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**POVERTY, GOVERNMENT ASSISTANCE,
AND JUVENILE DELINQUENCY**

A Dissertation in

Sociology

by

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ABSTRACT

Despite a substantial body of sociological research regarding the relationship between poverty and crime, an important element of the lives of America's poor remains understudied. Millions of Americans receive government benefits through programs such as Temporary Assistance for Needy Families and the Supplemental Nutrition Assistance Program, yet relatively few studies have examined the association between these programs and criminal behavior. Of the existing studies, the majority documents a negative, macro-level association between welfare payments and crime rates, but these findings are not robust. Furthermore, individual-level studies find negative, null, and positive associations between government benefits and criminal behavior.

This dissertation seeks to contribute to this body of literature in three key ways. First, I expand the individual-level literature to examine the association between family receipt of government benefits and adolescent delinquency. Second, I closely examine the interplay between poverty and government benefits. Do benefits mediate or moderate the association between poverty and delinquency? Finally, I explicitly measure two of the key theoretical concepts that prior work has used to link benefits to delinquency. No prior study has empirically tested for mediation by theoretical variables.

My findings reveal that there is a positive bivariate association between family receipt of government benefits and adolescent delinquency, violence, and property offending. However, this association is not robust to the inclusion of control variables. In other words, factors that influence selection into benefits, and not benefits themselves, are associated with delinquency. Additionally, I examine three different measures of

poverty, and I find inconsistent evidence of a poverty-delinquency link. In fully controlled models, poverty is inversely associated with delinquency, but is not associated with violence or property offending. A measure of persistent poverty is not associated with any of the delinquency measures, while moving into poverty between birth and age 9 is negatively associated with all three delinquency measures. Furthermore, receipt of government benefits does not mediate or moderate the association between poverty and delinquency.

I next focus on examining the association between measures of key criminological theories, strain and attachment, and government benefits. I find that families that receive government benefits are more likely to have experienced consistently high or increasing levels of strain, rather than decreasing levels of strain. Regarding parental attachment, there is no statistical association between receipt of government benefits and changes in adolescents' supervision by their parents. However, benefits receipt is negatively associated with consistent or increasing levels of communication between parent and child, compared to decreasing communication. Contrary to theoretical expectations, neither strain nor parental attachment mediates the observed association between benefits and delinquency.

In sum, these findings provide evidence that, as designed, government benefits are disbursed to some of the most disadvantaged in our society. The selection process into receiving benefits is complex and difficult to capture, but including a set of selection variables accounts for the bivariate association between benefits receipt and delinquency. Furthermore, it appears that government benefits do not decrease family levels of strain, as designed, but they may decrease some forms of parental attachment, as some feared.

Continued examination of the associations between government benefits and key criminological concepts will likely prove a fruitful direction for social research.

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CHAPTER 1

Government Assistance and Crime in the United States

Introduction

Social scientists have long theorized poverty as a potentially important and complex criminogenic force. Yet despite this theorizing and an abundance of research on poverty and crime, their association remains unclear, with findings varying based on the source of the data (official or self-report), the definition of crime (Braithwaite 1981; Sutherland 1940; Tittle, Villemez, and Smith 1978), and the measurement of inequality (Hagan 1992). At the same time that scholars of crime have studied the influence of poverty, much public and political discourse on the subject has focused on whether government assistance programs, such as cash payments of income support and credit towards food purchases, can indirectly have an impact on criminal behavior. However, many individuals and politicians conclude that welfare state programming creates or exacerbates criminal tendencies among the poor (Porter 2015). Although government assistance programs are a central part of the lived experience of poverty in the United States, and a frequent folk explanation for crime, criminological research has only minimally studied their association with crime.

In his presidential address to the American Society of Criminology, John Hagan (1992) argued for the importance of the criminological study of class. At a time when many criminologists were using inconsistent findings to conclude that poverty and class are unrelated to crime, Hagan (1992) argued that “A better starting point is to

acknowledge the variety and complexity of the relationship between class and crime” (12). Subsequent research documented a curvilinear relationship whereby children of both low and high SES parents are more likely to commit crimes than middle class youth (Wright et al. 1999). Additional analyses limited to serious street crimes (specifically burglary, robbery, motor vehicle theft, assault, and drug dealing) find a substantially higher prevalence among poor youth (Bjerk 2007). These findings are consistent with Sutherland’s (1940) arguments for the criminological importance of distinguishing among the crimes of the lower and upper classes. In Hagan’s words “we do not expect to find complicated securities schemes undertaken by unemployed street youths, or street muggings and robberies performed by corporate executives” (Hagan 1992:8). It is street crime that is the subject of most criminological research and public fear of crime and that appears to be prevalent among disadvantaged youth.

Many social theories provide proposed mechanisms linking poverty and crime. Some theories propose a direct, causal link in which poverty leads rational individuals to crime in order to generate income and acquire goods (Becker 1968). Other theories propose that it is not poverty itself, but the many consequences of poverty that cause crime. These consequences include deprivation, hunger, poor education, inadequate housing, and family disruption (Hagan 1992). This indirect effect of poverty on crime is consistent with multiple criminological theories including General Strain Theory (Agnew 1992) and social bond theory (Hirschi 1969). While each of these theories emphasizes different factors as causes of crime, all propose mechanisms (e.g., strain, attachments, and parenting) that can be strongly influenced by the conditions of poverty.

In response to the serious challenges faced by America's poor, government programs provide income assistance and help accessing food, healthcare, and housing. Such programs are an additional potential intervening link between poverty and criminal behavior in the U.S. Not only do these programs alter the amount of deprivation experienced by the poor, but they may also shape social relationships in ways that are highly consequential for criminal behavior. Despite their significance and frequency in America's disadvantaged population, these programs have been largely ignored in the literature on poverty and crime. There is only a small body of literature that examines the association between welfare and crime. Most of these studies are macro-level examinations of welfare spending and crime rates. They largely find a significant negative relationship, indicating that increased spending on welfare programs is associated with less crime (Chamlin, Cochran, and Lowenkamp 2002; DeFronzo and Hannon 1998; DeFronzo 1997; DeFronzo 1996; DeFronzo 1983; Devine, Sheley, and Smith 1988; Fishback, Johnson, and Kantor 2010; Hannon and DeFronzo 1998; Hannon 1997; Zhang 1997). To date only three studies have examined the association between welfare and crime at the individual level, with two studies finding negative associations (Verbruggen et al. 2015; Monte and Lewis 2011) and one finding no association (Brown et al. 2004).

Together, government assistance and the mechanisms of criminological theories should account for a large part of the criminal behavior of poor adolescents. These relationships are diagrammed in Figure 1.1. As shown, there is a direct effect of poverty on delinquency, net of key early life confounders. Additionally, the effect of poverty partially operates through the likelihood of receiving government assistance benefits.

Furthermore, the association between government assistance and delinquency is explained by the criminological theories of strain and social bonds.

The primary aim of this dissertation is to expand the existing research on government assistance and crime to explain the individual association between household receipt of government benefits and children's delinquent behavior. I use the Fragile Families and Child Wellbeing Study, a longitudinal cohort study with an oversample of children of unmarried mothers, to test a) the influence of a set of government assistance programs and b) the explanatory power of three criminological theories. While there has been very limited research on this topic, this dissertation contributes to the area in a number of ways. First, I study the impact of these programs on children's behavior. Prior individual-level research only looks at the behavior of adult recipients, ignoring potential effects on other household members. Second, I explicitly test a set of theoretical mechanisms that have been used to explain the causal links between poverty, government assistance programs, and crime. While previous literature discusses these theories, no study to date in this area has empirically tested their mechanisms. Third, unlike the majority of the research on government assistance programs, I do not limit my independent variable to the AFDC cash assistance program (later TANF). I measure participation in multiple different assistance programs. Fourth, I include a rich set of intergenerational confounders to rule out spurious associations.

This chapter first describes the history of government assistance programs in the United States and theoretical perspectives on their development. Next, I review the existing literature on this topic before discussing the criminological theories that offer

useful potential explanations for associations between benefits and crime. Finally, I elaborate on the contributions of this dissertation and the layout of its chapters.

Government Assistance in the United States

Welfare programs have a long history in the United States. The earliest welfare policies in the U.S. began in 1910 with state-level cash support for single mothers, primarily white widows (Handler 2009). The first national program started in 1935 with the Social Security Aid to Dependent Children program, which was later renamed Aid to Families with Dependent Children (Somers and Block 2005). Welfare programs grew in the post-war years, influenced by Keynesian economics and provided for by economic surplus and the government centralization that occurred during wartime (Quadagno 1987).

For much of the early history of welfare, these payments were largely limited to white women, but the demographics began to change in the 1950s and 1960s (Handler 2009). During these decades, many African Americans migrated to the North, and there was increasing crime, unemployment, and civil unrest. In the 1960s alone, the welfare rolls doubled from 3 to 6 million (Danziger 2010). Although they were not the majority of recipients, African American single mothers came to be associated with welfare (Handler 2009). By the 1970s, the idea of the “welfare queen,” a woman (usually depicted as Black) who has many children and supports herself on welfare with no desire to work, entered popular discourse (Handler 2009). However, the “welfare queen” was not factual. Families on welfare had on average 2.1 children, and 85% of them spent 2

years or less on welfare (Handler 2009). The population that relied on welfare was low-income workers with unstable employment. Because they did not qualify for unemployment insurance, they relied on AFDC in its place (Handler 2009).

During the economic decline in the 1970s, welfare took some of the blame. Welfare rolls doubled again in the 1970s, reaching 11.3 million in 1978 (Danziger 2010), and many believed that welfare hurt businesses by disincentivizing work and investment (Quadagno 1987). This belief is part of what Somers and Block (2005:265) call the “perversity thesis”—the idea that assisting the poor actually hurts them by creating a dependency, and that the compassionate response is to deny assistance. This belief resonated in the popular image of the “welfare queen,” and was not limited to conservatives. It was commonly believed that welfare programs create, in the words of President Clinton “a cycle of dependency that keeps dragging folks down” (*The New York Times* 1996). Furthermore, this dependency was often linked to criminality. In the lead up to the passage of welfare reform, then Speaker of the House Newt Gingrich, when addressing a brutal murder in Illinois, pointed the finger at welfare: “Let’s talk about what the welfare state has created. Let’s talk about the moral decay of the world the left is defending” (*The New York Times* 1995). While these perspectives did not reflect the reality of the population relying on welfare, by the 1980s the government began reform efforts. Multiple states were provided with waivers that allowed them to experiment with new welfare systems, often prioritizing work requirements (Handler 2009). Although these experiments had modest results, they were largely reported as successes (Handler 2009) and, combined with a further increase of the welfare rolls in the early 1990s (Danziger 2010), helped provide support for large scale welfare reform.

The Personal Responsibility and Work Opportunity Reconciliation Act (PRWORA) was signed into law in 1996. The 1990s reforms combine two primary perspectives on welfare. First, to address the conservative perspective that welfare recipients choose not to work, work training and job search requirements were central to PRWORA. Second, to address the liberal perspective that welfare recipients want to work but struggle to find and maintain jobs, PRWORA, along with other reforms at the time, increased the minimum wage, expanded Earned Income Tax Credits (EITC), increased enforcement of child support, created the State Child Health Insurance Program (SCHIP or CHIP), and provided for child care subsidies (Danziger 2010).

In practice, the United States has 50 different TANF programs (Handler 2009; Danziger 2010). PRWORA provided block grants to the states based on the size of their welfare rolls in 1994, and states were given substantial flexibility in the design of their programs, including income criteria. Numerous changes occurred in the move from AFDC to TANF. Changes to the functioning of TANF included an end to the requirement that applications be processed within 30 days, an end to auto-enrollment of recipients in SNAP (food stamps) and Medicaid, and an increase in the use of sanctions (reductions in benefits) to recipients who do not complete requirements (Schram et al. 2009). Eligibility also changed dramatically. For instance, recipients can only stay on TANF for 2 years at a time, with a 5 year lifetime limit. Recipients cannot have a drug felony conviction. Teen parents are required to live with an adult and attend school. Documented immigrants are only eligible after living in the U.S. for 5 years. However, in line with the pre-reform criticisms of welfare, the reforms' primary focus is removing any disincentives to work. Such programs are commonly called "workfare."

After the passage of PRWORA, welfare rolls saw dramatic declines, but some studies showed that the reduction in caseloads did not occur with equal reductions in poverty (Danziger 2010). By 1999 caseloads reduced by almost 50% while the poverty of female-headed households with children (the main recipients of TANF) dropped by only 22% (Lichter and Jayakody 2002). Although these women enter the workforce when they leave welfare, their wages are generally low (Lichter and Jayakody 2002), which leaves their families below the poverty line. Further research has shown that welfare rolls do not respond to changes in the economy. When the Great Recession hit, poverty increased notably but welfare enrollment did not (Danziger 2010). In 2008, 25% of single mothers were both unemployed and not receiving welfare (Danziger 2010). Fortunately for those hit by the recession, TANF is far from the only source of assistance for America's poor. While TANF benefits do not, SNAP benefits do track closely with unemployment (Danziger 2010).

Today, cash welfare provided through TANF is but one of over 80 federal assistance programs in the U.S. These programs include SNAP, free and reduced price school lunch, CHIP, Medicaid, EITC, the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC), and Supplemental Security Income (SSI) for the elderly, blind, and disabled (Danziger 2010). Although cash welfare, TANF, tends to dominate public discussions of government assistance, it is a relatively small program. Figure 1.2 shows the 2014 enrollment totals for eight federal government assistance programs (Centers for Medicare and Medicaid Services 2014; HHS 2015; IRS 2016; Medicaid n.d.; Social Security Administration 2015; Thorn et al 2015; USDA 2017a;

USDA 2017b).¹ Of these programs, Medicaid is by far the largest, with 64.9 million enrolled, followed by SNAP with 46.7 million. In comparison, TANF's enrollment of 3.4 million is quite small. The current enrollment is similar to the level in 1960, and only about a quarter of the 1994 peak at 14.2 million (Danziger 2010). Accordingly, the study of government assistance in the United States is not complete if limited to TANF alone. Other programs designed to provide assistance to the poor are vital to understanding the U.S. welfare state as a whole.

Theories of the Welfare State

A number of explanations have been put forward to describe the development of western welfare state policies. These theories generally build from the work of founding sociological theorists. One prominent explanation of the welfare state is the “*logic-of-industrialism thesis*” (Quadagno 1987:112 emphasis added). Drawing from Durkheimian ideas, this perspective argues that the welfare state is made possible and necessary by the progression of industrialization (Quadagno 1987; Amenta et al. 2001). As a country becomes more industrialized, its people come to rely on the income provided by wage work (Amenta et al. 2001). Industrializing economies place less emphasis on the traditional family, and bring an increase in surplus labor (such as the young, sick, and disabled) (Quadagno 1987). At the same time, countries have increasing wealth and bureaucracy, which provides both the means and the organization to assist the surplus labor force that cannot perform the wage work that has become a necessity (Quadagno

¹ Free and Reduced Price School Lunch data is for 2012 due to data availability.

1987). Institutional explanations of the welfare state, drawing from Weberian theory, also emphasize the role that increased centralization and bureaucracy play in social spending programs (Amenta et al. 2001).

Neo-Marxist perspectives, on the other hand, place the origins of the welfare state in class struggle. The *social democratic model* of the welfare state (also called the power resources model) emphasizes the role of labor movements. While labor movements initially focus their efforts on conflicts with capitalists for better working conditions, they often develop into conflicts with the state for redistributive policies to address inequalities (Quadagno 1987). In some countries these movements develop into institutionalized political parties that represent the interests of labor and influence the state to have more social spending (Amenta et al. 2001). This perspective is not purely Marxist, however. While Marx would argue that the state is an instrument of the ruling class, the social democratic perspective views the state as a mediator between different interest groups, with the labor group being one (Quadagno 1987).

A more traditionally Marxist *class conflict perspective* on the welfare state draws attention to the apparent contradiction between capitalism and democracy. One might expect that, given a democratic state, the working class would have the influence to cause social change that undermines capitalism through influencing the government (Quadagno 1987). As an instrument of the ruling class, however, the state acts in ways to placate and control the poor. Piven and Cloward (1971) argue that government welfare programs are developed and expanded when unemployment increases and causes social unrest. These programs have the goal of controlling the unemployed population and ending the unrest. When the economy is more successful, the welfare programs are restricted, providing

more workers to enter back into the labor market (Piven and Cloward 1971). Welfare programs have to be limited in their benefits, however, in order to not undermine capitalism by providing more income and benefits than wage work (Quadagno 1987).

An important development in the theorizing of the welfare state in the last two decades is the identification of a number of paradoxes related to the support for and effectiveness of welfare programs. Korpi and Palme (1998) argue that there is a paradox between the effectiveness of welfare programs and how those programs are designed. They conclude that greater reductions in poverty result from universal welfare programs rather than programs that target the poor. While this finding seems counterintuitive, they explain that it occurs because universal welfare programs increase popular support for a large welfare state. Brady and Bostic (2015) revisit and expand Korpi and Palme's (1998) paradox. This new research identifies two new paradoxes. First, the non-complementary paradox holds that what decreases poverty (the share of household income provided by government assistance) is not associated with public preferences for redistribution. At the same time, low-income targeting affects redistribution preferences, but not poverty. Second, the undermining paradox holds that what decreases poverty is the share of household income provided by government assistance, but that share is also associated with low-income targeting, which decreases support for redistributive policy. As a result, the very policies that most decrease poverty bring around a lack of support for those policies.

Compared to other similar western democracies, there is much less support for a policy of large welfare expenditures in the United States. The U.S. has a much more limited welfare state than comparable countries, with substantially more benefits

provided through private systems than public ones. Although theories of the welfare state usually attempt to identify a universal explanation of the development of welfare programs, a substantial body of work also focuses on explaining the uniqueness of the U.S. system. One of the most convincingly supported explanations points to how democracy is practiced in the United States. Amenta and colleagues (2001:226) argue that the U.S. lags in welfare spending because of an “underdemocratized polity.” Voting, political engagement, and party choice are all limited in the U.S. (Amenta et al. 2001), and we do not have an officially organized labor party (Quadagno 1987). Additionally, the split between the north and south of the country up until the 1960s created a system where the south was disproportionately influential (Quadagno 1987). In opposition to the industrialized north, the agricultural south had laws in place to disenfranchise much of the population. The result allowed the elite planter class to control the southern seats in congress for years. The resulting congressional seniority led the south to control multiple congressional committees. From these positions of power they were able to limit welfare programs, particularly to the exclusion of (mostly Black) agricultural workers (Quadagno 1987). With the advances in civil rights in the 1960s, this circumstance largely ended, but soon thereafter the economic downturn of the 1970s and the depiction of the “welfare queen” began a new attack on the U.S. welfare state. Despite its limited size in comparison to other western democracies, government assistance programming in the United States remains a vital part of the experience of being poor in America. These programs must therefore be incorporated into any body of knowledge seeking to understand how poverty is related to other features of American life, including crime.

