in the criminal justice arena. In particular, incarceration rates provide a measure of the extensiveness of the criminal justice system’s involvement with a state’s population that is sensitive to forces that influence both the entries of people into prisons and jails, such as policing activity and prosecutorial decisions, and the exits of people from prisons and jails, such as sentencing variation and the availability of community supervision (Phelps 2013). To capture a state’s authorization of and enthusiasm for expressive punishment, I include a measure of the number of new death sentences issued by each
state in a given year. This measure captures the extent to which a diverse set of policy actors (legislators, governors, prosecutors, judges, and juries) are willing to engage in the most severe punishment legally available within the United States. Lastly, I include a measure of the per capita number of full-time police officers employed within a state. This variable provides an operational measure of the institutionalization of a state’s financial commitment to coercive social control and the administrative breadth of its criminal justice bureaucracies.

I measure a state’s welfare policy regime through (1) TANF benefit levels adjusted for inflation and regional price parity, (2) enrollment rates in TANF per children in poverty, (3) enrollment rates in the Supplemental Nutrition Assistance Program (SNAP) per persons in poverty, (4) enrollment rates in Medicaid per persons in poverty, and (5) the number of public welfare workers employed by state and local agencies per capita. Though TANF is a program with limited scope, it is one of the few transfer programs available in all fifty states in which benefit levels are largely driven by state policy decisions. The TANF benefit for a family of three set by state officials provides a measure of the expressive generosity of state governments. While enrollment in AFDC/TANF has declined dramatically across the nation after the passage of PRWORA in 1996, state specific eligibility and sanctioning policies are responsible for significant state-level heterogeneity in the magnitude of declining enrollment (Loprest 2012). States also have significant discretion in their administration of SNAP. State rate of SNAP enrollment per persons in poverty are sensitive to a variety of measures states may take to increase take-up rates or expand or curtail eligibility (Agriculture 2012). Similarly, states have broad flexibility in setting Medicaid eligibility thresholds as well as enrollment and renewal procedures (Brooks et al. 2015). The inclusion of these conditional enrollment measures provides information on the scope of a state’s efforts to enroll eligible individuals and families in a series of important social welfare programs with varying reach and focus. I also include a measure of the per capita number of full-time public welfare workers employed within a state. States are likely to vary significantly in the complexity of their welfare administrations, which likely has significant impact on the ways that agencies interact with families.
A.1 References


Piven, Frances Fox and Richard Cloward. 1993. Regulating the Poor: The Functions of


Appendix B

ROBUSTNESS CHECKS: CHAPTER 2

While counts of foster care entries that exclude entries directly attributed to parental incarceration provide a compelling measure to examine the relationship between policy regime punitiveness and foster care entry, data on this cause of entry are missing or dramatically under-reported for some states (notably Illinois, New York and Idaho). Despite these limitations, I model the count of all foster care entries minus those entries directly attributed to parental incarceration by child protection workers as a test of the robustness of the study’s main findings displayed in Table 2. These results are displayed in Table A3. I exclude those states with systematically missing or erroneous reports from this model, resulting in 43 fewer state-years available for analysis. Focal parameter estimates from this model are consistent in sign and significance with results presented in Table 2, Model 1. These results provide further evidence that the relationship between the punitiveness of a social policy regime and foster care entry is not fully attributable to the direct and proximate cause of parental incarceration.

The lack of data on non-custodial kinship placements (in which the state informally arranges for a relative to care for a child without taking formal custody of the child) is a limitation of the data collected by the states and federal government on child protection. Reliable measures of non-custodial kinship placements would provide useful information on a state’s utilization of minimally disruptive forms of child protection. A robustness check suggests that the substantive implications of the paper are unchanged if we exclude all kinship placements from the regression models. If we focus only on those placements that are most disruptive to family life, those in which a child is placed with someone other than a member of their extended family, the observed negative associations between welfare generosity and
<table>
<thead>
<tr>
<th>Parameter</th>
<th>Not parental incar.</th>
<th>Caseload size</th>
<th>Non-kinship</th>
</tr>
</thead>
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<tr>
<td>Unemployment rate</td>
<td>-0.023</td>
<td>-0.03</td>
<td>-0.019</td>
</tr>
<tr>
<td></td>
<td>(-0.017)</td>
<td>(-0.017)</td>
<td>(-0.021)</td>
</tr>
<tr>
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<td>0.016</td>
<td>0.005</td>
</tr>
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<td>(-0.029)</td>
<td>(-0.029)</td>
</tr>
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<td>-0.058***</td>
<td>0.007*</td>
</tr>
<tr>
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<td>(-0.015)</td>
<td>(-0.018)</td>
</tr>
<tr>
<td>Child Poverty</td>
<td>0.012</td>
<td>0.021</td>
<td>0.013</td>
</tr>
<tr>
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<td>(-0.035)</td>
<td>(-0.039)</td>
</tr>
<tr>
<td>Adults w/ Less than HS</td>
<td>0.023</td>
<td>0.011</td>
<td>0.012</td>
</tr>
<tr>
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<td>(-0.031)</td>
<td>(-0.037)</td>
</tr>
<tr>
<td>GSP per capita</td>
<td>0.023</td>
<td>0.027</td>
<td>0.017</td>
</tr>
<tr>
<td></td>
<td>(-0.023)</td>
<td>(-0.021)</td>
<td>(-0.021)</td>
</tr>
<tr>
<td>Legislative Ideology</td>
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<td>0.002</td>
<td>-0.012</td>
</tr>
<tr>
<td></td>
<td>(-0.009)</td>
<td>(-0.009)</td>
<td>(-0.011)</td>
</tr>
<tr>
<td>Crime per capita</td>
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<td>0.02</td>
<td>0.067***</td>
</tr>
<tr>
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<td>(-0.016)</td>
<td>(-0.016)</td>
<td>(-0.019)</td>
</tr>
<tr>
<td>% Black Population</td>
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<td>-0.333***</td>
<td>-0.349***</td>
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<td>(-0.057)</td>
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<td>-0.062*</td>
<td>-0.043</td>
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<td>(-0.028)</td>
<td>(-0.028)</td>
<td>(-0.03)</td>
</tr>
<tr>
<td>SNAP Enrollment</td>
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<td>-0.041*</td>
<td>-0.042*</td>
</tr>
<tr>
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<td>(-0.018)</td>
<td>(-0.018)</td>
<td>(-0.019)</td>
</tr>
<tr>
<td>Medicaid Enrollment</td>
<td>-0.028</td>
<td>-0.028</td>
<td>-0.037*</td>
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<td>(-0.023)</td>
<td>(-0.015)</td>
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<td>TANF Enrollment</td>
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<td>0.017</td>
</tr>
<tr>
<td></td>
<td>(-0.016)</td>
<td>(-0.015)</td>
<td>(-0.019)</td>
</tr>
<tr>
<td>Welfare workers per capita</td>
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<td>-0.011</td>
<td>0.000</td>
</tr>
<tr>
<td></td>
<td>(-0.019)</td>
<td>(-0.02)</td>
<td>(-0.021)</td>
</tr>
<tr>
<td>TANF Enroll x Welfare Staff</td>
<td>0.030**</td>
<td>0.039***</td>
<td>0.033*</td>
</tr>
<tr>
<td></td>
<td>(-0.009)</td>
<td>(-0.009)</td>
<td>(-0.01)</td>
</tr>
<tr>
<td>Incarceration</td>
<td>0.111***</td>
<td>0.106**</td>
<td>0.079*</td>
</tr>
<tr>
<td></td>
<td>(-0.033)</td>
<td>(-0.033)</td>
<td>(-0.037)</td>
</tr>
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<td>Death Sent.</td>
<td>0.025**</td>
<td>0.01</td>
<td>0.027**</td>
</tr>
<tr>
<td></td>
<td>(-0.008)</td>
<td>(-0.008)</td>
<td>(-0.009)</td>
</tr>
<tr>
<td>Police per capita</td>
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<td>0.059*</td>
<td>0.048</td>
</tr>
<tr>
<td></td>
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<td>(-0.024)</td>
<td>(-0.026)</td>
</tr>
<tr>
<td>Intercept</td>
<td>5.563***</td>
<td>4.226***</td>
<td>3.780***</td>
</tr>
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<td>(-0.047)</td>
<td>(-0.047)</td>
<td>(-0.058)</td>
</tr>
</tbody>
</table>

| Variance of state random effects| 0.12                | 0.01          | 0.17        |
| Variance of year random effects | 0.001               | 0            | 0           |

*p < 0.05, **p < 0.01, ***p < 0.001

Table B.1: Parameter Estimates from Models of Foster Care Entries
foster care entry, positive association between the interaction of administrative breadth and TANF enrollment and foster care entry, and positive association between punitive criminal justice and foster care entry reported in the manuscript hold.