Existing Research on Government Benefits and Crime

The current body of literature regarding the association between government assistance programs and crime is small but not insubstantial. The majority of these studies were conducted in the late 1990s and early 2000s, at a time when welfare reform and the passage of the PRWORA received national attention. Most of the existing research examines macro-level associations, ranging from national- to city-level units of analysis. Among these studies, researchers have tested associations between government benefits and many types of crime, including homicide, rape, aggravated assault, robbery, burglary, and other property crimes. Additionally, to date three studies have been conducted on individual-level data, testing the association between an individual's receipt of government benefits and their own criminal offending.

The majority of existing research on the association between government assistance programs and crime is macro-level. The most macro of these studies examine differences across nations to test social support theory (Cullen 1994) and Institutional Anomie Theory (Messner and Rosenfeld 1997). These theories posit that cultures with less emphasis on economic institutions and more emphasis on social support and institutions such as family and education will experience lower rates of crime. Using data from the World Health Organization and United Nations on 46 countries from 1989 to 1995, Pratt and Godsey (2002) find that social support is significantly negatively associated with homicide rates. In this study, they conceptualize social support as the percent of a nation's GDP spent on healthcare and public education. In a similar study, also using WHO homicide data, Savolainen (2000) examines the interactive effects of

economic inequality and welfare state generosity on homicide rates. This study finds that, while economic inequality is positively associated with homicide rates, this effect is removed in contexts with generous welfare spending (Savolainen 2000). These studies are consistent with the propositions of both social support and Institutional Anomie Theory.

A number of studies within the United States have also examined the association between welfare generosity and homicide. In the first study to assess the impact of government assistance on crime, DeFronzo (1983) finds that AFDC spending is associated with lower homicide rates, using data on 39 SMSAs for the year 1970. Specifically, DeFronzo (1983) finds that for every \$10 additional dollars spent on AFDC per family member, the homicide rate (per 100,000) would decrease by 1.38. Similar studies conducted by DeFronzo (1997), Hannon (1997), and DeFronzo and Hannon (1998) with data on cities, Labor Market Areas, and metropolitan counties, respectively, find negative associations between cost-of-living adjusted AFDC payments per person and homicide rates. Results across all studies are not uniform, however. In a study by Devine, Sheley, and Smith (1988), a time series analysis using national data from 1948 to 1985 finds no significant association between the homicide rate and the total amount of AFDC, public assistance, and other direct relief spending.

Macro-level research on government benefits and violent crime has not been limited to the study of homicide. In the same study where he finds a negative association between per person AFDC spending and homicide, DeFronzo (1983) finds a significant, negative association with rape. This association is larger than that for homicide, with a decrease in rape rates by 5.5 for every additional \$10 spent per person. Again, not all

studies find a negative association between government benefits and violent crime.

Devine and colleagues (1988) found no association between total direct relief spending and robbery.

It is possible that a more robust relationship exists between government benefits and property crime than with violent crime, due to the financial needs of benefit recipients. The majority of this research focuses on crimes that fall within the category of Part I offenses in the FBI's Uniform Crime Report (UCR). These offenses are more serious than Part II offenses, and include the aforementioned crimes of homicide, rape, robbery, and aggravated assault as well as the property crimes of burglary, larceny-theft, motor vehicle theft, and arson. Of these, burglary is the property crime that has received the most attention from researchers.

The current body of macro-level research has documented a negative association between government benefits and burglary. Using data on cost-of-living adjusted AFDC payments per recipients in 141 U.S. cities, DeFronzo (1996) finds a significant negative association with burglary rate. The relationship appears to be substantial. Adjusting for a set of controls, the mean burglary rate for the cities in the lowest third of AFDC payments was 2,356 compared to 1,573 for those in the top third. Additional studies by DeFronzo (1983), Devine and colleagues (1988), and Hannon and DeFronzo (1998) document significant negative associations with burglary. In the case of Devine and colleagues (1988), their study that did not yield significant associations between welfare and violent crimes did find a significant association with burglary. In addition to burglary, negative associations have been found between benefits spending and larceny (DeFronzo 1983; Hannon and DeFronzo 1998), auto theft (DeFronzo 1983; Hannon and

DeFronzo 1998), and combined property crime indices (Fishback, Johnson, and Kantor 2010; Zhang 1997).

A primary critique of the macro-level literature on government benefits and crime is that the majority of the studies are cross-sectional. A small number of longitudinal, macro-level studies address this limitation, but come to less consistent conclusions about the welfare-crime relationship. In a particularly unique study, Foley (2011) examined monthly temporal patterns of crime rates in twelve U.S. cities. He then compared these patterns with the disbursement schedules for food stamp, TANF, and SSI payments in those cities. This study finds that financially motivated crimes, but not other crimes, increase with the amount of time since an assistance payment was made, suggesting that illegal income is used by benefits recipients after their assistance funds run out.

In a critique of the cross-sectional literature on the relationship between AFDC and homicide, Chamlin, Cochran, and Lowenkamp (2002) argue that welfare payments are not of adequate size to reduce the strains associated with poverty. The authors argue that the consistent negative associations in the prior literature may be due to the cross-sectional limitation of that work. Improving upon prior methods by using longitudinal data on homicide and the number of AFDC recipients in Oklahoma City, Chamlin and colleagues (2002) find a negative association for family homicide, but not other homicides (e.g., strangers or friends). They argue that this pattern indicates that government benefits may promote altruism among individuals with close ties, in line with social support theory, but does not create an overall change in levels of violence among the poor.

Worrall (2005) similarly argues that welfare payments are too small to have a meaningful impact on recipients' lives, and that cross-sectional research may be overstating the association between welfare and crime. To ameliorate this weakness, Worrall (2005) uses panel data for all counties in California between 1990 and 1998. Additionally, Worrall (2005) expands the measures of welfare and crime to include six operational definitions of welfare, expanded to include other social services, and five different crimes (all Part I crimes except arson). In contrast to the majority of prior research on this topic, Worrall (2005) finds very little evidence of an association between welfare and crime.

The final macro-level study of welfare and crime (Burek 2005) seeks to address two limitations of prior literature: the lack of longitudinal analysis and the lack of Part II crimes. Burek (2005) uses data on Kentucky counties in 1980 and 1990 to examine the influence of the change in assistance spending. Although the majority of prior studies have found a negative or null association between welfare and crime rates, Burek (2005) finds that the total amount spent per AFDC recipient per county is significantly positively associated with the amount of Part II arrests and not associated with Part I crime rates. These findings are consistent with the arguments put forth by Chamlin et al. (2002) and Worrall (2005) that AFDC amounts are not substantial enough to provide real financial or social support for recipients.

As with longitudinal research, very few macro-level studies of welfare and crime specifically test theoretically informed mechanisms of the observed relationships. Three key exceptions to this limitation are written by DeFronzo (1997), Hannon (1997), and Hannon and DeFronzo (1998). DeFronzo (1997) conducts a test of Sampson and

Wilson's (1995) social control-disorganization theory of crime. This theory posits that strains lead to crime through their impact on reducing social controls (e.g. family disruption). DeFronzo (1997) finds that, while the cost-of-living adjusted average AFDC payment per person is significantly negatively associated with homicide rates, it has a larger indirect effect through its significantly negative association with female headed households, which themselves are positively associated with homicide rate. This provides support for not only strain theory, but also Sampson and Wilson's social control-disorganization theory of crime.

In an additional test of social-control disorganization theory, Hannon and DeFronzo (1998) extend their previous work by examining the influence of the cost-of-living adjusted average AFDC payment per recipient and the influence of the percentage of poor families receiving assistance on property crime. The results show that a county's rates of burglary, larceny, and auto theft are negatively associated with both measures of government assistance. Furthermore, contributing additional support to the social-control disorganization theory, Hannon and DeFronzo (1998) find that AFDC payments are negatively associated with the prevalence of divorce and female-headed households. As a result, it appears that government benefits reduce property crime in part due to their influence on pro-social family structures.

Finally, in his study of Labor Market Areas (LMAs), Hannon (1997) tests the hypothesis that AFDC payments reduce homicide rates, partly due to their influence on educational attainment. Hannon (1997) finds that the cost-of-living adjusted average AFDC payment per recipient (in 1990) is significantly negatively associated with homicide rates. Additionally, he finds that about 45% of the AFDC effect works

indirectly through the effect of AFDC on reducing high school dropout. Overall, Hannon (1997) finds that, adjusting for controls, the average homicide rate is 42% lower in areas in the top third of AFDC payments compared to those in the bottom third.

Together, the macro-level literature on government assistance benefits and crime fails to present conclusive evidence about either the presence or direction of an association between the two. Although significant negative associations are documented between government welfare spending and numerous crime types, many of the more methodologically rigorous studies fail to find significant associations. A final criticism of this literature is that the majority of these macro-level studies posit individual-level explanations for why welfare is associated with crime such as strain and rational choice theories. By examining macro-level data, a) it remains unclear whether the aggregate associations also exist at the individual level and b) it is not possible to directly test the mechanisms of individual-level theories.

To date, three studies report findings from individual-level research on welfare receipt and criminal offending (Monte and Lewis 2011; Brown et al 2004; Verbruggen et al. 2015). Using panel data on 534 female welfare recipients in Texas, Brown et al (2004) were able to examine changes in criminal and substance use behaviors resulting from changes in women's welfare status. The results show that, at the beginning of the study, 40% of the women reported involvement in some sort of criminal activity in the past year. Over the following three years, this percentage decreased by over half to 18%. This decrease occurred at the same time that many of the women stopped receiving welfare, however multivariate analysis showed no association between receiving TANF and criminal activity.

Monte and Lewis (2011) also examined whether the 1996 PRWORA reforms impacted recipients' criminal behavior through the removal of benefits. Monte and Lewis (2011) test two alternate hypotheses. First, as critics of the PRWORA proposed, losing benefits may increase the likelihood of offending due to financial hardship. Second, as proponents of welfare reform argue via the "culture of dependency argument", women who receive benefits may be the ones committing crime. Using data from the Illinois Family Study, which followed welfare recipients over time (beginning in 1998), Monte and Lewis (2011) find that financial hardship (unemployment or non-receipt of welfare) increases the hazard of arrest by 13%. They estimated Cox regressions predicting arrest, controlling for race, education, number of children, marital status, teen motherhood, IPV victimization, long-term welfare receipt, and childhood welfare status. Only 10% of the sample (representative of all welfare recipients in Illinois in 1998) were ever arrested in the years included in the data. In periods when respondents did not receive welfare, they had an increased hazard of arrest. However this hazard was further increased in periods when respondents did not work and neither worked nor received, with increases of 40% and 29%, respectively.

A final study of the individual-level association between receiving government benefits and criminal behavior was conducted in the Netherlands. In order to disaggregate the effects of income from employment, Verbruggen and colleagues (2015) compared the effects of employment income government support income on crime. Using a sample of Dutch men and women who were institutionalized as youths, they find that income from both sources reduces criminal offending among men. In contrast, women have a reduction in crime associated with employment, but an increase in offending associated

with government income support. The authors argue that this finding supports both the perspective that crime is financially motivated and the perspective that employment provides informal social control that prevents offending.

The existing body of literature studying the association between government assistance benefits for the poor and criminal behavior does not provide a clear picture. Prior research comes to inconsistent conclusions regarding whether there is a significant association between benefits and crime as well as the direction of that relationship. Additionally, despite many of the theoretical underpinnings of these studies providing individual-level explanations of crime, the majority of studies are conducted at the macro-level. To further examine the potential association between benefits and crime, I next turn to a detailed discussion of these theories and their propositions.

Criminological Theories of Poverty and Inequality

The discipline of criminology is built on a century of theoretical thought that has developed a rich body of explanations of crime and delinquency. While government assistance programs to alleviate poverty and joblessness have not been of consideration to criminological theorists, poverty and inequality have been central explanatory factors from the very beginning. Given the interdependency of poverty, particularly unemployment, and government assistance, theories that speak to the former have implications for the latter. Accordingly, there is much theoretical justification for the study of welfare and crime, although the expected direction of the relationship differs across theoretical traditions. In this dissertation I consider the ability of two specific theories, general strain theory (Agnew 1992) and social bond theory (Hirschi 1969), to explain the benefits-delinquency association.

Strain Theories of Crime and Delinquency

In one of the earliest theories of antisocial behavior, Merton (1938) proposes the concept of anomie as the source of crime. Anomie occurs when the normative means for achieving culturally valued goals are insufficient. As a result, structural barriers prevent some classes from being able to be successful. In Merton's (1938:679) words, "The cultural demands made on persons in this situation are incompatible." This incompatibility results in frustration that, when combined with "inadequate socialization" (Merton 1938:678), leads to the rejection of the normative means. Instead, some individuals use culturally unacceptable means, such as crime, to achieve success goals. For example, the uneducated, unskilled worker faced with poor occupational outcomes may turn to theft to achieve financial success. Merely having employment is inadequate to prevent alienation among adults, as marginal employment is associated with increased arrest among young adults (Allan and Steffensmeier 1989) while measures of job satisfaction are negatively associated with crime among ex-offenders (Uggen 1999). Based on Merton's (1938) theory, interventions designed to alleviate the structural barriers faced by America's poor may end or prevent the state of anomie. Although most government benefits are not sufficiently large to be construed as financial success by any means, they are designed to address some of the structural blockages in the U.S. For example, recipients of TANF are given assistance with job skills training that may otherwise be unavailable to them. Similarly, government provided child care subsidies help the poor, particularly single mothers, to be able to work.

An important expansion of Merton's (1938) theory is Agnew's (1992) general strain theory. Anomie theory was heavily criticized in the 1970s (Kornhauser 1978) with the result that it had largely lost its role in criminology by the early 1990s. Agnew (1992) substantially revised strain theory in his establishment of general strain theory, which brought strain back into the criminological focus. Agnew's theory is explicitly social-psychological and specified at the individual level, drawing heavily from the broader literature on stress and coping. Agnew's primary expansion beyond classical structural strain theory regards psychological sources of strain. In addition to the incompatibility of goals and means, Agnew (1992) argues that strain occurs when a positively valued stimuli is removed or when a negative stimuli is presented. Furthermore, he expands Merton's disjuncture between goals and means to also include "the disjuncture between (1) aspirations and expectations/actual achievements, (2) expectations and actual achievements, and (3) just/fair outcomes and actual outcomes" (Agnew 1992: 56). These revisions substantially broadened the focus of strain theory, which had previously been criticized for its inability to explain middle-class crime and its narrow focus on class-based, economic motivations for crime.

Agnew (1992) additionally expands strain theory by specifying negative affect as the mechanism linking strain with crime. Strains create negative affect, with which individuals must cope. In a recent extension of his theory, Agnew (2012) specifies the association between coping and crime. Crimes are just a few of hundreds of possible coping strategies for addressing strain, and criminal strategies are used the minority of the time. Strained individuals are often able to address their negative affect through cognitive (e.g., accepting responsibility), behavioral (e.g., transferring schools to avoid bullies), and

emotional (e.g., meditation) coping strategies without turning to crime (Agnew 1992). However, Agnew (2012) argues “that *certain* individuals experiencing *certain* types of strain in *certain* circumstances are likely to engage in criminal coping” (661, emphasis in original). Part of this specification points to the different emotional states engendered by different experiences of strain. For example, anger is likely to result from strains perceived as unjust while depression may result from strains perceived as uncontrollable. Anger is considered the most important emotion in general strain theory because it can exacerbate the experience of the strain, while making the individual want to retaliate at the same time as lowering their inhibitions against crime (Agnew 1992). Research has found that strains such as family conflict and financial trouble have indirect effects on delinquency through anger and anxiety (Aseltine, Gore, and Gordon 2000; Mazerolle, Piquero, and Capowich 2003)

In earlier work, Agnew (2001) also specified the types of strain most likely to lead to crime. One key factor is the centrality of the strain. When a strain is experienced that creates a problem in daily life activities, it may be particularly criminogenic. This is because strains related to central and unavoidable parts of daily life are especially high in magnitude. For example, research finds that disadvantaged youth will utilize theft to address the need for shelter, food, or clothing (Agnew 2012). Experiencing high magnitude strain can be compounded by the environmental context, creating further incentives for crime. For example, Agnew (1992: 73) describes how the poor “lack the resources to negotiate successfully with many others, and they often find it difficult to escape legally from adverse environments.” Poor youth are further disadvantaged by their age, which makes it more difficult for them to advocate for themselves (Agnew 1992).

Proponents of generous government assistance programs view them as resources for the poor to alleviate some of the hardships of poverty in the face of social and structural barriers to employment outside of the secondary labor market. The hardships associated with poverty take the shape of all three types of strain identified by general strain theory. As Merton (1938) identified, Americans in poverty are faced with a nearly impossible task of achieving the American dream without the resources to do so, such as a strong educational system. Furthermore, the secondary labor market is structured so that hard working poor will still struggle to provide for their families through steady employment. This struggle results in both the loss of positive stimuli, such as housing or utilities, and the presence of negative stimuli, such as hunger. Poverty is therefore associated with many objective strains, or strains that are aversive to most people (Agnew 2001). Because these types of strains are likely to affect daily life, they are particularly likely to lead to crime (Agnew 2001).

Some of the strains associated with poverty may be further likely to lead to crime because they may be viewed as unjust, which increases anger and the likelihood of criminal coping (Agnew 2001). The example of utilities being shutoff for nonpayment meets a number of the characteristics of an unjust strain. The harm caused can be quite severe, especially in the case of utilities needed for heat being shut off in the winter. Furthermore, this treatment may be “very different from their past treatment in similar circumstances and/or from the treatment of similar others” (Agnew 2001: 332). Some states and localities do not allow utility companies to shut off services needed for heat in the winter, but these regulations vary place to place and over time (Desmond 2016). As a

result, a utility shutoff could come as a surprise based on past experience or the experience of friends and family, and therefore be perceived as an injustice.

Like the adults in the household, adolescents may also experience such strains as severe and potentially unjust, which are key factors in the likelihood of criminal coping (Agnew 2012). Adolescents may have further risk factors for a criminal or delinquent response to the strains associated with poverty. Specifically, adolescents may have more trouble applying legal coping strategies in the face of the negative emotions caused by strain for multiple reasons. First, stress researchers have found that prior experience with a stressor can lead to the development of tolerance and adaptive coping strategies (Agnew 2012; Seery, Holman, and Silver 2010), which is less likely to have happened at a young age. Second, Agnew (2012) acknowledges that coping is both emotional and rational, such that strained individuals consider the costs and benefits of crime as a response to strain. Strong experiences of emotion can decrease the extent to which crime is viewed as a risky coping mechanism (Agnew 1992). Adolescence is a developmental time period in which emotions are generally heightened but judgment has not fully formed (Casey, Jones, and Hare 2008) making criminal coping more likely. Finally, adolescents may not be in the position to take advantage of some legal coping mechanism because of their age and lack of resources. Whereas an adult has the agency to actively seek out coping mechanisms such as cognitive behavioral therapy, a child cannot make and execute that type of decision on his or her own.