Foster care caseloads provide another alternative outcome variable to evaluate the robustness of these findings. Children entering foster care are generally the victim of a substantiated allegation of abuse or neglect and enter the system after the intervention of child protection authorities. Once in the system, however, a different set of processes determine whether and when a child will exit foster care. Potential exits include family re-unification, adoption, or reaching the age of emancipation (generally 18). The organizational structure of adoption, legislative and administrative prioritization of family re-unification, and foster care drift all differ substantially between states. As shown in Table 3, parameter estimates for the relationships between foster care caseloads and regime characteristics are generally consistent in direction and significance when compared with the results of models of the relationship between foster care entries and social policy described in Table 2, model 1. Foster care caseloads are sensitive to the same policy regime contexts that predict rates of foster care entry.
Appendix C

ROBUSTNESS CHECKS: CHAPTER 3

The multilevel models presented above partially pool estimated intercepts toward group averages, and allow for correlations between intercepts and model predictors. This limits their applicability for within-unit inference when such correlations exist, though they still provide substantial flexibility for discussing conditional correlations between measures while adjusting for the serial correlation of errors induced by repeated measurements of states over time. By contrast, a fixed effects approach purges unobserved unit heterogeneity by classically estimating intercepts, rather than assigning them a probability distribution. Fixed effects models provide better, but still imperfect, information about sources of within-unit variation with panel data.

To illustrate the relationships between incarceration rates and rates of foster care for all children, African Americans, and Native Americans, I present a series of negative binomial regressions of foster care caseloads that include state fixed effects, both state and year fixed effects, and lagged incarceration and White incarceration predictors in Tables C1 and C2. These models provide limited evidence for a causal relationship between incarceration and foster care, a relationship that has been documented with more rigorous evidence elsewhere (Andersen and Wildeman 2014). Taken together with the results from models of foster care inequality presented above, these fixed effects model results support the argument that racial inequality in child protection is intimately tied to racial inequality in incarceration.

These findings suggest three possible causal interpretations: (1) unequal child protection is a collateral consequence of unequal criminal justice, (2) unequal child protection is caused by a similar set of political and institutional mechanisms that explain unequal criminal justice, or (3) some unmeasured population characteristic associated with state of residence
<table>
<thead>
<tr>
<th></th>
<th>(State FE)</th>
<th>(State, year FE)</th>
<th>(State, year FE)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Incarceration rate, log</td>
<td>0.28*</td>
<td>0.23*</td>
<td>0.19*</td>
</tr>
<tr>
<td></td>
<td>(0.12)</td>
<td>(0.10)</td>
<td>(0.10)</td>
</tr>
<tr>
<td>Inc. rate - lagged, log</td>
<td></td>
<td>0.15</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(0.09)</td>
<td></td>
</tr>
<tr>
<td>White Inc. rate, log</td>
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<td>-0.12</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(0.17)</td>
<td></td>
</tr>
<tr>
<td>Unemployment rate, log</td>
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<td>-0.04</td>
<td>-0.04*</td>
</tr>
<tr>
<td></td>
<td>(0.05)</td>
<td>(0.05)</td>
<td>(0.10)</td>
</tr>
<tr>
<td>Single parent rate, log</td>
<td>0.11</td>
<td>0.11</td>
<td>0.10</td>
</tr>
<tr>
<td></td>
<td>(0.08)</td>
<td>(0.09)</td>
<td>(0.09)</td>
</tr>
<tr>
<td>Adults w/o HS rate, log</td>
<td>0.01</td>
<td>0.05</td>
<td>0.04</td>
</tr>
<tr>
<td></td>
<td>(0.07)</td>
<td>(0.07)</td>
<td>(0.08)</td>
</tr>
<tr>
<td>Child poverty rate, log</td>
<td>0.08</td>
<td>0.08</td>
<td>0.07</td>
</tr>
<tr>
<td></td>
<td>(0.06)</td>
<td>(0.06)</td>
<td>(0.06)</td>
</tr>
<tr>
<td>Percent Afr. Am. pop., log</td>
<td>-0.51*</td>
<td>-0.55*</td>
<td>-0.58*</td>
</tr>
<tr>
<td></td>
<td>(0.18)</td>
<td>(0.16)</td>
<td>(0.18)</td>
</tr>
<tr>
<td>Leg. ideology</td>
<td>-0.00</td>
<td>-0.00</td>
<td>-0.00</td>
</tr>
<tr>
<td></td>
<td>(0.00)</td>
<td>(0.00)</td>
<td>(0.00)</td>
</tr>
<tr>
<td>Violent crime rate</td>
<td>0.31*</td>
<td>0.28*</td>
<td>0.26*</td>
</tr>
<tr>
<td></td>
<td>(0.13)</td>
<td>(0.12)</td>
<td>(0.12)</td>
</tr>
<tr>
<td>Year</td>
<td>-0.01</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.01)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Theta</td>
<td>33.56</td>
<td>34.86</td>
<td>40.60</td>
</tr>
<tr>
<td></td>
<td>(1.95)</td>
<td>(2.00)</td>
<td>(2.46)</td>
</tr>
<tr>
<td>Num. obs.</td>
<td>750</td>
<td>750</td>
<td>700</td>
</tr>
</tbody>
</table>