Parents or other primary caregivers generally seek to not only personally cope with strains, but to also help their children to avoid strain. In the case of poverty, applying for government assistance benefits is identified by Agnew (2001; 2012) as an

important legal coping option exercised by many poor Americans. Strains resulting from poverty can be reduced for recipients and their children through accessing cash and in-kind assistance, such as food stamps. Many assistance recipients are explicit about applying for benefits in order to provide for their children. In a qualitative study on the perceptions of welfare recipients, one young mother explained that “When you’ve got two kids you do what you have to do. That’s really the main reason I went on it too, because of the kids. I had no choice” (quoted in Rank 1994). In this way, family receipt of government benefits may in fact be a method by which parents can legally cope with the strains of poverty for both them and their children, reducing the likelihood of criminal coping.

Attachment and Crime and Delinquency

Whereas general strain theory posits that strain and the resulting negative affect pushes individuals into crime and delinquency, control theories posit that crime and delinquency will naturally result when social controls are not present to restrict deviant behavior. In essence, control theories seek to explain what prevents criminal behavior, rather than what causes it. One of the primary control theories in criminology is Hirschi’s (1969) social bond theory. Hirschi argues that it is our bonds to society that prevent criminal and delinquent behavior.

Hirschi (1969) states that there are four unique elements of the bond to society: attachment, commitment, involvement, and belief. Each of these elements represents a specific way in which we are prevented from acting against social norms. First,

attachment is our connection to other people such as parents, teachers, and peers. To the extent that we are attached to others, we internalize social norms. Furthermore, we do not want to upset those to whom we are attached by violating those norms. Second, commitment can be conceptualized as stakes in conformity. Over time, we invest time and energy in conventional activities like education. Our commitment to these achievements and their continuation prevents us from putting them at risk by participating in delinquent activities. The third element, involvement, is the simple idea that time spent in conventional behavior is time that cannot be spent in delinquent behavior. The final element is belief. While social bond theory posits that there is a single value system that everyone knows, it argues that people vary in their belief that they should follow that value system. Hirschi (1969) argues that these elements are generally interrelated and positively correlated.

Among children and adolescents, attachment to parents is a particularly important part of the social bond. Hirschi (1969) draws on Durkheim's conceptualization of socialization processes to explain attachment:

Durkheim said it many years ago: 'We are moral beings to the extent that we are social beings.' This may be interpreted to mean that we are moral beings to the extent that we have 'internalized the norms of society...The essence of internalization of norms, conscience, or super-ego thus lies in the attachment of the individual to others (Hirschi 1969: 18).

A key portion of this explanation is internalization. In contrast to other control theorists focus on direct control, or discipline (Nye 1958; Wells and Rankin 1988), Hirschi emphasizes only the indirect control that results from a well bonded relationship between parent and child. In measuring attachment to parents, Hirschi (1969) uses the concepts of

“virtual supervision” (89) and “intimacy of communication” (90). Virtual supervision reflects parental knowledge of what adolescents are doing and who they are with when they are away from their parents. Intimacy of communication reflects the quality of conversation and idea sharing between parent and child.

Research on family processes has found substantial evidence of the association between parental attachment and delinquency. In their reanalysis of the Gleuks’ data, Laub and Sampson (1988) and Sampson and Laub (1994) found that parental attachment, supervision, and discipline protected against delinquency and were more important than background structural factors. Other studies have similarly documented an inverse association between adolescents’ attachment to their parents and delinquency (Rankin and Wells 1990; Rankin and Kern 1994; Sokol-Katz, Dunham, and Zimmerman 1997; Wright and Cullen 2001), and a recent meta-analysis also documents an inverse association between attachment and delinquency (Hoeve et al. 2012). Attachment not only prevents adolescent delinquency, but also operates by preventing the formation of friendships with delinquent peers (Warr 1993).

The development of attachment is influenced by structural factors including poverty. Sampson and Laub (1994) found that poverty makes it more difficult for families to develop strong social controls in part due to the added stress experienced by impoverished parents. Additionally, it is more difficult for single parents to create strong attachment within the family, which can then indirectly increase delinquency (Rankin and Kern 1994; Sokol-Katz et al. 1997). This influence may be compounded by the prevalence of female headed single family households because boys’ attachment to their

father has a stronger association with delinquency than their attachment to their mother (Hoeve et al. 2012).

The ability of families to control children and instill social norms is a central part of policy decisions regarding government assistance programs. The earliest cash assistance programs in the United States were explicitly designed to support widowed mothers and their children so that the mothers could raise their children following middle class values with the state replacing the lost husband and father. However, as women became more independent following the civil-rights and feminist movements, dependence on government assistance no longer followed popular conceptualizations of gender roles. This change resulted in the stigmatization of welfare recipients as going against American standards of independence and hard work (Rogers-Dillon 1995).

With stigmatization came welfare reform focused on moving welfare recipients out of the home and into the workforce. One of the primary arguments of reformists was the importance of parental modeling of employment to their children (Chase-Lansdale et al. 2003). Additionally, reformists argued that working would improve mothers' parenting skills by increasing their self-esteem and financial circumstances (Garfinkel et al. 2001). On the other hand, critics argued that children would experience greater benefit from a parent being at home instead of at work (Chase-Lansdale et al. 2003). Part of this criticism proposed that if mothers receiving welfare entered the low-wage workforce they would spend less time with their children while still having the same impoverished financial status, therefore decreasing the quality of their relationship with their children (Chase-Lansdale et al. 2003). Indeed, one of the primary benefits of welfare receipt found

in qualitative research on AFDC receiving mothers was their ability to stay at home to care for their young children (Jarrett 1996)

Arguments can be made that family receipt of government benefits may increase or decrease children's attachment to their parents. Wright and Cullen (2001) argue that adolescent delinquency can be prevented through "parental efficacy", which is a combination of social support and social control. Parents provide social support to their children when they can give their children emotional or instrumental resources. Such supports include behaviors like taking children on outings and encouraging their hobbies. Such support is more difficult for impoverished parents because they have fewer resources. Wright and Cullen (2001) find that parental social support is positively associated with attachment and therefore negatively associated with delinquency. To the extent that government benefits provide more resources with which parents can support their children, it follows that attachment will increase and delinquency will decrease.

While parents may be able to provide additional support for their children when receiving government benefits, the stigma of benefits receipt could override that support and decrease attachment. Qualitative research on recipients' perceptions of welfare finds evidence that recipients see welfare negatively, and so do their children. One mother explained that she taught her children to hide their use of government and nonprofit assistance:

And I tell him no, it's not a thing like that...It is like our family secret...They can remember when we was in the shelter and so I tell them this is just like that. We just have to go through, but it's not something we want to make flyers and put out and make everybody know. (Quoted in Rogers-Dillon 1995: 449)

By presenting their need to receive government assistance as a shameful secret that should be hidden, this mother may undermine her children's attachment to her. One characteristic of highly attached children is the desire to one day be like their parents (Hirschi 1969), which becomes less likely if the parent presents their life in a negative light. Another mother indicated she was reluctant to seek out help from a soup kitchen because she thought her children would make fun of her if she did (Kissane 2003). Welfare stigma is pervasive in U.S. society, and so many children may similarly feel critical of parents who apply for the family to receive benefits, which could decrease their attachment and therefore increase their risk for delinquency.

Overview of the Current Study

The most common finding in the current body of research on government assistance and crime is an inverse relationship. However, there are a number of limitations to prior work that leave uncertainty as to whether there is truly a negative, causal relationship between government assistance and criminal behavior. The initial limitation is two-pronged. First, due to changes in policy over time, past studies largely report results related to a government program that no longer exists. Specifically, the existing literature examines the relationship between AFDC payments and crime rates. Since 1996, TANF replaced AFDC with a number of significant changes to the way welfare programs are run by the states. While theoretical arguments regarding the benefits of government assistance payments for reducing strain and increasing social support should hold true across both programs, many differences in the eligibility

requirements and rules for receiving benefits could change conclusions related to crime. Second, almost all past studies report results related to only one of many government assistance programs. AFDC was the target of most of the criticism about “welfare queens” and behavioral poverty, and so it accordingly was the subject of most criminological research. However, cash welfare (AFDC and now TANF) has many fewer recipients than other government assistance programs like SNAP. The theoretical arguments for a connection between government assistance and crime are not limited to cash welfare programs, and research needs to expand to include other programs.

The second important limitation of prior research is that all but three of the existing studies used macro-level data. Although studies have been conducted at many different ecological units of analysis including cities, counties, SMSAs, states, and nations, the individual level remains mostly unexamined. While repeated findings of a negative association between welfare spending and crime at the macro level provide important evidence that there may be a causal relationship between the two, it is not robust to all specifications, and is overall far from enough evidence to draw any causal conclusions, particularly not about individual behavior. Macro-level correlations cannot substitute for individual-level analysis, as they do not present an accurate picture of individual behavior and often have much larger correlation sizes than the individual association (Robinson 1950). For the most part, criminological theories with implications for why government assistance may decrease crime posit mechanisms about the individual, not about the city, county, or nation. If the negative relationship seen in ecological studies is proposed to indicate that welfare payments decrease crime by alleviating inequality through reducing strain and providing social support to the

individuals who receive them, then that proposal should be tested at the individual level. Furthermore, individual analyses should incorporate mechanisms from the various proposed explanatory theories.

Finally, it is important to note the focus of analysis in existing individual-level studies. To date, three studies have examined the individual impact of government cash assistance on offending (Brown et al. 2004; Monte and Lewis 2011; Verbruggen et al. 2015). The first two of these studies utilize samples of welfare recipients followed longitudinally. With this design, the researchers are able to document the effects of exiting TANF on recipients' criminal behavior and substance use. Rather than selecting a sample for welfare receipt, Verbruggen and colleagues (2015) utilized a sample of institutionalized juveniles in the Netherlands who were followed longitudinally through age 32. This population has a high likelihood of both receiving benefits and crime, but was not selected for either. While all of these studies provide useful insights into the association between welfare and crime, they only examine the criminal behavior of the direct recipient of the benefit. Still unstudied is the impact of benefits receipt on the behavior of a recipient's children. This is a significant absence for a number of reasons, and the intergenerational effects of government assistance are the focus of this dissertation.

Children have always been at the center of American welfare state policy. The very first cash assistance program was designed to assist single mothers (Handler 2009), and parenthood is often a factor in qualification for benefits, as emphasized by the names of programs like Aid to Families with Dependent Children. Furthermore, the political rhetoric surrounding government assistance programs frequently highlights the

consequences of these programs for children. Two speeches during the welfare reform period in the 1990s demonstrate this focus. In a 1993 campaign speech for Congress, Newt Gingrich said “It is impossible to maintain civilization with 12-year-olds having babies, 15 year olds killing each other, 17-year-olds dying of AIDS, and 18-year-olds getting diplomas they can’t even read. Yet that is precisely where three generations of Washington-dominated, centralized-government, welfare-state policies have carried us” (quoted in Shirley 2017). In this speech, Gingrich argues that the U.S. welfare state directly lead to numerous social problems, with juvenile delinquency among them. Three years later, in a speech about his decision to sign the PRWORA after vetoing two prior reform bills, President Clinton explained that “this new bill is better for children than the two I vetoed” (quoted in *The New York Times* 1996). While the Democratic and Republican politicians made dramatically different statements about children during the reform period, it is nevertheless clear that welfare programs are not just about the direct recipients of payments.

The concern with children among politicians is consistent with the concern of social scientists across many disciplines. In particular, the period of adolescence is exceedingly important in the study of human development because of its consequence across the life course. Within criminology, adolescence is further the frequent focus of research because of the documented age-crime curve (Hirschi and Gottfredson 1983). The prevalence of criminal behavior begins to increase in the early teenage years, rapidly growing until about age 20 when it peaks and begins to rapidly decline. Consequently, the majority of crimes are committed by teens and young adults, especially males. By selecting its sample for welfare participation, prior individual research (Brown et al.

2004; Monte and Lewis 2011) does not focus on the population most likely to commit crime. Both Monte and Lewis (2011) and Brown and colleagues (2004) study all female samples with an average age around 30. By expanding the analytical focus to the children in households that receive benefits, this dissertation captures the population at highest risk for criminal behavior.

A final significant contribution of the current study over prior work is the explicit testing of the mechanisms of key criminological theories. Although prior macro-level studies have found an association between AFDC spending and divorce rates, prevalence of female-headed households, and high school dropout (Hannon and DeFronzo 1998; Hannon 1997), the ecological fallacy prevents conclusions about individual behavior from aggregate data. Additionally, the mechanisms of the central criminological theories such as general strain theory and social bonds theory remain untested. As a result, it remains unclear why government benefits have been found to be associated with criminal behavior.

This dissertation is composed of five chapters. Chapter 2 provides a detailed discussion of the data and methodology used in this dissertation. I begin by describing the Fragile Families and Child Wellbeing Study. I explain the sampling strategy and design of the study. I further describe the measures that I use in my empirical analysis. Finally, this chapter provides a description of my analytical strategy including a discussion of adjustments for complex survey design.

Chapter 3 is the first empirical chapter, in which I examine the relationships between poverty, government benefits, and delinquency. These relationships are studied as direct associations as well as potential mediating and moderating effects. Chapter 4 is

the second and final empirical chapter, in which I study the theoretical mechanisms that are hypothesized to explain the effect of government benefits on delinquency.

Specifically, first examine whether there is an association between receipt of government benefits and measures of strain and parental attachment. I then test whether those theoretical measures that are significantly associated with benefits mediate or moderate the associations between benefits and delinquency that were observed in Chapter 3.

Finally, the dissertation concludes with a final discussion of the empirical findings and their theoretical and policy implications in Chapter 5.

Figures

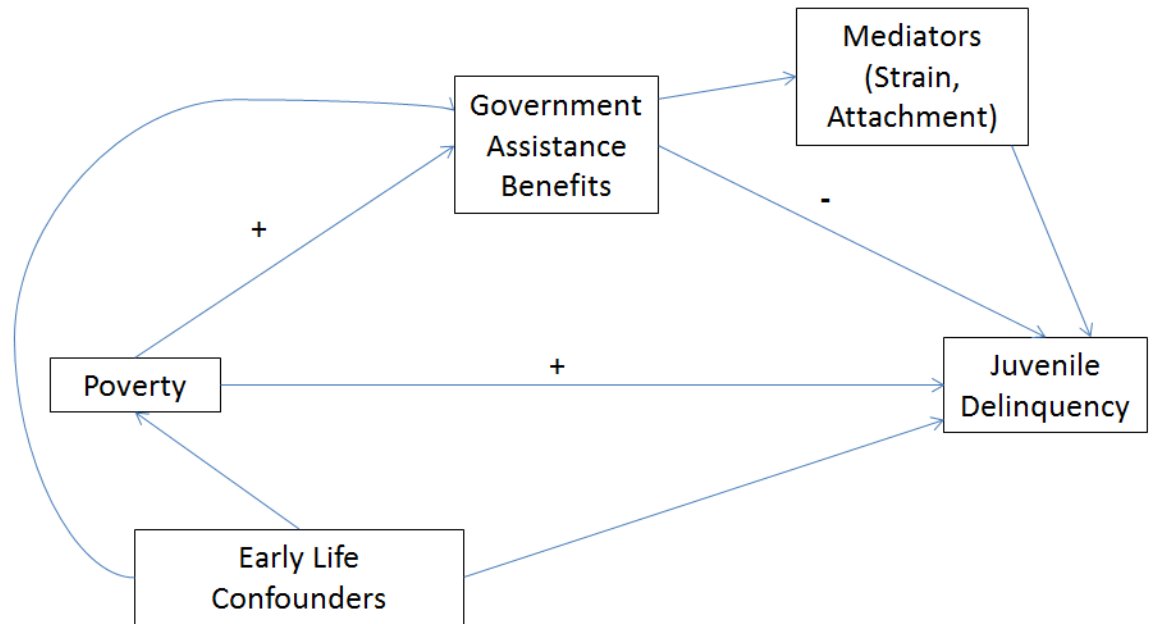


Figure 1-1: Path diagram of relationships among poverty, government assistance, theoretical mechanisms, and juvenile delinquency.

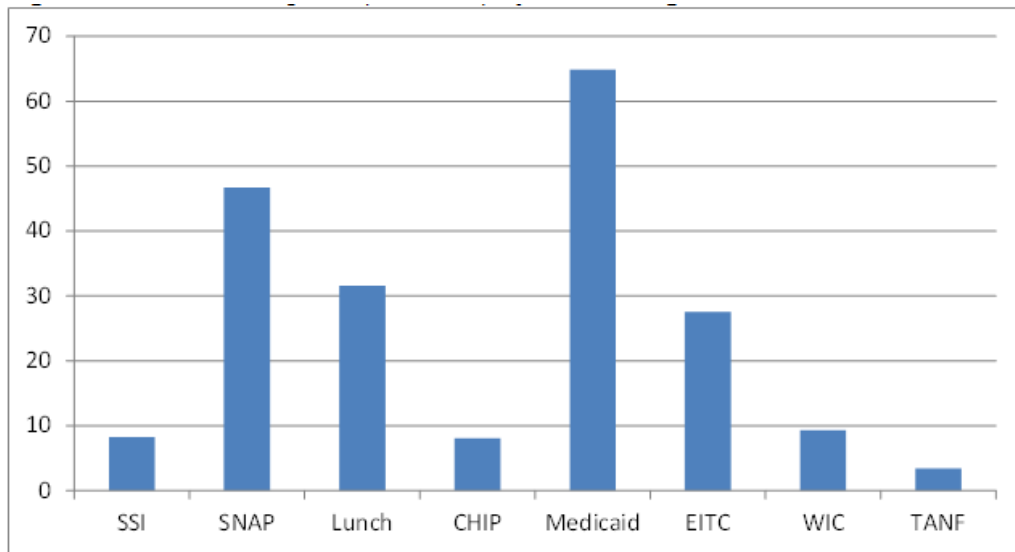


Figure 1-2: Number of recipients (in millions) by federal assistance program.

CHAPTER 2

Data and Methods

This dissertation utilizes data from the Fragile Families and Child Wellbeing Study (Fragile Families)². Fragile Families was primarily designed to provide information on unmarried parents and their children. It is particularly appropriate for this dissertation because one of the guiding questions of the study is “What are the long-term consequences for parents, children, and society of new welfare regulations, stronger paternity establishment, and stricter child support enforcement?” (Reichman et al. 2001). Accordingly, it captures detailed information about government benefits in the population of greatest likelihood to receive them.