*p ≤ 0.05

Table C.1: African American foster care caseloads, negative binomial fixed effect models
<table>
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<th>(State, year FE)</th>
<th>(State, year FE)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Incarceration rate, $\sqrt{r}$</td>
<td>0.41</td>
<td>-0.10</td>
<td>-0.94</td>
</tr>
<tr>
<td></td>
<td>(1.11)</td>
<td>(1.23)</td>
<td>(1.11)</td>
</tr>
<tr>
<td>Inc. rate - lagged, $\sqrt{r}$</td>
<td></td>
<td>1.44$^*$</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(0.72)</td>
<td></td>
</tr>
<tr>
<td>White Inc. rate, log</td>
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<td>-0.13</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(0.19)</td>
<td></td>
</tr>
<tr>
<td>Unemployment rate, log</td>
<td>-0.02</td>
<td>-0.01</td>
<td>-0.01</td>
</tr>
<tr>
<td></td>
<td>(0.05)</td>
<td>(0.04)</td>
<td>(0.04)</td>
</tr>
<tr>
<td>Single parent rate, log</td>
<td>0.01</td>
<td>0.00</td>
<td>-0.02</td>
</tr>
<tr>
<td></td>
<td>(0.07)</td>
<td>(0.07)</td>
<td>(0.07)</td>
</tr>
<tr>
<td>Adults w/o HS rate, log</td>
<td>-0.36$^*$</td>
<td>-0.38$^*$</td>
<td>0.39$^*$</td>
</tr>
<tr>
<td></td>
<td>(0.14)</td>
<td>(0.15)</td>
<td>(0.16)</td>
</tr>
<tr>
<td>Child poverty rate, log</td>
<td>0.02</td>
<td>0.02</td>
<td>0.03</td>
</tr>
<tr>
<td></td>
<td>(0.06)</td>
<td>(0.06)</td>
<td>(0.06)</td>
</tr>
<tr>
<td>Percent Native Am. pop., log</td>
<td>-1.25$^*$</td>
<td>-1.18$^*$</td>
<td>-1.23$^*$</td>
</tr>
<tr>
<td></td>
<td>(0.15)</td>
<td>(0.18)</td>
<td>(0.17)</td>
</tr>
<tr>
<td>Leg. ideology</td>
<td>-0.00</td>
<td>-0.00$^*$</td>
<td>-0.00$^*$</td>
</tr>
<tr>
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<td>(0.00)</td>
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<td>Violent crime rate</td>
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</tr>
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<td>22.21</td>
</tr>
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<td>(1.38)</td>
<td>(1.57)</td>
</tr>
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<td>Num. obs.</td>
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<td>750</td>
<td>700</td>
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</tbody>
</table>

* $p \leq 0.05$

Table C.2: Native American foster care caseloads, negative binomial fixed effect models
drives selection of families of color into both criminal behavior and child maltreatment. Models include ecological measures for the concentration of childhood disadvantage and other risk factors for child abuse and neglect that likely control for variation in group-specific rates of child abuse and neglect. However, this design cannot eliminate the possibility of behavioral selection associated with race and ethnicity. These results are also importantly limited by excluding the most dramatic phase of the expansion of mass incarceration, during which prison populations increased seven fold between the late 1970s and late 1990s. Available data on foster care populations limit the possibility of such analyses, and make state comparisons of populations by race impossible prior to 2000, though some research suggests a clear link between incarceration and foster care during this time period (Swann and Sylvester 2006).
Appendix D

FULL REGRESSION TABLES: CHAPTER 4

Below, I present median parameter estimates and 95 percent posterior uncertainty intervals for regression coefficients and the variances of estimated varying intercepts. The tables presents results for the full population by offense category of arrest (Table D.1), for models of all police reported maltreatment by men’s arrest by offense category (Table D.2), for models of all police reported maltreatment by women’s arrest by offense category (Table D.3), for models of African American children reported to child protection agencies by police by African American arrest by offense category (Table D.4), and for models of white children reported to child protection agencies by police by white arrest by offense category (Table D.5). These results and the specification of the models are discussed in detail in Chapter 4.
Table D.1: Parameter estimates and 95 percent posterior intervals, multilevel models of police child maltreatment reports. All children, all arrests

<table>
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<tr>
<th></th>
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<th>Drug</th>
<th>Qual. of Life</th>
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<td>−4.97</td>
<td>−4.97</td>
<td>−4.97</td>
</tr>
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<td>[−5.14, −4.8]</td>
<td>[−5.14, −4.8]</td>
</tr>
<tr>
<td>Change in arrests</td>
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<td>0.01</td>
<td>0</td>
<td>0.02</td>
</tr>
<tr>
<td></td>
<td>[−0.01, 0.03]</td>
<td>[−0.01, 0.02]</td>
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</tr>
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<td>[−0.02, 0.02]</td>
<td>[−0.02, 0.02]</td>
<td>[−0.02, 0.02]</td>
</tr>
<tr>
<td>Change in police budgets (state)</td>
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<td>0</td>
<td>0</td>
<td>0</td>
</tr>
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<td>[−0.02, 0.02]</td>
<td>[−0.02, 0.02]</td>
<td>[−0.02, 0.02]</td>
<td>[−0.02, 0.02]</td>
</tr>
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<td>Change in child poverty</td>
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<td>−0.01</td>
<td>−0.01</td>
<td>−0.01</td>
</tr>
<tr>
<td></td>
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<td>[−0.03, 0.01]</td>
<td>[−0.03, 0.01]</td>
<td>[−0.03, 0.01]</td>
</tr>
<tr>
<td>Change in homicide</td>
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<td>−0.01</td>
<td>−0.01</td>
<td>−0.01</td>
</tr>
<tr>
<td></td>
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<td>[−0.03, 0.02]</td>
<td>[−0.03, 0.02]</td>
<td>[−0.03, 0.02]</td>
</tr>
<tr>
<td>Change in infant mortality</td>
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<td>−0.01</td>
<td>−0.01</td>
</tr>
<tr>
<td></td>
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<td>[−0.03, 0.01]</td>
<td>[−0.03, 0.01]</td>
<td>[−0.03, 0.01]</td>
</tr>
<tr>
<td>Change in median income</td>
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<td>0.02</td>
<td>0.02</td>
<td>0.02</td>
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<tr>
<td></td>
<td>[0.04, 0.04]</td>
<td>[0.03, 0.03]</td>
<td>[0.03, 0.03]</td>
<td>[0.03, 0.03]</td>
</tr>
<tr>
<td>Mean arrests</td>
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<td>0</td>
<td>0.06</td>
</tr>
<tr>
<td></td>
<td>[0.04, 0.13]</td>
<td>[0.02, 0.14]</td>
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Table D.2: Parameter estimates and 95 percent posterior intervals, multilevel models of police child maltreatment reports. All children, male arrests.
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<th>Qual. of Life</th>
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Table D.3: Parameter estimates and 95 percent posterior intervals, multilevel models of police child maltreatment reports. All children, female arrests.
Table D.4: Parameter estimates and 95 percent posterior intervals, multilevel models of police child maltreatment reports. African American children, African American arrests.
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<tr>
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<td>[−0.36, −0.04]</td>
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<tr>
<td>Mean homicide</td>
<td>−0.11</td>
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<tr>
<td></td>
<td>[−0.2, −0.02]</td>
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<td>Mean child poverty</td>
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<tr>
<td></td>
<td>[−0.08, 0.03]</td>
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<td>[−0.08, 0.03]</td>
</tr>
<tr>
<td>Mean infant mortality</td>
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<tr>
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<tr>
<td>Mean median income</td>
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<tr>
<td>Percent African American</td>
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<td>[−0.28, −0.05]</td>
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<tr>
<td>Percent American Indian</td>
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<tr>
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<td>[−0.07, 0.11]</td>
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</tr>
<tr>
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<td>0.05</td>
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<td>[0.03, 0.07]</td>
<td>[0.03, 0.07]</td>
<td>[0.04, 0.07]</td>
</tr>
<tr>
<td>SD: Observation</td>
<td>0.33</td>
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<td>0.33</td>
<td>0.33</td>
</tr>
<tr>
<td>SD: County</td>
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<tr>
<td>SD: State</td>
<td>0.59</td>
<td>0.6</td>
<td>0.6</td>
<td>0.6</td>
</tr>
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</table>

Table D.5: Parameter estimates and 95 percent posterior intervals, multilevel models of police child maltreatment reports. White children, white arrests
VITA

Frank Edwards is a sociologist who works to understand how policy systems affect children and families. Before beginning his graduate education, Frank worked in group homes for children and youth in Texas’ foster care system, and worked as a community organizer in grassroots media and criminal justice reform organizations in Chicago. In July 2017, he will begin a postdoctoral fellowship at the Bronfenbrenner Center for Translational Research at Cornell University.