Fragile Families is a large cohort study that follows families with children born between 1998 and 2000 (n=4,700). All of the children were born in a representative sample of large cities in the United States (n=20 sampled cities). The data are representative of non-marital births within each sampled city and across all U.S. cities with populations of 200,000 or more. To achieve the study’s goal of learning about the unique risks and challenges experienced by families with unmarried parents, it was designed to oversample children of unmarried mothers. Specifically, of the 4,700 sampled births in this study, 3,600 were non-marital and 1,100 were marital.

² Research reported in this publication was supported by the Eunice Kennedy Shriver National Institute of Child Health and Human Development (NICHD) of the National Institutes of Health under award numbers R01HD36916, R01HD39135, and R01HD40421, as well as a consortium of private foundations. The content is solely the responsibility of the author and does not necessarily represent the official views of the National Institutes of Health

The Fragile Families study used a three stage sampling method to sample cities, hospitals, and births. Cities were chosen from the population of U.S. cities with at least 200,000 residents. Before sampling, cities were stratified based on the generosity of welfare, strength of child support, and strength of the labor market. This stratification method ensured that the study captured cities at the extremes of each of these characteristics in addition to randomly selecting cities from each strata. Selection of cities was proportional to their populations (Reichman et al. 2001). To maximize variation, more births were sampled in the cities in the strata with extreme values (n=325 cities) than in the other cities (n=100 cities).

Next, the study sampled hospitals within cities. In the cities with a large number of birthing hospitals, Fragile Families randomly chose hospitals that had over 1,000 non-marital births annually. In other cities, all birthing hospitals were sampled. The sampling of births occurred within hospitals instead of from birth records because hospital interviews are significantly more cost effective than in-home interviews and because pilot studies determined hospital sampling would achieve higher response rates for both mothers and fathers (Richman et al. 2001). Unwed fathers are particularly hard to interview, however the investigators discovered a “magic moment” immediately after a child is born when fathers are easier to contact and interview (Reichman et al. 2001: 303).

Finally, interviewers sampled births within each hospital. During the fielding period, interviewers randomly chose from a daily roster of birthing beds. Interviews continued until they reached preset quotas. The quotas were determined from the amount of non-marital births in the years prior to the initiation of data collection (Richman et al.

2001). Less than 5% of births were excluded due to eligibility restrictions.³ Overall, Fragile Families achieved high response rates. Across the cities, mothers responded between 80 and 90% of the time. The fathers responded less often, with large variation according to their relationships with the mothers. For example, only 35% of unmarried fathers who did not visit the hospital responded, while 87% of fathers married to the mothers responded.

Researchers conducted interviews at six time points: birth, age one, age three, age five, age nine, and age fifteen. As shown in Table 2.1, interviewers conducted a different set of interviews at each wave.⁴ Additionally, some waves involved non-interview data collection: extraction of medical records, collection of DNA samples, and assessment of the home environment. The key surveys for this dissertation are the surveys of the mothers, fathers, primary caregivers, and child. The parents received individual surveys in each of the first five waves. In wave 6, only the primary caregiver (mother, father, or other caregiver) was interviewed. Most of the primary caregivers were mothers (88%). This questionnaire combined the previous primary caregiver and mother questionnaires. The individual interviews with the mother and father were not conducted. Finally, the data were linked through collaboration with additional scholars and foundations to provide supplemental information about: childcare and education; parents' religion; and parents' medical, employment, and incarceration histories.

³ “The following patients were excluded from the study: those who planned to place the child for adoption, those for whom the father of the baby was not living at the time of the birth, those who did not speak English or Spanish well enough to complete the interview, mothers who were too ill to complete the interview (or their babies were too ill for the mother to complete the interview), and those whose baby died before the interview could take place. In addition, many hospitals prohibited us from interviewing parents less than 18 years old” (Reichman et al. 2001:321-322).

⁴ Table replicated from <https://fragilefamilies.princeton.edu/documentation>

Table 2.2 presents the rates of completion for the different survey components for the waves used in this dissertation.⁵ The baseline sample size was impacted by the eligibility requirements discussed in footnote two and by the willingness of mothers to participate. Fathers were only approached to participate if the mother participated. Overall, the baseline achieved a high response rate, with 86% of mothers participating, and 78% of their babies' fathers participating. Eligibility for inclusion in the survey changed over time. Families lost eligibility if a child was adopted or passed away. Parents who passed away were also not eligible to be in the sample at follow-up waves. Lastly, conflicting paternity information excluded some fathers (CRCW 2018). As shown in Table 2.2, the response rates remain quite high over time. All response rates for waves five and six are above 70%, with the exception of the biological fathers in wave five (59%).

Measures

Dependent Variables - Delinquency

The dependent variable throughout most of this dissertation is self-reported delinquency. In year 15 (wave 6), the teens answered a series of questions about their participation in thirteen different criminal behaviors. Interviewers asked the frequency of the behavior in the prior 12 months, ranging on a four point scale from “never” to “5 or more times.” The questions were as follows:

⁵ Table compiled from CRCW 2008, CRCW 2011, and CRCW 2018.

- Paint graffiti or signs on someone else's property or in a public place?
- Deliberately damage property that didn't belong to you?
- Take something from a store without paying for it?
- Get into a serious physical fight?
- Hurt someone badly enough to need bandages or care from a doctor or nurse?
- Drive a car without its owner's permission?
- Steal something worth more than \$50?
- Go into a house or building to steal something?
- Use or threaten to use a weapon to get something from someone?
- Sell marijuana or other drugs?
- Steal something worth less than \$50?
- Take part in a fight where a group of your friends was against another group?
- Were you loud, rowdy, or unruly in a public place?

I created multiple summary measures of delinquency from this set of behaviors.

First, I created a dichotomous measure indicating whether any of the behaviors were reported. Next, I use separate dichotomous measures of violent and property offending. Violence includes the measures of fighting, hurting someone, and threatening someone to get something (robbery). Property offending includes shoplifting, car theft, stealing something worth more or less than \$50, and stealing from a house or building (burglary).

Table 2.3 presents the frequency of these behaviors in the sample. Overall, almost half of the teens (46%) have done one of the listed behaviors. Additionally, almost one third of the teens (29%) reported violent offending, while 13% reported property offending. Of the different behaviors, public disturbance is the most common (27%) followed by fighting, both individually (25%) and in a group (12%). Robbery and burglary are the least common, each only reported by 1% of the teens.

Independent Variables - Poverty

Poverty is a central concept to this dissertation. The Fragile Families study constructed a measure of the household's percentage of the poverty line based on income. These percentages are coded into five categories reflecting the household's relation to the poverty line: 0-49%, 50-99%, 100-199%, 200-299%, and 300% or more. The primary measure of poverty in this dissertation measures the poverty of the child's family at age 9 in these five categories. Just over one third of children live in families below the poverty line at either <49% (17%) or 50-99% (19%). Almost one third of children live in families just above poverty at 100-199% (29%). The remaining children fall into the higher categories of 200-299% (14%) and 300%+ (20%).

I also seek to capture experiences of chronic childhood poverty. To capture chronic poverty, I use a measure of the number of survey waves in which the child's household is below the poverty line. To create this measure, I dichotomized the five category poverty measure and then totaled the number of previous waves (birth, age 1, age 3, age 5, and age 9) that the household's income fell below poverty. This measure ranges from 0 to 5 with a mean of 1.7.

While the previous measure captures, to some extent, the duration of childhood poverty, it does not capture movement in and out of poverty. To adjust for this, I additionally include a measure of whether the children's level of poverty has worsened, improved, or stayed the same between birth and the age 9 interview. While this does not fully capture all of the patterns of movement in and out of poverty that the teens experienced in early childhood, it captures whether, at the most recent wave, the children

were in better or worse circumstances than at the baseline. The majority of children fall into the same level of poverty at birth and age 9. Of those who do experience a change, 17% moved into poverty while 14% moved out of poverty.

Independent Variable – Government Benefits

The key independent variable in this dissertation measures family receipt of government benefits. The types of benefits include housing assistance and other government programs. The housing assistance measures ask whether the primary caregiver currently a) lives in public housing or b) receives government help to pay rent. The other government programs are measures of whether a member of the household has received one of the following types of benefit since the date of the previous (age 9) interview: a) TANF, welfare, or General Assistance, b) Unemployment Insurance or Workers Compensation, c) SNAP, Food Stamps, or Electronic Benefits Transfer, d) Supplemental Security Income (SSI) or Social Security Disability Insurance (SSDI), or e) other cash aid. Government benefits are summarized in a dichotomous measure of whether any benefits were received (coded “1”) or not (coded “0”).

Table 2.4 presents the frequency of receipt of benefits in the sample. Overall, most families report receiving some form of aid (69%). SNAP is by far the most common type of benefit received (54%). SSI/SSDI (27%), unemployment and workers compensation (25%), and TANF (21%) are also quite common. Housing and other cash aid are the least common benefits received in the sample.

I additionally create measures that separate Unemployment Insurance/Workers Compensation from the other types of benefits. While all of the benefits types exist to assist families and individuals in times of financial struggle, unemployment and workers compensation are limited to eligible individuals who have a history of employment. Accordingly, these benefits are distributed among a more economically diverse segment of the population, and are less associated with poverty. Table 2.5 presents the correlations between each type of benefit and poverty. These correlations show that benefits other than Unemployment Insurance/Workers Compensation are negatively correlated with the measure of poverty categories. This indicates that these benefits are, as designed, more common among those below the poverty threshold. Unemployment Insurance/Workers Compensation is notably distinct with a positive correlation close to zero. Removing it from the more limited measure of benefits receipt more closely ties the measure to the alleviation of poverty.

Mediating Variables

To test the explanatory power of strain and social bond theories, I include measures of their key concepts. General strain theory (Agnew 1992) argues that crime and delinquency are possible outcomes of various stressful experiences. These strains are defined in three primary ways: 1) “failure to achieve positively valued goals,” 2) “removal of positively valued stimuli,” and 3) “presentation of negatively valued stimuli” (Agnew 1992: 47). In this dissertation, I primarily measure the latter two types of strain. I capture these strains through a set of questions asked to the primary caregivers in the year

15 questionnaire. These questions target stressful experiences that result from financial problems. The seven specific experiences are as follows, all specific to the past twelve months:

were you ever hungry, but didn't eat because you couldn't afford enough food?

were you evicted from your home or apartment for not paying the rent or mortgage?

was your gas or electric services ever turned off, or the heating oil company did not deliver oil, because there wasn't enough money to pay the bills?

did you move in with other people even for a little while because of financial problems?

did you stay at a shelter, in an abandoned building, an automobile or any other place not meant for regular housing, even for one night?

was there anyone in your household who needed to see a doctor or go to the hospital but couldn't go because of the cost?

was your telephone service (mobile or land line) cancelled or disconnected by the telephone company because there wasn't enough money to pay the bill?

Although these specific questions were asked of the primary caregiver, I chose them for inclusion in this dissertation because they are all likely to be noticed or directly experienced by the teen in the household as well. Table 2.6 presents the frequency of these experiences at the age 9 and age 15 interviews. At both interviews the most common experience was losing phone service for nonpayment (20% and 17%, respectively) while the least common was staying in a shelter or other irregular housing (2% and 1% respectively). It is noteworthy that the levels of strain across all seven categories decreased between age 9 and age 15. It is likely that this is the result of greater national economic conditions. The age 9 interviews were conducted between 2007 and 2010, when many families were struggling due to the great recession. By 2014 to 2017, when the age 15 interviews were conducted, the national economy had improved, potentially explaining the overall decreases in strain experiences by this time.

Alternatively, it could be the case that strain experiences decreased because the most disadvantaged left the sample. This appears to be a less accurate explanation, however, as the total level of strain reported and attrition at age 15 are only correlated 0.016.

I combine the above experiences into a single measure of strain that corresponds to the total number of stressful experiences reported. Second, I compare this measure to the reports of the experience of the same strains in the prior wave (age 9). Through this comparison, I create a four category variable of change in strain. The categories are no strain, same level of strain, increase in strain, and decrease in strain. Table 2.7 shows the cross tabulation of strain at age 9 and age 15. The darkest areas represent an increase, the light gray areas represent a decrease, while the medium gray area stayed the same. Most respondents (54%) do not report any of the strains. Few experience the same level of strain at both waves (6%). Of those who experience a change in strain, more experience a decrease (25%) than an increase (15%).

Next, I include measures from Hirschi's (1969) social bond theory, which has four key components: attachment, commitment, involvement, and belief. Delinquency is likely to result from the weakening of these bonds. My analysis focuses on attachment, which is a measure of an emotional connection that results in the internalization of social norms. One of the most influential attachments among adolescents is to their parents. In his original statement of the theory, Hirschi (1969) captures attachment to parents in multiple ways. Attachment to parents is measured through their levels of "virtual supervision" (Hirschi 1969:89) and "intimacy of communication" (90). The former reflects the parents' knowledge of the teens' behavior when away from home while the latter reflects how well the teen is able to talk about things with their parent.

At age 9 and 15, the teens were asked comparable questions about their relationships with their parents. First, they reported whether their primary caregiver knows what they are doing in their free time “never, sometimes, or often.”⁶ Second, for each parental figure in their life, including their biological mother and father and, if applicable, their parents’ partners, they reported how close they feel to that parent and whether they can “share ideas or talk about things that really matter.” Both of these questions were answered on a four point scale ranging from 1-extremely close/well to 4-not very close/well. I reversed coded the responses so that higher values indicate greater attachment. The respondents were assigned the value for the relationship that had the greatest level of attachment. For the majority of respondents (83-93%), the relationship with the highest level of attachment was their relationship with their mother. Exploratory factor analysis (see Table 2.8) indicates that the measures for virtual supervision and intimacy of communication all load onto a single factor. However, the virtual supervision measure is more unique than the communication measures. Accordingly, I keep virtual supervision separate and combine the communication variables into a summary measure that reflects their average.

Finally, I compare the measures from age 15 and age 9 to capture change in parental attachment over time. I measure change in parental attachment in three categories for both virtual supervision and communication: the same level of attachment, an increase in attachment, and a decrease in attachment. Most children (69%) do not report a change in virtual supervision, while 20% report an increase and 11% report a

⁶ At age 9, the answers had an additional option of “always”, which I combine with “often” to make the measure comparable with age 15.

decrease. The children are relatively equally divided regarding change in intimacy of communication, with 25% reporting no change, 33% reporting an increase, and 41% reporting a decrease.

Control Variables

First, I control for the teen's race, sex, employment, and relationship to their primary caregiver. The teen's race/ethnicity is coded in a series of dummy variables indicating whether the respondent reported themselves as non-Hispanic white, non-Hispanic black, Hispanic, or another race or multiracial. The teen's sex is coded from their designation at birth in the base year. Males are coded "1" and females as "0." I additionally control for the average number of hours the teen reported working per week at age 15. Lastly, their relationship is coded as "1" if the primary caregiver is one of their biological parents and "0" otherwise.

Next, I control for three characteristics of the mother that were measured at the base year: her age, her marital status, and her country of birth. The mother's age at birth measures the age of the mother at the baseline survey. The mothers were between 15 and 43 with a mean age of 25. This measure does not have a curvilinear relationship to the outcome, so additional terms are not included in the models. The mother is coded as U.S. born if she reported at the baseline that she was born in the United States. Additionally, I control for whether the mother was married to the teen's father when he or she was born (coded "1") or not (coded "0"). If the father was unknown to the mother, this measure is coded as "0."

Additionally, I control for a set of household characteristics at age 15. I control for a dichotomous indicator of whether any adult household member is employed (coded “1”) or not (coded “0”). This measure includes the primary caregiver, but not the teen. The primary caregiver’s highest level of education is entered as a series of dummy variables indicating whether the primary caregiver’s education is less than high school (the reference category), high school or equivalent, some college or technical school, or college graduate or graduate school. I base a measure of household size on the Fragile Families constructed measure, but I collapse those families with more than 9 members together to prevent any categories having fewer than 2% of the distribution.

Finally, I include two additional pre-treatment controls. First, I control for whether the teen’s mother or father reports using any illegal drugs at the age 9 interview (coded “1”). This includes prescription drugs that the parent is not prescribed to use. 18% of parents reported some illegal drug use. Second, I control for whether the father had ever been incarcerated by the age 9 interview. To capture the incarceration histories for fathers that did not participate in the age 9 interview, I use a combination of the reports at age 5 and age 9. Almost half of the children’s fathers (45%) had been incarcerated. Table 2.9 presents a summary of when each variable was measured across the six waves of Fragile Families, and Table 2.10 presents the full list of descriptive statistics.

Analysis

Weights in the Fragile Families and Child Wellbeing Study

The Fragile Families data was collected using complex sample design, and will therefore yield biased statistical estimates if not properly weighted. The weights calculated by the study account for unequal probability of selection as well as baseline nonresponse and attrition over time (FFCWS 2008). Although the stratification and primary sampling unit identifiers are not available in the public use files, the replicate weights adjust for them to provide correct estimates of variance (FFCWS 2008). Using the replicate weights requires jackknife estimation. These weights are cross-sectional, and the study recommends using the weight for the wave with the largest number of respondents in the analysis when using multiple waves of data (FFCWS 2008). Two sets of weights can be used. The first makes the data representative of the 77 U.S. cities with populations over 200,000 in the base year. The second makes the data representative of the population of the 20 U.S. cities where respondents were sampled.

Prior Studies' Use of Weights

Prior published studies using the Fragile Families data often do not use the provided weights in multivariate analysis. For example, in their study of the consequences of paternal incarceration, Geller and colleagues (2012), claim that “The study systematically oversamples unmarried parents, but when weighted or regression-adjusted, it is nationally representative of urban families with children” (53). Consistent

with this claim, they do not use weights in their analyses, but control for the parents' relationship status at the child's birth. Multiple other studies with the Fragile Families data have similarly only weighted univariate analyses (Carlson, McLanahan, and England 2004; Waller and Swisher 2006), while others do not mention weights at all (Wildeman 2010). Importantly, using the regression-adjustment method does not account for attrition, as Geller and colleagues (2012) admit in their limitations section. They note that "despite the population-based nature of the Fragile Families data, generalizability may be limited by sample attrition. Families observed at the year-5 survey likely differ in unobserved ways from those families who could not be contacted for follow-up" (72). They conclude, however, that the high response rates mitigate this weakness.

One drawback of the nationally-representative weights is that their use limits the sample. While data were collected in 20 cities, 4 of the cities were added because of their interest to foundations, and were not part of the stratified random sample of cities. When the national weights are applied, these 4 cities are excluded because the weight variables are missing for respondents in them. The resulting reduction in sample size can make certain comparisons, such as racial disparities, difficult. Accordingly, prior work has limited the use of weights to descriptive analysis and controlled for marital status in regression to maximize sample size (Jacobsen and Ramirez under review). In sensitivity analysis, results with the regression adjustment have been similar to the 16-city weighted models (Jacobsen and Ramirez forthcoming; Waller and Swisher 2006). However, it is unclear whether these prior studies merely weight the data, or if they fully adjust for the complex survey design by using the jackknifed replicate weight procedure recommended in the Fragile Families documentation (FFCWS 2008).

In a working paper assessing the representativeness of Fragile Families through comparison with the Early Childhood Longitudinal Study, Birth Cohort of 2001 (ECLS-B), Wagmiller (2010) finds that the Fragile Families data, when analyzed with replicate weights, over represents African Americans and families with low earnings and low parental educational attainment compared to the ECLS-B nationally representative sample. The relatively disadvantaged nature of the Fragile Families study is likely a result of the urban sample (Wagmiller 2010). Wagmiller concludes that research using the Fragile Families should include statistical controls for race/ethnicity, household income, and parental education. These findings indicate that, not only should weighting procedures be used, but additional adjustment through statistical controls is necessary.

Weights in the Current Study

Although prior studies using Fragile Families commonly use regression-adjustment in place of complex weighting procedures, it is not clear that this is a statistically sound practice. Some prior work documents similar results with and without the use of the national weights (Jacobsen and Ramirez forthcoming; Waller and Swisher 2006), but not all studies do so. Furthermore, there are substantive reasons to expect that weighted and unweighted findings will not always be similar.

The weights are designed to adjust for more than just the oversampling of unmarried mothers. First, they account for attrition. When using any of the follow-up waves, it can be expected that there are systematic differences between those who were and were not reached by interviewers. Second, the weighting procedure accounts for the

clustering of births within hospitals. Hospital choice is not random, and research has found that some hospitals have higher concentrations of disadvantaged patients. Some of the hospitals sampled by Fragile Families are considered urban-safety-net (USN) hospitals. These are hospitals that prioritize providing care for anyone who needs it, regardless of their ability to pay. The markets served by USN hospitals are made up disproportionately of families that are minorities, low-income, non-English speaking, and have lower educational attainment (Gaskin and Hadley 1999). As a result, there may be notable homogeneity along these characteristics within hospitals. In my dissertation, I utilize the baseline national weights to make the data representative of U.S. cities with populations over 200,000. To further account for potential effects of different adjustment for complex survey design, I present robustness checks with other specifications (see below).

Missing Data

Although researchers sampled 4,700 births, complete data does not exist for all 4,700 children and their families. Some respondents are lost to attrition over time (n=1303), as some respondents become ineligible to participate (n=350) and others are not able to be reached or choose not to participate. Additionally, item nonresponse to survey questions used in these analyses brings the analysis sample down further to a sample size of 2,637.

More of the missing data results from attrition than from item non-response. Table 2.11 presents the number of observations with missing and valid data on the

measures as well as the percent missing. This information is presented for all respondents who remain eligible across the waves and for those respondents further limited to only those who did not attrite by wave 6 (age 15). Of the eligible families (n=4,548), the most data tends to be missing from variables that measure change across waves (34% for parental attachment measures and 29% for strain). This is likely due to the compounding of missing in both waves. Additionally, race is frequently not reported. Overall, most of the measures are missing between 20% and 30% in the sample of eligible families. However, when looking at missingness in only those families who are both eligible and participate in wave 6 (i.e. excluding those who attrite), there is much less missing data. Only six measures have more than 5% missing.

To adjust for this missing data, I used the multivariate normal multiple imputation procedure in Stata 14 to create 20 complete datasets. The procedure used in multiple imputation incorporates random variation in the process of creating complete datasets. This random variation is necessary to maintain accurate variance/covariance matrices (Allison 2002). Additionally, a large number of complete datasets are used in order to increase uncertainty and ensure unbiased standard errors (Allison 2002). Final estimates are calculated by following Rubins' Rules (Rubin 1987).

Statistical Approach

The subsequent two chapters present the empirical analysis for this dissertation. In the next chapter (i.e., Chapter 3), I begin my empirical analysis by estimating a series of regression models predicting delinquency. These models are designed to test the role of

government assistance benefits in the relationships between poverty and crime. Because the dependent variables measuring delinquency are binary, I use logistic regression. First, I estimate separate base models with family poverty and benefits as the only independent variables predicting offspring crime. Three versions of family poverty are used, the poverty category, the number of waves in poverty, and the change in poverty. Next all of the control variables are added. In the final set of models, I assess whether benefits mediates or moderates the effects of poverty on delinquency . The KHB calculation is used to test for whether family government assistance mediates the relationship between family poverty and offspring delinquency.

The KHB method was developed to allow researchers to test whether mediation occurs in nonlinear models. While the separation of direct and indirect effects is relatively straightforward when using ordinary least squares regression, nonlinear models such as logistic regression do not have the same ease of interpretation. Coefficients in nonlinear models are influenced by the error variance of the model. If an additional predictor variable that is correlated with Y is added to the model, the error variance changes. This results in a “rescaling problem” where coefficients in the two models are measured on different scales (Karlson, Holm, and Breen 2012). Accordingly, a change in the key independent variable after the inclusion of a potentially mediating variable is not evidence of indirect effects (Karlson et al. 2012). The KHB method provides researchers with estimates of the mediation effect net of the rescaling effect, and its operationalization in Stata provides clear estimates of the direct and indirect effects of key variables and can disentangle the indirect effect among multiple mediators (Kohler, Karlson, and Holm 2011).

In Chapter 4, my analyses test the power of strain and social bond theories to explain the association between government assistance and delinquency. I begin with models estimating the relationship between poverty, government assistance and the theoretical measures, net of a set of control variables. Second, I estimate a series of models to test whether these theoretical measures mediate or moderate the relationship between assistance and delinquency. As in chapter three, these analyses use the KHB calculation to test these mediation effects.

Robustness Checks

Although the most common way of scaling offending is to use a dichotomous measure of whether the respondent reported any delinquency, dichotomous measures are sensitive to the least serious offenses and do not account for frequency of offending (Sweeten 2012). To adjust for these weaknesses, I additionally use variety scales, which measure the number of the behaviors that the teen reported doing at least once. Variety scales were originally recommended by Hindelang and colleagues (1979, 1981) as they better account for offending frequency and seriousness than dichotomous measures because variety is positively correlated with both frequency and seriousness (Farrington 1973). Their high correlation with scales created from Item Response Theory indicates that they approximate a measure of criminality as a trait (Sweeten 2012).

I use three variety scales. The first measures overall delinquency and represents the number of all of the thirteen delinquent behaviors that the teen reported doing at least once. Due to small cell sizes, the scale is capped at 5. Next, I use separate variety scales

for violent and property offending. These measures are comprised of the same set of behaviors as the dichotomous versions. To account for small cell sizes, the variety scores for violent and property offending are capped at 3.

I next present robustness checks for adjustment for complex survey design. There are two primary reasons for this decision. First, prior work does not provide adequate justification for the regression-adjustment approach, leaving a question as to the robustness of prior findings. Second, Fragile Families has not yet released weights for the year 15 follow-up, which prevents me from making a simple comparison of weighted and regression-adjusted year 15 analyses.

To adequately account for complex survey design in my dissertation, I present multiple versions of each analysis. Unfortunately, I am not able to fully account for both missing data and clustering in a given analysis because the jackknife procedure is not compatible with multiple imputation estimation. Accordingly, each version of the analysis focuses on controlling for a particular aspect of the survey design. First, using imputed data, I weight the analysis using the city weight from the baseline, rather than the national weight used in the main analyses. Next, I use only one imputed data set in order to apply the jackknife replicate city and national weights.

The final robustness checks that I present use a different method to address missing data. Rather than impute all of the missing data (excluding those who become ineligible in the follow-up waves), I instead only impute those who participated in wave 6. To account for attrition, I include a control variable that measures the probability to attrit, based on a logistic regression estimating this probability from a large set of covariates.

Tables

Table 2.1

Fragile Families Components by Wave

	Birth	Age 1	Age 3	Age 5	Age 9	Age 15
Medical Records	X					
Mother Survey	X	X	X	X	X	X
Primary Caregiver Survey			X	X	X	
Father Survey	X	X	X	X	X	
In-Home Assessment			X	X	X	X
Child Survey					X	X
Child Care Provider Survey			X			
Teacher Survey				X	X	
DNA Sampling					X	X

Table 2.2
Survey Completion Rates

Wave / Age	Survey Component	Number of Complete Cases	Number of Eligible Cases	% Completion Among Eligible
6 / 15 yo	Primary Caregiver	3,580	4,663	77%
	Teen	3,444	4,663	74%
5 / 9 yo	Biological Mother	3,515	4,654	76%
	Biological Father	2,652	4,464	59%
	Primary Caregiver	3,630	4,688	77%
	Child	3,377	4,688	72%
Baseline / Birth	Biological Mother	4,789	5,568	86%
	Biological Father	3,742	4,789	78%

Table 2.3

Frequency of Delinquent Behaviors

	%	SE
Public Disturbance	27%	0.008
Fight	25%	0.007
Group Fight	12%	0.006
Hurt Someone	9%	0.005
Steal <\$50	9%	0.005
Shoplifting	8%	0.005
Property Damage	6%	0.004
Graffiti	3%	0.003
Auto Theft	3%	0.003
Drug Dealing	2%	0.003
Steal >\$50	2%	0.002
Robbery	1%	0.002
Burglary	1%	0.002
Any Delinquency	46%	0.009
Any Violence	29%	0.008
Any Property	13%	0.006

Table 2.4

Frequency of Benefits Receipt

	%	SE
SNAP	54%	0.008
SSI/SSDI	27%	0.007
Unemployment/Workers Comp	25%	0.007
TANF	21%	0.007
Rent Assistance	13%	0.006
Public Housing	8%	0.005
Other Cash Aid	4%	0.003
Any Benefits	69%	0.008

Table 2.5**Correlation with Poverty Category in Year 9**

Public Housing	-0.22
Rent Assistance	-0.30
TANF	-0.26
Unemployment/WorkComp	0.02
SNAP	-0.49
SSI/SSDI	-0.22
Other Cash Aid	-0.07

Table 2.6
Frequency of Strains

	Age 9		Age 15	
	%	SE	%	SE
Were you ever hungry, but didn't eat because you couldn't afford enough food?	7%	0.004	6%	0.004
Were you evicted from your home or apartment for not paying the rent or mortgage?	3%	0.003	2%	0.002
Was your gas or electric services ever turned off, or the heating oil company did not deliver oil, because there wasn't enough money to pay the bills?	11%	0.005	8%	0.004
Did you move in with other people even for a little while because of financial problems?	10%	0.005	4%	0.003
Did you stay at a shelter, in an abandoned building, an automobile or any other place not meant for regular housing, even for one night?	2%	0.002	1%	0.002
Was there anyone in your household who needed to see a doctor or go to the hospital but couldn't go because of the cost?	7%	0.004	5%	0.003
Was your telephone service (mobile or land line) cancelled or disconnected by the telephone company because there wasn't enough money to pay the bill?	20%	0.007	17%	0.006

Table 2.7
Cross Tabulation of Age 9 and Age 15 Strain Experiences

		Age 15						
		0	1	2	3	4	5	6
Age 9	0	1,767	245	83	26	7	2	0
	1	429	142	66	18	7	4	1
	2	135	70	38	13	9	4	0
	3	63	25	21	17	6	2	1
	4	20	5	8	5	6	0	1
	5	5	3	3	3	0	1	0
	6	3	1	0	0	2	0	0

none
increase
same
decrease

Table 2.8

Factor loadings and uniqueness based on factor analysis with orthogonal varimax rotation for 3 items of parental attachment

Measure	Age 9		Age 15	
	Factor 1	Uniqueness	Factor 1	Uniqueness
Does your primary caregiver never, sometimes, or often know what you do during your free time?	0.446	0.801	0.501	0.749
How close do you feel to your mom (dad, parent's partner)?	0.752	0.435	0.835	0.303
How well do you and your mom (dad, parent's partner) share ideas or talk about things that really matter?	0.772	0.404	0.836	0.302

Table 2.9

Wave at Which Each Variable is Asked

	Birth	Age 1	Age 3	Age 5	Age 9	Age 15
Delinquency						X ^a
Benefits						X ^b
Poverty Category					X	
Waves in Poverty	X	X	X	X	X	
Change in Poverty	X				X	
Change in Strain					X ^a	X ^a
Change in Virtual Supervision					X	X
Change in Communication					X	X
Race						X
Male	X					
Household Adult Employed						X
Household Size						X
PCG Education						X
PCG is Teen's Parent						X
Mother Married at Teen's Birth	X					
Mother U.S. Born	X					
Mother's Age at Teen's Birth	X					
Teen Weekly Work Hours						X
Father Ever Incarcerated				X	X	
Parental Drug Use					X ^a	

^a Question timeframe of past 12 months^b Question timeframe of since prior interview

Table 2.10

Descriptive Statistics

	% / Mean	SE
Any Delinquency	46%	0.009
Any Violence	29%	0.008
Any Property	13%	0.006
Any Benefits	69%	0.008
Any Benefits (excluding UI/WC)	63%	0.008
Poverty Category	3.02	0.023
Number of Waves in Poverty	1.72	0.024
Change in Poverty		
Moved Into Poverty	17%	0.006
Moved Out of Poverty	14%	0.006
No Change	69%	0.008
Change in Strain		
None	54%	0.009
Same	6%	0.004
Increase	15%	0.006
Decrease	25%	0.008
Change in Virtual Supervision		
Same	60%	0.009
Increase	22%	0.008
Decrease	17%	0.007
Change in Communication		
Same	35%	0.009
Increase	27%	0.008
Decrease	38%	0.009
Race		
White	18%	0.007
Black	49%	0.009
Hispanic	25%	0.008
Other Race	8%	0.005
Male	52%	0.007
PCG is Teen's Parent	95%	0.004
Household Adult Employed	86%	0.006
PCG Education		
< High School	18%	0.006
High School	20%	0.007
Some College	44%	0.008
College +	19%	0.007
Household Size	4.7	0.029
Mother Married at Teen's Birth	24%	0.006
Mother's Age at Teen's Birth	25.3	0.086
Mother U.S. Born	83%	0.005
Teen Weekly Work Hours	3.3	0.107
Parental Drug Use	18%	0.006
Father Ever Incarcerated	45%	0.007
Delinquency Variety Scale	1.03	0.025
Violence Variety Scale	0.48	0.014
Property Variety Scale	0.22	0.011
Probability of Attrition	0.26	0.002

Table 2.11
Amount of Missing Data in Eligible and in Participating Samples

	Of Eligible Families			Of Families in Wave 6		
	Missing	Valid	% Missing	Missing	Valid	% Missing
Change in Communication	1,552	2,996	34%	535	2,996	15%
Change in Virtual Supervision	1,550	2,998	34%	533	2,998	15%
Race	1,337	3,211	29%	320	3,211	9%
Change in Strain	1,329	3,219	29%	312	3,219	9%
Teen Weekly Work Hours	1,189	3,359	26%	172	3,359	5%
Delinquency	1,176	3,372	26%	159	3,372	5%
Poverty Category	1,134	3,414	25%	363	3,168	10%
Change in Poverty	1,113	3,435	24%	349	3,182	10%
Other Cash Benefit	1,061	3,487	23%	44	3,487	1%
PCG Education	1,059	3,489	23%	42	3,489	1%
Public Housing	1,057	3,491	23%	40	3,491	1%
SSI/SSDI	1,054	3,494	23%	37	3,494	1%
TANF	1,052	3,496	23%	35	3,496	1%
Rent Assistance	1,051	3,497	23%	34	3,497	1%
Unemployment/Work. Comp.	1,051	3,497	23%	34	3,497	1%
SNAP	1,048	3,500	23%	31	3,500	1%
Any Benefits	1,037	3,511	23%	20	3,511	1%
Household Size	1,036	3,512	23%	19	3,512	1%
Household Adult Employed	1,035	3,513	23%	18	3,513	1%
PCG is Teen's Parent	1,032	3,516	23%	15	3,516	0%
Parental Drug Use	896	3,652	20%	235	3,296	7%
Father Ever Incarcerated	213	4,335	5%	24	3,507	1%
Mother U.S. Born	11	4,537	0%	9	3,522	0%
Mother's Age at Teen's Birth	3	4,545	0%	2	3,529	0%
Number of Waves in Poverty	0	4,548	0%	0	3,531	0%
Male	0	4,548	0%	0	3,531	0%
Mother Married at Teen's Birth	0	4,548	0%	0	3,531	0%
Attrition	0	4,548	0%	0	3,531	0%

CHAPTER 3

Empirical Analysis of the Association between Poverty, Government Assistance Benefits, and Juvenile Delinquency

The relationship between poverty and criminal behavior is of central concern to social scientists, politicians, and the public alike. Many government policies and programs exist to address public concern for the plight of the poor, but, at the same time, this group is stigmatized and viewed as criminal. As a result, heavy criticism has fallen on government assistance programs resulting in the restriction of eligibility criteria. However, whether these critiques are warranted remains a key question for researchers. While a small number of prior studies provide evidence that receiving government assistance has no effect or a protective effect on the criminal behavior of recipients, no study to date has examined the association between family receipt of these benefits and adolescent delinquency. Furthermore, no study to date has examined the interplay of poverty and benefits in their association with delinquent behavior.

This chapter presents the first part of my analysis of poverty, assistance, and delinquency in the Fragile Families and Child Wellbeing Study. I begin with bivariate analysis of these measures by regressing delinquency separately on each measure of poverty and benefits receipt. Subsequently, I add the full set of control variables to account for the influence of other factors on these associations. My analysis next proceeds to examine the interrelationships between poverty, benefits receipt, and delinquency. First, I seek to understand whether benefits mediate the association between poverty and delinquency. I accomplish this by adding a measure of benefits receipt to the fully controlled model regressing delinquency on poverty. I use the KHB calculation to

determine whether there is significant confounding due to benefits receipt. Second, I test the possibility that benefits serve to moderate the effect of poverty on delinquent behavior through the inclusion of a multiplicative term interacting these measures.

Poverty

First, is poverty associated with delinquency? While many prior studies have found a positive association between poverty and delinquency, these findings are far from consistent. This association is more consistently found in official data, and is less robust in self-report surveys like the Fragile Families study (Tittle, Villemez, and Smith 1978). Table 3.1 presents bivariate and multivariate estimates from a series of regression models. The first model includes only the five category measure of poverty. In this model, the coefficient shows a 0.011 decrease in the log odds of delinquency as the poverty category increases. This estimate indicates a lower risk of delinquency among youth in higher income versus lower income families. However, this association is not statistically significant (i.e., $p < .05$). The second model includes only a measure of the number of waves that the child's family was below the poverty line. The coefficient for this measure of poverty is also not statistically significant in the bivariate, but is in the same direction as the category measure of poverty. The third model in Table 3.1 similarly shows a not statistically significant association between change in poverty and delinquency. Compared to those who were in the same category of poverty at age 9 as at birth, those who experienced a change (whether for better or worse) did not have differing odds of delinquency.

In the final three models of Table 3.1, I present multivariate analyses of the association between poverty and delinquency, controlling for all of the measured control variables. Model 4 shows that, after the addition of the full set of controls, the poverty category measure is positively associated with delinquency ($p < 0.01$). With each unit increase in this measure (reflecting higher family income), the log odds of the teen reporting any delinquent behavior increases by 0.249, or a 28% increase in the odds of delinquent behavior. A number of control variables in this model also have significant associations with delinquency. For instance, compared to White respondents, Black respondents are significantly more likely to report delinquent behavior. Black respondents have 0.789 greater log odds of delinquency, or 120% higher odds of delinquency, than do White respondents. Additionally, male respondents are more likely to report delinquency than female respondents. Male respondents have 0.533 greater log odds of delinquency, or 70% higher odds of delinquency. Respondents' whose primary caregiver is a parent, as opposed to another relative or unrelated guardian, are significantly less likely to report delinquency. When the primary caregiver is the respondent's parent the log odds of delinquency decreases by 2.041. This reflects 87% lower odds of delinquency. Employment of the adults in the household is also significantly associated with delinquency. For instance, teens who reside in employed households have 0.877 lower log odds of delinquency, or 58% lower odds. Finally, there is some evidence of an association between the primary caregiver's education and delinquent behavior. Compared to teens whose primary caregivers did not graduate high school, those who have some college or at least a college degree have lower odds of delinquency ($p < 0.1$) by 39% and 48%, respectively.

Model 5 presents the fully controlled estimates of the association between the number of waves in poverty and delinquency. As in the uncontrolled model, this association is not statistically significant. The associations between the control variables and delinquency follow closely to the pattern in Model 4. Model 6 presents the fully controlled estimates of the association between changes in poverty and delinquency. Compared to teen's whose poverty category did not change between birth and age 9, those who did experience a change, whether for better or worse, have higher odds of delinquency. Moving into poverty is associated with 0.658 lower log odds of delinquency, or 48% lower odds ($p < 0.05$). Similarly, moving out of poverty is associated with 0.489 lower log odds of delinquency, or 39% lower odds. Again, the associations between control variables and delinquency closely follow the pattern in Model 4.

Next, I examine the associations between poverty and violent behavior. Table 3.2 presents the estimates resulting from regressing a measure of any violence on the measures of poverty and the control variables. Model 1 of Table 3.2 shows a negative association between the poverty category measure and violence. In this model, the coefficient shows a 0.133 decrease in the log odds of violence as the poverty category increases ($p < 0.1$), which corresponds to 13% lower odds. This association suggests a lower risk of teenage violence among youth residing in higher income families. Model 2 presents consistent results, with further evidence that greater poverty is associated with more violence. In the bivariate, for each additional wave in poverty the log odds that a teen will report violent behavior increases by 0.160 ($p < 0.01$). This corresponds to 17% higher odds of violence. Finally, Model 3 presents the association between changes in poverty and violent behavior. Compared to those who are in the same poverty category at

birth and age 9, those who move out of poverty are more likely to report violence ($p < 0.1$). The log odds of violence are 0.512 higher (67% higher odds) for this group compared to those in the same poverty category as their birth.

Models 4, 5, and 6 of Table 3.2 add the full set of controls to the models estimating the associations between poverty and violence. When fully controlled, poverty category and the number of waves in poverty are no longer significantly associated with violence. The association between change in poverty and violence changes direction from the uncontrolled model and the significance changes as well. In the fully controlled model, teens who are in poverty at age 9 but were not at birth are less likely to report violent behavior than teens who experienced no change in poverty ($p < 0.1$). In Table 3.2, the association between the control variables and violent behavior largely follow the same pattern as those in the delinquency models presented in Table 3.1. A notable exception is that Table 3.2 shows an additional statistically significant association. Teens of older mothers are less likely to report violent behavior ($p < 0.1$). More specifically, for each additional year of maternal age at birth, the teens have 0.044 lower log odds of violent behavior, or 4% lower odds.

Finally, I examine the association between poverty and property offending. Table 3.3 presents the estimates of bivariate and multivariate regression models of property offending. Models 1 through 3 present the bivariate associations between each measure of poverty and property offending. None of the three measures are significantly associated with property offending in the bivariate. After adding the full set of control variables (Models 4 through 6), there is a significant, negative association between change in poverty and property offending. Teens who are in poverty at age 9 but were not

at birth are significantly less likely to report property offending than teens who were in the same poverty category at birth and age 9 ($p < 0.01$). Specifically, moving into poverty is associated with 0.985 lower odds of property offending, or 63% lower odds. Table 3.3 shows similar associations between property offending and race, primary caregiver relationships, and household adult employment as were found in Tables 3.1 and 3.2 with overall delinquency and violent offending. Property offending is, however, not significantly associated with gender or maternal age.

Government Assistance Benefits

In the next set of analyses I examine whether receipt of government benefits is associated with delinquency. While many prior studies have found a negative association between benefits and crime, these findings are largely macro-level, and the individual-level studies are much more mixed. Table 3.4 presents bivariate and multivariate estimates from a series of regression models. The first model includes only the dichotomous measure of benefits receipt. In this model, the coefficient shows that teens in families that receive benefits have 0.785 higher log odds of delinquency compared to teens in families who do not ($p < 0.05$). In other words, teens in families that receive benefits have 119% higher odds of delinquent behavior.

However, government benefits are not randomly distributed across families, and those very factors that influence eligibility for and selection into receiving benefits are also likely to influence delinquency. This influence can then create a spurious association between benefits and delinquency. Model 2 of Table 3.4 provides evidence that the

observed association in Model 1 is spurious. After adding the full range of control variables, the association between benefits receipt and delinquency becomes statistically non-significant and the sign of the estimate flips direction to indicate less delinquency among teens in benefits-receiving families. Four of the control variables in Model 2 are significantly associated with delinquency, following the same general patterns found in models including poverty in Tables 3.1 through 3.3. Compared to White respondents, Black respondents have 0.690 higher log odds of reporting delinquent behavior ($p < 0.1$), which corresponds to 99% higher odds. Similarly, male respondents have 0.543 higher log odds of delinquency ($p < 0.05$), which corresponds to 72% higher odds. Teens whose primary caregiver is a parent, as opposed to other relative or unrelated guardian, are significantly less likely to report delinquent behavior ($p < 0.1$). Teens whose primary caregiver is a parent have 2.193 lower log odds of delinquency, which corresponds to 89% lower odds. Finally, teens in households with adults who are employed are significantly less likely to report delinquency. These teens have 0.832 lower log odds of delinquency compared to teens in households with no employed adults ($p < 0.05$, 57% lower odds).

It is possible that unemployment insurance and workers compensation operate differently than other types of government benefits, as they are notably less correlated with poverty. Models 3 and 4 of Table 3.4 present the associations between delinquency and receiving benefits other than unemployment insurance and workers compensation. Overall these models are very similar to the first two models in this table. In the bivariate, family receipt of benefits is significantly positively associated with delinquency, but this effect loses significance and flips direction in the fully controlled model. The control

variables follow the same pattern in Model 4 as in Model 2. This suggests that unemployment insurance and workers compensation do not operate differently than other types of government benefits in their associations with delinquency. In all types of benefits, the observed positive associations in the bivariate are reduced in magnitude and become statistically non-significant when confounders are included.

Next, I examine the associations between family receipt of government benefits and the teens' reports of violent behavior. Model 1 of Table 3.5 shows a large, significant association between benefits receipt and violence. Teens in families that receive government benefits have 1.440 higher log odds of violence ($p < 0.01$), which corresponds to 322% higher odds. However, after adding the full set of control variables in Model 2, this effect dramatically shrinks in size and loses significance, indicating that the bivariate effect is spurious. The associations between the control variables and delinquency follow much the same pattern as in Table 3.4, but two additional variables are significantly associated with violence ($p < 0.1$). Teens whose primary caregivers have at least a college degree are less likely to report violent behavior, with 0.907 lower log odds, or 60% lower odds. Additionally, maternal age is negatively associated with violent behavior such that, for each additional year of age, teens have 0.042 lower log odds of violence, or 4% lower odds. As in the analysis of delinquency, removing unemployment insurance and workers compensation from the measure of benefits receipt does not substantively change the results.

Finally, Table 3.6 presents the associations between family receipt of government benefits and the teen's reports of property offending. Model 1 of Table 3.6 shows a large, statistically significant association between benefits receipt and property offending.

Teens in families that receive government benefits have 1.250 higher log odds of property offending ($p < 0.05$), which corresponds to 249% higher odds. As was the case in the delinquency analysis in Table 3.4, adding the full set of control variables flips the direction of this effect and it loses statistical significance. While these models find bivariate associations between benefits receipt and delinquency, violence, and property crime, for each measure of crime the association is found to be spurious when control variables are added to the model. Fewer control variables are significantly associated with property offending than violence or overall delinquency. Only the effects of race, primary caregiver relationship, and household adult employment are significantly associated with property crime, in the same directions as their associations with overall delinquency and violence. Again, removing unemployment insurance and workers compensation from the measure of benefits receipt does not change the substantive conclusions.

Mediation and Moderation

Does receiving government benefits mediate or moderate the association between poverty and delinquency? The analyses presented in the final three tables of this chapter seek to answer this question. Models 1 through 3 of Table 3.7 are the same as Models 4 through 6 of Table 3.1 with the addition of the measure of benefits receipt. If benefits receipt mediates the association between poverty and delinquency, the poverty measures that were significant in Table 3.1 would lose statistical significance in Table 3.7. Additionally, to determine whether any change in the coefficients of the poverty

measures is due to the inclusion of the measure of benefits receipt, the KHB calculation determines whether there is a significant difference between the coefficients in the models with and without the measure of benefits receipt. The results in Table 3.7 do not substantively change from those in Table 3.1. Furthermore, the KHB analysis (see Table 3.10) indicates that there is little evidence of mediation. The poverty coefficients in Table 3.7 are not significantly different from those in Table 3.1.

The remaining three models in Table 3.7 each add an interaction term to determine whether the association between poverty and delinquency varies for those who do and do not receive government benefits. A significant interaction term would indicate that the effect of one variable (e.g. poverty) depends on the value of the other variable (e.g. benefits). Models 4 through 6 of Table 3.7 do not have statistically significant interaction terms. This indicates that benefits receipt does not moderate the association between any of the three poverty measures and delinquency.

Next, I examine mediation and moderation effects in the associations with violence. Table 3.8 presents substantively the same findings as Table 3.7. As was the case with overall delinquency, the association between poverty and violence is neither mediated nor moderated by benefits receipt. This general pattern of findings is again repeated in Table 3.9 in the analysis of property offending.

Robustness Checks

Robustness of the above findings was assessed in three key ways (see the Appendix for tables). First, instead of using a dichotomous measure of delinquency, I

used a variety scale. Variety scales reflect the number of different delinquent, violent, and property offending behaviors the teen reported. While the dichotomous measure reflects any level of delinquent behavior, variety scales are correlated with frequency and severity of delinquent behavior, making them a closer reflection of criminality. In the bivariate, poverty and benefits receipt is positively associated with variety scale measures of offending. After adding control variables, no statistically significant associations remain with poverty, delinquency, or property crime. However, in contrast to the models with the dichotomous measure, benefits receipt remains significantly positively associated with violence even when controlling for the full set of variables.

Second, I altered my strategy for addressing missing data. Rather than imputing values for respondents who were lost to attrition, I dropped those respondents and included a control variable for the probability of attrition. Similarly to the primary models, poverty is negatively associated with delinquency and property offending in the multivariate models. However, when accounting for attrition in this way, poverty is not associated with violence as it was in the primary models. Fewer associations between benefits receipt and delinquency were found in this specification, with only violence being associated with benefits receipt in the bivariate. However, as in the primary models, there are not significant associations between benefits and any measure of delinquency in the fully controlled models.

Third, I adjusted for complex survey design in different ways. The primary models are weighted using the baseline national weights. Here, I assess the robustness of the findings to the use of city level weights and jackknife replicate weights. When weighted to be representative of the 20 sampled cities, whether using replicates or not,

the multivariate association between poverty and delinquency becomes limited to only property offending. Similarly, the national replicate weight models have fewer significant associations as well. Whereas there were negative associations between poverty and all three measures of delinquency in the primary models, when replicate weights are used, poverty is only negatively associated with delinquency and property offending, but not violence. Regarding the associations between benefits receipt and delinquency, there are also some changes. The city weighted models, like the primary models, show no associations between benefits receipt and delinquency in fully controlled models. When using national replicate weights, however, the association between benefits receipt and violence remains marginally significant in the fully controlled model. Finally, there are three significant interaction effects in these models. Using the city weights, there is a significant negative interaction between the number of waves in poverty and benefits receipt in their association with property offending. In the models with national replicate weights, there are significant negative interactions between moving out of poverty and benefits receipt in their association with violence and property offending. I am hesitant to emphasize these interactions, however, because of the large number of interaction models that I estimated. These significant associations may be only the result of chance.

Summary

The results of this chapter show that in the Fragile Families dataset poverty is negatively associated with delinquency, violence, and property crime after adjusting for potential confounders. Furthermore, I find a significant positive association between

family receipt of government benefits and teen delinquency, violence, and property crime in the bivariate. However, after controlling for potential confounders, it is apparent that the bivariate association is spurious. The bivariate association is not a true effect of benefits on delinquency, but the results of the unique selection processes that determine who is and is not likely to receive benefits in U.S. society. Lastly, this chapter finds no evidence that receiving benefits mediates or moderates the association between poverty and delinquency.

Tables

Table 3.1
Logistic Regression Estimation of Any Delinquency - Poverty Analysis

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)
Poverty Category	-0.011 (0.070)			0.249 ** (0.088)		
Number of Waves in Poverty		0.092 (0.057)			-0.043 (0.082)	
Change in Poverty (Ref=No Change)						
Moved Into Poverty			-0.168 (0.260)			-0.658 * (0.267)
Moved Out of Poverty			0.249 (0.270)			-0.489 † (0.280)
Race (Ref=White)						
Black				0.789 * (0.355)	0.673 † (0.371)	0.669 † (0.355)
Hispanic				0.190 (0.412)	0.121 (0.432)	0.123 (0.420)
Other Race				0.746 (0.517)	0.728 (0.535)	0.765 (0.540)
Male				0.533 * (0.215)	0.528 * (0.216)	0.564 * (0.219)
PCG is Teen's Parent				-2.041 * (0.995)	-2.168 † (1.073)	-2.156 * (1.048)
Household Adult Employed				-0.877 * (0.360)	-0.784 * (0.363)	-0.872 * (0.376)
PCG Education (Ref=<HS)						
High School				-0.167 (0.420)	-0.118 (0.443)	-0.135 (0.422)
Some College				-0.489 † (0.291)	-0.402 (0.302)	-0.390 (0.291)
College +				-0.654 † (0.383)	-0.448 (0.387)	-0.485 (0.388)
Household Size				0.043 (0.070)	0.027 (0.070)	0.035 (0.069)
Mother Married at Teen's Birth				-0.207 (0.236)	-0.166 (0.236)	-0.230 (0.228)
Mother's Age at Teen's Birth				-0.027 (0.020)	-0.023 (0.019)	-0.024 (0.019)
Mother U.S. Born				0.033 (0.347)	0.080 (0.355)	0.064 (0.359)
Teen Weekly Work Hours				0.031 (0.025)	0.033 (0.025)	0.032 (0.025)
Parental Drug Use				0.158 (0.285)	0.131 (0.292)	0.160 (0.286)
Father Ever Incarcerated				0.022 (0.221)	-0.101 (0.226)	-0.099 (0.220)
Constant	0.176 (0.245)	0.019 (0.123)	0.137 (0.110)	1.930 (1.452)	2.786 † (1.484)	2.955 * (1.461)

† p<0.1 *p<0.05 **p<0.01 ***p<0.001

Table 3.2
Logistic Regression Estimation of Any Violence - Poverty Analysis

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)
Poverty Category	-0.133 † (0.071)			0.129 (0.096)		
Number of Waves in Poverty		0.160 ** (0.056)			0.021 (0.095)	
Change in Poverty (Ref=No Change)			1.66817			
Moved Into Poverty			0.038 (0.271)			-0.509 † (0.282)
Moved Out of Poverty			0.512 † (0.284)			-0.316 (0.308)
Race (Ref=White)						
Black				1.113 * (0.458)	1.012 * (0.474)	1.054 * (0.451)
Hispanic				0.347 (0.546)	0.269 (0.568)	0.313 (0.542)
Other Race				0.859 (0.603)	0.853 (0.618)	0.873 (0.616)
Male				0.576 * (0.267)	0.577 * (0.268)	0.607 * (0.272)
PCG is Teen's Parent				-2.144 † (1.075)	-2.214 † (1.106)	-2.189 † (1.083)
Household Adult Employed				-1.173 ** (0.416)	-1.111 * (0.421)	-1.196 ** (0.428)
PCG Education (Ref=<HS)						
High School				0.088 (0.484)	0.139 (0.510)	0.093 (0.479)
Some College				-0.407 (0.329)	-0.331 (0.347)	-0.365 (0.325)
College +				-1.125 * (0.490)	-0.977 † (0.495)	-1.062 * (0.506)
Household Size				0.028 (0.086)	0.020 (0.085)	0.027 (0.084)
Mother Married at Teen's Birth				0.121 (0.261)	0.158 (0.262)	0.098 (0.251)
Mother's Age at Teen's Birth			0.957	-0.044 † (0.024)	-0.040 † (0.022)	-0.043 † (0.024)
Mother U.S. Born				0.222 (0.433)	0.266 (0.444)	0.232 (0.440)
Teen Weekly Work Hours				0.024 (0.026)	0.025 (0.027)	0.025 (0.027)
Parental Drug Use				0.063 (0.322)	0.039 (0.323)	0.073 (0.321)
Father Ever Incarcerated				-0.096 (0.218)	-0.193 (0.224)	-0.146 (0.221)
Constant	0.118 (0.246)	-0.545 *** (0.123)	-0.395 *** (0.112)	2.035 (1.632)	2.344 (1.686)	2.616 (1.632)

† p<0.1 *p<0.05 **p<0.01 ***p<0.001

Table 3.3
 Logistic Regression Estimation of Any Property Offending - Poverty Analysis

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)
Poverty Category	-0.067 (0.072)			0.150 (0.113)		
Number of Waves in Poverty		0.070 (0.058)			-0.053 (0.128)	
Change in Poverty (Ref=No Change)						
Moved Into Poverty			-0.271 (0.296)			-0.985 ** (0.344)
Moved Out of Poverty			0.306 (0.311)			-0.592 (0.366)
Race (Ref=White)						
Black				1.164 † (0.587)	1.115 † (0.595)	1.108 † (0.578)
Hispanic				0.388 (0.649)	0.343 (0.665)	0.366 (0.646)
Other Race				0.959 (0.723)	0.940 (0.736)	1.015 (0.745)
Male				0.214 (0.298)	0.212 (0.300)	0.266 (0.304)
PCG is Teen's Parent				-2.232 * (1.033)	-2.264 * (1.033)	-2.288 * (1.048)
Household Adult Employed				-1.126 * (0.510)	-1.085 * (0.509)	-1.189 * (0.523)
PCG Education (Ref=<HS)						
High School				0.579 (0.616)	0.593 (0.650)	0.560 (0.609)
Some College				-0.138 (0.398)	-0.116 (0.420)	-0.105 (0.388)
College +				-0.949 † (0.566)	-0.861 (0.568)	-0.923 (0.597)
Household Size				0.075 (0.102)	0.070 (0.101)	0.078 (0.098)
Mother Married at Teen's Birth				0.515 (0.335)	0.532 (0.342)	0.467 (0.313)
Mother's Age at Teen's Birth				-0.019 (0.027)	-0.018 (0.025)	-0.018 (0.027)
Mother U.S. Born				-0.225 (0.455)	-0.212 (0.469)	-0.214 (0.459)
Teen Weekly Work Hours				0.041 (0.032)	0.042 (0.033)	0.042 (0.033)
Parental Drug Use				-0.093 (0.366)	-0.107 (0.366)	-0.065 (0.367)
Father Ever Incarcerated				0.100 (0.280)	0.049 (0.291)	0.058 (0.296)
Constant	-0.449 † (0.253)	-0.768 *** (0.124)	-0.673 *** (0.115)	0.377 (1.692)	0.949 (1.798)	1.148 (1.721)

† p<0.1 *p<0.05 **p<0.01 ***p<0.001

Table 3.4
 Logistic Regression Estimation of Any Delinquency - Benefits Analysis

	Model 1	Model 2	Model 3	Model 4
	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)
Any Benefits	0.785 *	-0.252		
	(0.317)	(0.291)		
Any Benefits (excluding UI/WC)			0.853 *	-0.299
			(0.411)	(0.262)
Race (Ref=White)				
Black		0.690 †		0.707 †
		(0.352)		(0.360)
Hispanic		0.128		0.143
		(0.415)		(0.419)
Other Race		0.775		0.766
		(0.542)		(0.539)
Male		0.543 *		0.541 *
		(0.215)		(0.215)
PCG is Teen's Parent		-2.193 †		-2.214 *
		(1.090)		(1.089)
Household Adult Employed		-0.832 *		-0.868 *
		(0.352)		(0.354)
PCG Education (Ref=<HS)				
High School		-0.104		-0.112
		(0.423)		(0.420)
Some College		-0.381		-0.380
		(0.292)		(0.291)
College +		-0.455		-0.466
		(0.409)		(0.400)
Household Size		0.032		0.037
		(0.069)		(0.069)
Mother Married at Teen's Birth		-0.201		-0.203
		(0.237)		(0.234)
Mother's Age at Teen's Birth		-0.021		-0.023
		(0.019)		(0.019)
Mother U.S. Born		0.111		0.111
		(0.353)		(0.353)
Teen Weekly Work Hours		0.033		0.034
		(0.025)		(0.025)
Parental Drug Use		0.146		0.158
		(0.293)		(0.290)
Father Ever Incarcerated		-0.099		-0.092
		(0.222)		(0.216)
Constant	-0.371	2.814 †	-0.346	2.899 †
	(0.253)	(1.474)	(0.292)	(1.466)

† p<0.1 *p<0.05 **p<0.01 ***p<0.001

Table 3.5
 Logistic Regression Estimation of Any Violence - Benefits Analysis

	Model 1	Model 2	Model 3	Model 4
	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)
Any Benefits	1.440 ** (0.426)	0.393 (0.341)		
Any Benefits (excluding UI/WC)			1.352 * (0.536)	0.026 (0.293)
Race (Ref=White)				
Black		0.947 * (0.446)		1.021 * (0.458)
Hispanic		0.237 (0.529)		0.284 (0.548)
Other Race		0.784 (0.636)		0.835 (0.625)
Male		0.567 * (0.271)		0.576 * (0.267)
PCG is Teen's Parent		-2.181 † (1.081)		-2.188 † (1.102)
Household Adult Employed		-1.017 ** (0.377)		-1.105 ** (0.389)
PCG Education (Ref=<HS)				
High School		0.141 (0.494)		0.124 (0.482)
Some College		-0.321 (0.324)		-0.345 (0.323)
College +		-0.907 † (0.528)		-0.986 † (0.520)
Household Size		0.010 (0.085)		0.019 (0.085)
Mother Married at Teen's Birth		0.214 (0.267)		0.151 (0.260)
Mother's Age at Teen's Birth		-0.042 † (0.023)		-0.041 † (0.024)
Mother U.S. Born		0.239 (0.442)		0.254 (0.440)
Teen Weekly Work Hours		0.025 (0.027)		0.025 (0.027)
Parental Drug Use		0.011 (0.329)		0.039 (0.320)
Father Ever Incarcerated		-0.231 (0.225)		-0.176 (0.214)
Constant	-1.331 ** (0.385)	2.153 (1.628)	-1.160 * (0.439)	2.378 (1.610)

† p<0.1 *p<0.05 **p<0.01 ***p<0.001

Table 3.6
 Logistic Regression Estimation of Any Property Offending - Benefits Analysis

	Model 1	Model 2	Model 3	Model 4
	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)
Any Benefits	1.250 *	-0.172		
	(0.547)	(0.398)		
Any Benefits (excluding UI/WC)	3.49027		1.288 †	-0.242
			(0.712)	(0.378)
Race (Ref=White)				
Black		1.106 †		1.133 †
		(0.555)		(0.579)
Hispanic		0.330		0.360
		(0.630)		(0.646)
Other Race		0.969		0.981
		(0.754)		(0.754)
Male		0.220		0.223
		(0.295)		(0.293)
PCG is Teen's Parent		-2.276 *		-2.293 *
		(1.038)		(1.049)
Household Adult Employed		-1.101 *		-1.137 *
		(0.454)		(0.463)
PCG Education (Ref=<HS)				
High School		0.604		0.602
		(0.611)		(0.607)
Some College		-0.092		-0.086
		(0.385)		(0.387)
College +		-0.844		-0.852
		(0.641)		(0.623)
Household Size		0.073		0.077
		(0.097)		(0.098)
Mother Married at Teen's Birth		0.528		0.521
		(0.324)		(0.328)
Mother's Age at Teen's Birth		-0.017		-0.018
		(0.026)		(0.027)
Mother U.S. Born		-0.174		-0.171
		(0.459)		(0.459)
Teen Weekly Work Hours		0.041		0.042
		(0.033)		(0.033)
Parental Drug Use		-0.104		-0.092
		(0.370)		(0.365)
Father Ever Incarcerated		0.033		0.044
		(0.297)		(0.289)
Constant	-1.584 **	0.896	-1.536 *	0.957
	(0.487)	(1.638)	(0.589)	(1.670)

† p<0.1 *p<0.05 **p<0.01 ***p<0.001

Table 3.7
Logistic Regression Estimation of Any Delinquency - Mediation and Moderation Analysis

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)
Poverty Category	0.240 ** (0.091)			0.319 * (0.155)		
Number of Waves in Poverty		-0.033 (0.084)			0.002 (0.158)	
Change in Poverty (Ref=No Change)						
Moved Into Poverty			-0.626 * (0.269)			-0.981 (0.673)
Moved Out of Poverty			-0.475 † (0.278)			-0.777 (0.605)
Any Benefits	-0.170 (0.294)	-0.243 (0.297)	-0.177 (0.288)	0.265 (0.682)	-0.195 (0.360)	-0.241 (0.327)
Poverty Category*Any Benefits				-0.120 (0.186)		
Waves in Poverty*Any Benefits					-0.048 (0.163)	
Into Poverty*Any Benefits						0.434 (0.707)
Out of Poverty*Any Benefits						0.381 (0.665)
Race (Ref=White)						
Black	0.819 * (0.349)	0.717 † (0.364)	0.706 * (0.351)	0.821 * (0.350)	0.716 † (0.362)	0.709 * (0.353)
Hispanic	0.209 (0.405)	0.147 (0.424)	0.146 (0.411)	0.223 (0.403)	0.138 (0.422)	0.157 (0.411)
Other Race	0.773 (0.520)	0.769 (0.539)	0.792 (0.544)	0.773 (0.521)	0.767 (0.541)	0.798 (0.550)
Male	0.541 * (0.215)	0.540 * (0.216)	0.571 ** (0.219)	0.537 * (0.216)	0.544 * (0.216)	0.561 * (0.218)
PCG is Teen's Parent	-2.044 * (0.996)	-2.173 † (1.079)	-2.157 * (1.048)	-2.052 * (1.003)	-2.172 † (1.078)	-2.155 * (1.052)
Household Adult Employed	-0.914 * (0.348)	-0.840 * (0.352)	-0.908 * (0.365)	-0.887 * (0.352)	-0.849 * (0.352)	-0.890 * (0.363)
PCG Education (Ref=<HS)						
High School	-0.173 (0.417)	-0.124 (0.440)	-0.142 (0.419)	-0.158 (0.420)	-0.130 (0.437)	-0.139 (0.417)
Some College	-0.498 † (0.293)	-0.411 (0.305)	-0.401 (0.294)	-0.498 † (0.291)	-0.409 (0.306)	-0.394 (0.294)
College +	-0.685 † (0.397)	-0.494 (0.402)	-0.522 (0.408)	-0.704 † (0.402)	-0.485 (0.408)	-0.520 (0.412)
Household Size	0.047 (0.070)	0.033 (0.070)	0.040 (0.069)	0.046 (0.070)	0.035 (0.069)	0.040 (0.068)
Mother Married at Teen's Birth	-0.239 (0.239)	-0.211 (0.239)	-0.264 (0.234)	-0.237 (0.239)	-0.213 (0.238)	-0.283 (0.236)
Mother's Age at Teen's Birth	-0.026 (0.019)	-0.022 (0.019)	-0.023 (0.019)	-0.025 (0.019)	-0.022 (0.019)	-0.022 (0.019)
Mother U.S. Born	0.042 (0.347)	0.094 (0.356)	0.072 (0.359)	0.038 (0.349)	0.106 (0.349)	0.075 (0.358)
Teen Weekly Work Hours	0.031 (0.025)	0.033 (0.025)	0.033 (0.025)	0.030 (0.025)	0.033 (0.025)	0.032 (0.025)
Parental Drug Use	0.172 (0.286)	0.151 (0.293)	0.174 (0.288)	0.167 (0.284)	0.155 (0.293)	0.166 (0.286)
Father Ever Incarcerated	0.042 (0.220)	-0.072 (0.221)	-0.074 (0.220)	0.039 (0.221)	-0.073 (0.221)	-0.074 (0.221)
Constant	2.048 (1.440)	2.892 † (1.473)	3.036 * (1.444)	1.707 (1.574)	2.862 † (1.475)	3.025 * (1.447)

† p<0.1 *p<0.05 **p<0.01 ***p<0.001

Table 3.8
Logistic Regression Estimation of Any Violence - Mediation and Moderation Analysis

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)
Poverty Category	0.154 (0.104)			0.007 (0.166)		
Number of Waves in Poverty		0.008 (0.101)			0.192 (0.176)	
Change in Poverty (Ref=No Change)						
Moved Into Poverty			-0.593 * (0.293)			-1.047 (0.875)
Moved Out of Poverty			-0.361 (0.317)			-0.187 (0.737)
Any Benefits	0.455 (0.352)	0.388 (0.353)	0.479 (0.340)	-0.280 (0.705)	0.651 (0.432)	0.480 (0.382)
Poverty Category*Any Benefits				0.204 (0.194)		
Waves in Poverty*Any Benefits					-0.242 (0.179)	
Into Poverty*Any Benefits						0.487 (0.902)
Out of Poverty*Any Benefits						-0.225 (0.802)
Race (Ref=White)						
Black	1.033 * (0.450)	0.941 * (0.462)	0.957 * (0.446)	1.032 * (0.443)	0.939 * (0.453)	0.954 * (0.446)
Hispanic	0.299 (0.527)	0.227 (0.548)	0.252 (0.524)	0.278 (0.516)	0.189 (0.543)	0.248 (0.525)
Other Race	0.792 (0.618)	0.789 (0.634)	0.804 (0.632)	0.803 (0.618)	0.783 (0.641)	0.795 (0.641)
Male	0.567 * (0.272)	0.567 * (0.273)	0.605 * (0.278)	0.576 * (0.273)	0.581 * (0.272)	0.599 * (0.277)
PCG is Teen's Parent	-2.107 † (1.041)	-2.185 † (1.078)	-2.159 * (1.052)	-2.094 † (1.034)	-2.183 † (1.074)	-2.176 * (1.049)
Household Adult Employed	-1.067 ** (0.377)	-1.014 * (0.382)	-1.087 ** (0.392)	-1.104 ** (0.379)	-1.058 ** (0.380)	-1.080 ** (0.390)
PCG Education (Ref=<HS)						
High School	0.100 (0.494)	0.147 (0.519)	0.108 (0.488)	0.082 (0.488)	0.116 (0.506)	0.115 (0.481)
Some College	-0.385 (0.326)	-0.316 (0.344)	-0.337 (0.322)	-0.380 (0.326)	-0.308 (0.343)	-0.331 (0.321)
College +	-1.047 * (0.498)	-0.903 † (0.509)	-0.969 † (0.518)	-1.014 * (0.497)	-0.862 † (0.516)	-0.958 † (0.522)
Household Size	0.016 (0.087)	0.010 (0.086)	0.014 (0.085)	0.019 (0.086)	0.021 (0.084)	0.015 (0.084)
Mother Married at Teen's Birth	0.189 (0.269)	0.217 (0.270)	0.171 (0.262)	0.185 (0.268)	0.218 (0.268)	0.168 (0.263)
Mother's Age at Teen's Birth	-0.045 † (0.024)	-0.042 † (0.022)	-0.044 † (0.024)	-0.046 * (0.023)	-0.043 † (0.022)	-0.044 † (0.023)
Mother U.S. Born	0.197 (0.437)	0.245 (0.447)	0.208 (0.444)	0.202 (0.432)	0.306 (0.439)	0.212 (0.441)
Teen Weekly Work Hours	0.024 (0.027)	0.025 (0.027)	0.024 (0.027)	0.026 (0.026)	0.026 (0.027)	0.024 (0.027)
Parental Drug Use	0.032 (0.326)	0.011 (0.327)	0.040 (0.324)	0.035 (0.326)	0.016 (0.329)	0.039 (0.320)
Father Ever Incarcerated	-0.145 (0.220)	-0.238 (0.225)	-0.211 (0.224)	-0.142 (0.218)	-0.240 (0.222)	-0.209 (0.224)
Constant	1.669 (1.630)	2.128 (1.649)	2.343 (1.613)	2.264 (1.691)	1.931 (1.656)	2.343 (1.603)

† p<0.1 *p<0.05 **p<0.01 ***p<0.001

Table 3.9
Logistic Regression Estimation of Any Property Offending - Mediation and Moderation Analysis

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)
Poverty Category	0.142 (0.120)			0.014 (0.195)		
Number of Waves in Poverty		-0.046 (0.132)			0.169 (0.198)	
Change in Poverty (Ref=No Change)						
Moved Into Poverty			-0.973 ** (0.347)			-1.400 (1.049)
Moved Out of Poverty			-0.586 (0.360)			-0.798 (1.002)
Any Benefits	-0.115 (0.411)	-0.162 (0.413)	-0.028 (0.382)	-0.741 (0.803)	0.194 (0.473)	-0.051 (0.427)
Poverty Category*Any Benefits				0.178 (0.209)		
Waves in Poverty*Any Benefits					-0.297 (0.194)	
Into Poverty*Any Benefits						0.452 (1.041)
Out of Poverty*Any Benefits						0.211 (1.044)
Race (Ref=White)						
Black	1.179 * (0.566)	1.139 † (0.569)	1.108 † (0.563)	1.176 * (0.558)	1.138 * (0.553)	1.109 † (0.563)
Hispanic	0.390 (0.629)	0.351 (0.643)	0.363 (0.628)	0.371 (0.619)	0.301 (0.639)	0.368 (0.630)
Other Race	0.970 (0.732)	0.960 (0.749)	1.011 (0.755)	0.979 (0.733)	0.943 (0.760)	1.003 (0.770)
Male	0.217 (0.299)	0.216 (0.300)	0.265 (0.305)	0.225 (0.300)	0.237 (0.302)	0.263 (0.305)
PCG is Teen's Parent	-2.225 * (1.013)	-2.258 * (1.019)	-2.273 * (1.030)	-2.219 * (1.011)	-2.265 * (1.014)	-2.276 * (1.032)
Household Adult Employed	-1.142 * (0.464)	-1.112 * (0.462)	-1.186 * (0.481)	-1.173 * (0.470)	-1.176 * (0.462)	-1.179 * (0.477)
PCG Education (Ref=<HS)						
High School	0.572 (0.611)	0.585 (0.645)	0.556 (0.606)	0.559 (0.605)	0.561 (0.629)	0.563 (0.597)
Some College	-0.146 (0.394)	-0.124 (0.415)	-0.108 (0.383)	-0.136 (0.394)	-0.098 (0.416)	-0.100 (0.383)
College +	-0.971 (0.595)	-0.894 (0.599)	-0.929 (0.625)	-0.934 (0.591)	-0.819 (0.600)	-0.922 (0.630)
Household Size	0.077 (0.100)	0.074 (0.098)	0.079 (0.097)	0.080 (0.099)	0.088 (0.096)	0.080 (0.096)
Mother Married at Teen's Birth	0.501 (0.333)	0.513 (0.339)	0.462 (0.316)	0.495 (0.333)	0.501 (0.341)	0.449 (0.317)
Mother's Age at Teen's Birth	-0.019 (0.026)	-0.018 (0.024)	-0.019 (0.026)	-0.020 (0.026)	-0.019 (0.024)	-0.018 (0.026)
Mother U.S. Born	-0.215 (0.459)	-0.199 (0.473)	-0.211 (0.465)	-0.208 (0.453)	-0.120 (0.461)	-0.208 (0.462)
Teen Weekly Work Hours	0.041 (0.032)	0.042 (0.033)	0.042 (0.033)	0.042 (0.032)	0.043 (0.032)	0.042 (0.033)
Parental Drug Use	-0.087 (0.369)	-0.097 (0.368)	-0.065 (0.370)	-0.086 (0.368)	-0.100 (0.370)	-0.069 (0.365)
Father Ever Incarcerated	0.115 (0.283)	0.072 (0.287)	0.065 (0.302)	0.114 (0.281)	0.065 (0.279)	0.071 (0.305)
Constant	0.465 (1.598)	1.019 (1.713)	1.152 (1.652)	0.969 (1.788)	0.779 (1.711)	1.133 (1.651)

† p<0.1 *p<0.05 **p<0.01 ***p<0.001

Table 3.10
KHB Calculation of Mediation of Poverty-Delinquency Effect

	Poverty Category			Number of Waves in Poverty			Into Poverty			Out of Poverty		
	Confound- ing Ratio	Confound- ing Percent	P of Diff.	Confound- ing Ratio	Confound- ing Percent	P of Diff.	Confound- ing Ratio	Confound- ing Percent	P of Diff.	Confound- ing Ratio	Confound- ing Percent	P of Diff.
Outcome: Any Delinquency	0.981	-1,940	0.825	0.997	-0,330	0.965	0.990	-1,030	0.896	1.002	0.170	0.945
Outcome: Any Violence	0.833	-20,090	0.780	0.808	-23,780	0.895	0.718	-39,230	0.501	1.355	26,220	0.936
Outcome: Any Property	0.930	-7,560	0.785	0.963	-3,830	0.896	0.932	-7,240	0.564	1.025	2,440	0.936

All models control for: sex, race, employment, household size, primary caregiver education, relationship between teen and primary caregiver, parents' relationship status at teen's birth, mother U.S. born, mother's age at teen's birth, and probability of attrition.

CHAPTER 4

Empirical Analysis of the Association between Strain, Attachment, Government Assistance Benefits, and Juvenile Delinquency

Over the past century, social theorists have developed a number of strong explanations of criminal and delinquent behavior. Two of the most predominant of these theories are general strain theory (Agnew 1992) and social bond theory (Hirschi 1969). Research consistently finds that the key principles of these theories are highly associated with criminal behavior (Slocum, Simpson, and Smith 2005; Wright et al. 1999), although no single theory has emerged as the principal explanation of crime. Each theory represents a different perspective on the mechanisms that connect social structural characteristics to criminal and delinquent behavior. Although scholars have documented an association between crime and government assistance programs, which are designed to remediate the negative effects of structures of disadvantage, no studies to date have examined whether the mechanisms of criminological theories explain these associations.

The focus of the current chapter is to test, first, whether receiving government benefits is associated with strain and parental attachment and, second, whether these concepts mediate the association between family benefits and adolescent delinquency. Accordingly, the first step of my analysis is to regress each theoretical measure on the measure of benefits receipt. Since my outcomes are nominal for these analyses, I present results from a series of multinomial regression analyses. Subsequently, the full set of

control variables is added to the models. Finally, I test whether strain and attachment mediate the association between benefits and delinquency.

Associations Between Benefits, Strain, and Attachment

First, is receiving government benefits associated with a decrease in strain?

Government benefits programs exist as a system of social services in order to provide funds to alleviate some of the hardships of poverty. Experiencing housing and food insecurity and utility shutoff are frequent prompts for poor families to apply for government assistance (Rank 1994; Rogers-Dillon 1995). Accordingly, families that receive government benefits are likely to report a history of these types of strain, but should also report a decrease in them over time.

Table 4.1 presents the results of multinomial logistic regressions of the association between receipt of government benefits and change in strain from age 9 to age 15. Recall that the outcome variable includes four categories: 1) experienced no strain (54% of families); 2) experienced the same amount of strain in both waves (6% of families); 3) experienced an increase in strain (15% of families); and 4) experienced a decrease in strain (25% of families). I set the most prevalent category (i.e., experienced no strain) as the reference category. Model 1 shows some evidence of a significant association between receiving benefits and strain. Compared to experiencing no strain in either wave, families that receive government benefits are more likely to have experienced a consistent level of strain (OR=2.2, $p<0.1$). Model 2 of Table 4.1 presents the fully controlled model estimating change in family strain. In this model, benefits

receipt is no longer significantly associated with having consistent levels of strain. However, it is associated with a 0.720 decrease in the log odds of experiencing a decrease in strain (OR=0.49, $p<0.1$). This finding suggests that receiving benefits does not itself reduce levels of strain. Rather, receiving benefits is an indicator of disadvantage and inequality. Model 2 documents other associations between individual and family characteristics and changes in strain. Specifically, Model 2 shows that, compared to White respondents, Black respondents had 1.215 higher log odds of experiencing less strain than no strain ($p<0.05$), while respondents reporting another race had 1.279 higher log odds of experiencing consistent levels of strain than no strain ($p<0.1$). Additionally, the education of the primary caregiver influences experiences of strain. Compared to having less than a high school education, a high school diploma decreases the log odds of same strain by 0.988 and of increasing strain by 1.536 compared to no strain ($p<0.1$). Primary caregivers with a college education have significantly lower odds of consistent strain than no strain (OR=0.28, $p<0.05$). Finally, mother's age at the teen's birth is negatively associated with consistent strain. In other words, children of older mothers are more likely to experience no strains than a consistent level of strains.

Given the goal of benefits to alleviate such experiences of strain, a decrease in strain should be more common than an increase or maintenance of strain levels among the families that receive benefits. When the reference category is rotated in Model 3, the opposite appears to be true. Family receipt of benefits is positively associated with both consistent levels of strain ($p<0.1$) and increasing levels of strain ($p<0.05$), compared to decreasing levels of strain. Specifically, benefits receipt is associated with 0.720 greater log odds of consistent strain than decreasing strain (OR=2.05). Similarly, benefits receipt

is associated with 1.309 greater log odds of increasing rather than decreasing strain (OR=3.70). These findings suggest that receiving benefits is not adequate assistance to reduce levels of strain and, in fact, benefits receipt may capture the most disadvantaged.

Second, is receiving government benefits associated with a change in adolescents' attachment to their parents? Parent-child relationships are a frequent topic in debates regarding welfare reform, and it is unclear whether family receipt of government benefits may increase or decrease attachment. On the one hand, receiving benefits should increase parents' ability to support their children, which should increase attachment and overall parental efficacy (Wright and Cullen 2001). On the other hand, the stigma associated with receiving government assistance may negatively influence children's opinions of, and attachment to, their parents.

Table 4.2 presents regression estimates for the first of two measures of attachment, virtual supervision. I used multinomial regressions for these analyses because the outcome was categorical. Recall that 60% of families experienced no change in parental supervision, compared to 22% who experienced an increase and 17% who experienced a decrease. In the bivariate, presented in Model 1, there is no statistically significant association between benefits receipt and levels of parental supervision. Family receipt of benefits is not associated with the odds of an increase or decrease in supervision, compared to maintaining the same level of supervision. This finding holds in model 2 following the addition of the full set of control variables.

Two family characteristics significantly predict change in virtual supervision. Adolescents in larger households are more likely to experience a decrease in supervision. For each additional household member, the log odds of a decrease in supervision increase

by 0.221 (OR=1.24, $p<0.05$). Maternal age is positively associated with a decrease in supervision, such that for each additional year of age, adolescents have 0.060 higher log odds of experiencing less supervision (OR=1.06, $p<0.05$).

Table 4.3 presents estimates for the other measure of parental attachment, which reflects closeness and intimacy of communication between parent and child. Multinomial regression was also used for these analyses because the outcome was categorical. Recall that 35% of families experienced no change in communication, compared to 27% who experienced an increase and 38% who experienced a decrease. In Model 1, family receipt of benefits is negatively associated with increasing communication and positively associated with decreasing communication. Specifically, adolescents in families that receive government benefits have 1.022 lower log odds of improved communication (OR=0.36, $p<0.05$) and 0.703 greater log odds of worsened communication (OR=2.02, $p<0.01$). This result is consistent with qualitative insights into the effect of welfare stigma on parent-child relationships.

These findings remain when the full set of control variables are added in Model 2, although their magnitude and significance decrease. Family receipt of benefits is associated with a 0.636 decrease in the log odds of improved communication (OR=0.53, $p<0.1$) and a 0.642 increase in the log odds of worsened communication (OR=1.90, $p<0.05$). Additionally, when the reference category is flipped in Model 3, receiving benefits is significantly associated with a decrease in the odds of improved communication, compared to worsened communication (OR=0.53, $p<0.05$).

The control variables have different associations with intimacy of communication than virtual supervision. Male respondents have 0.545 lower log odds of experiencing

less, rather than no change in communication with their parents (OR=0.58, $p<0.05$).

Adolescents whose primary caregiver is a parent have 1.255 lower log odds of worsened communication than no change in communication (OR=0.28, $p<0.05$). Primary caregiver education is negatively associated with decreases in communication. Compared to primary caregivers with less than a high school degree, primary caregivers with a college degree have 0.711 lower log odds of a decrease in communication with their adolescent ($p<0.1$). Teens whose mothers were married at their birth have 0.536 lower log odds of increasing communication, rather than consistent levels ($p<0.1$). Finally, paternal incarceration is negatively associated with an increase in communication. This indicates that adolescents whose fathers have been incarcerated have 0.770 lower log odds of improved communication (OR=0.46, $p<0.01$).

Juvenile Delinquency, Benefits, Strain, and Attachment

The next set of analyses, presented in Tables 4.4 through 4.7 examines the influence of the theoretical measures of strain and attachment on the association between benefits receipt and delinquency. As documented in Chapter 3, family receipt of benefits is positively associated with adolescent delinquency, violence, and property offending in the bivariate. For reference, the bivariate models from Chapter 3 are replicated in Model 1 of Tables 4.4 through 4. 6.

Table 4.4 presents the regression estimates from logistic regression analysis of any delinquency. Before accounting for any control variables, teens in families that receive government benefits have 0.785 higher log odds of delinquency ($p<0.05$), which

corresponds to over twice the odds of delinquency (OR=2.2) compared to adolescents in families that do not receive government benefits. In Model 2, change in strain between age 9 and age 15 is added to the model. In this model, benefits receipt is no longer statistically significant and the coefficient decreases to 0.032. Strain appears to influence delinquency. Compared to adolescents in families that report no strains, adolescents in families that experience a consistent level of strain have 1.820 lower log odds of reporting any delinquency (OR=0.16, $p<0.05$). Additionally, adolescents in families with increasing levels of strain have 1.186 higher log odds of reporting delinquency (OR=3.28, $p<0.05$). The full set of control variables is added in Model 3. After adjusting for controls, consistent levels of strain remains significantly negatively associated with delinquency, although the coefficient decreases slightly to -1.360 from -1.820. Similarly, the association between increasing strain and delinquency is affected by the introduction of control variables. Teens in families with increasing levels of strain have 0.771 higher log odds of reporting any delinquency (OR=2.163, $p<0.1$).

Models 4 through 7 of Table 4.4 present an analysis of attachment and delinquency. In Model 4, virtual supervision is added to the bivariate model of benefits and delinquency. In this model, the positive association between benefits receipt and any delinquency remains statistically significant ($p<0.05$), although the coefficient decreases in size from 0.785 to 0.557. Furthermore, virtual supervision is significantly associated with delinquency. Compared to adolescents who did not experience a change in supervision, those who experienced a decrease in supervision have 1.849 higher log odds of delinquency, or 6.3 times the odds. When the full set of control variables is added in Model 5, the association between supervision and delinquency remains in a smaller

magnitude ($b=1.199$), but the association between benefits and delinquency is no longer statistically significant.

In the final two models of Table 4.4, intimacy of communication is added to the model. Without the full set of controls, the association between benefits and delinquency loses significance and decreases in size ($b=0.320$) in Model 6 with the addition of intimacy of communication. Change in intimacy of communication is significantly associated with delinquency in the same manner as the other attachment variable, virtual supervision. Adolescents who experience less attachment, measured as communication, to their parents have 1.228 higher log odds of delinquency than those that do not experience a change in attachment ($p<0.01$), which corresponds to 3.4 times higher odds of delinquency. This association remains following the addition of the full set of control variables, although it decreases in magnitude to 0.758. Consistent with control theory (Hirschi 1969), loss of attachment to parents increases risk of delinquent behavior.

Table 4.5 presents the analysis of violent behavior. As seen in Model 1, there is a positive association between benefits receipt and adolescent violence in the bivariate ($p<0.01$). Adolescents in families that have received government benefits have 1.440 higher log odds of reporting any violent behavior, or over 4 times greater odds of violence, than adolescents in families that have not received benefits. When change in strain is added in Model 2, benefits receipt maintains positive, but is no longer statistically significant. Change in strain is significantly associated with delinquency. Similar to the findings regarding overall delinquency, teens in families experiencing consistent levels of strain have 2.945 lower log odds of violence than teens in families with no strain ($OR=0.05$, $p<0.05$). Teens in families experiencing increasing levels of

strain have 1.316 higher log odds of violence compared to teens in families reporting no strain (OR=3.73, $p<0.05$). These findings remain consistent in significance and direction after the addition of control variables, although they decrease in size to -1.967 and 0.861, respectively.

Models 4 through 7 of Table 4.5 assess the role of parental attachment in the benefits-delinquency association. When the attachment measures are added to the model without the full set of control variables, the measure of benefits receipt maintains its direction and significance, although it decreases in size to 1.344 and 1.017, respectively. As in the case of strain, the positive association between benefits and violence loses significance only when the full set of control variables is added in Models 5 and 7. Overall, the attachment measures show the same pattern of associations with violence as with any delinquency. Compared to adolescents who report no change in virtual supervision and intimacy of communication, those who report a decrease in these measures of attachment have significantly higher log odds of violence. These associations become smaller in magnitude but remain statistically significant net of all control variables.

Finally, Table 4.6 presents the analysis of property offending. Again, family receipt of government benefits is positively associated with offending ($p<0.05$). Compared to adolescents whose families do not receive government benefits, those who do have 1.25 higher log odds of reporting property offending (OR=3.5). After accounting for change in experiences of strain in Model 2 of Table 4.6, benefits is no longer statistically significant. Strain is again associated with property offending. As was the case for delinquency and violence, consistent levels of strain are negatively associated

with property offending (OR=0.01, $p<0.05$) while increasing levels of strain are positively associated with property offending (OR=2.58, $p<0.05$). Both intimacy of communication and virtual supervision are associated with all three measures of offending in the same way. Adolescents that report a decrease in supervision or intimacy of communication have higher log odds of property offending than those who do not experience a change in these forms of attachment ($p<0.001$ and $p<0.05$, respectively).

While the patterns of significance in Tables 4.4 and 4.6 indicate that strain and intimacy of communication may mediate the association between delinquency benefits receipt, the rescaling that occurs in logistic regression models prevents drawing this conclusion from the models alone. Table 4.7 presents the results of the KHB calculation to determine whether, separate from the other control variables, any of the theoretical measures mediates the association between benefits and delinquency. The first two columns of this table present the confounding ratio and the confounding percent. The confounding ratio represents how many times larger the total effect is than the direct effect, while the confounding percent reflects the percentage of the benefits-delinquency mediated the additional variable. The third column presents the p-value for the indirect effect of benefits via the mediator variable, or the difference between the full (with all controls) and reduced (with only benefits) models. Based on the results of this calculation, there are no statistically significant indirect effects of benefits via strain or attachment.

Robustness Checks

Robustness of the above findings was assessed in three key ways (see the Appendix for tables). First, instead of using a dichotomous measure of delinquency, I used a variety scale. As in the primary models with the dichotomous measure, there is no evidence that strain or attachment mediates the association between benefits and delinquency.

Second, I altered my strategy for addressing missing data. Rather than imputing values for respondents who were lost to attrition, I dropped those respondents and included a control variable for the probability of attrition. These models are quite similar to the primary models. In these and the primary models, families that report receiving benefits are more likely to report increasing than decreasing strain. However, in this specification, there is no difference between decreasing and consistent strain levels. As in the primary models, these models find evidence that benefits receipt is associated with decreased odds of consistent or increasing communication with parents, compared to decreasing communication. Finally, as in the primary models there is no evidence of mediation of the benefits-delinquency association by strain or attachment.

Third, I adjusted for complex survey design in different ways. The primary models are weighted using the baseline national weights. Here, I assess the robustness of the findings to the use of city level weights and jackknife replicate weights. When weighted to be representative of the 20 sampled cities, benefits receipt is associated with increased odds of experiencing both consistent levels of strain compared to less strain. Consistent with the primary models, the models using city weights and city replicate

weights do not find an association between benefits and measures of parental supervision, but do find that benefits receipt is associated with a decrease in the odds of consistent or better communication compared to decreased communication. Finally, the national replicate weights are quite similar to the primary findings. These models find that benefits receipt is positively associated with consistent levels of strain, rather than decreased levels. Further consistent with the primary findings, benefits receipt is not associated with virtual supervision, but was negatively associated with consistent and increased communication compared to less communication. As in the primary models, in none of the sensitivity models did the theoretical measures mediate the benefits-delinquency relationship.

Summary

The purpose of this chapter was to determine whether family receipt of benefits is associated with experiences of strain and levels of adolescent attachment to parents. To accomplish these aims, I first regressed changes in strain and attachment on benefits. Additionally, I assessed whether changes in strain and attachment to parents explain the association between benefits receipt and delinquency. Overall, the analysis in this chapter indicates that there is a significant association between benefits receipt and changes in experiences of strain. Specifically, families that receive benefits are significantly more likely to experience consistent or increasing levels of strain than decreasing levels of strain. However, family receipt of government benefits appears to only be associated with changes in certain types of attachment between adolescents and parents. While benefits

receipt is not associated with virtual supervision, it is associated with decreasing intimacy of communication, which may result from the stigmatization of welfare receipt.

Furthermore, although changes in strain and parental attachment are themselves associated with delinquency, violence, and property offending, they do not mediate the association between government benefits and delinquency.

Tables

Table 4.1
Multinomial Logistic Regression Estimation of Change in Strain (Ref=No Strain)

	Model 1			Model 2			Model 3		
	Same Strain	More Strain	Less Strain	Same Strain	More Strain	Less Strain	Same Strain	More Strain	No Strain
	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)
Any Benefits	0.800 † (0.402)	-1.194 (0.757)	-0.350 (0.514)	0.589 (0.366)	-0.552 (0.458)	-0.720 † (0.405)	0.720 † (0.405)	1.309 ** (0.445)	0.167 (0.432)
Count of Strain at Age 9	2.351 *** (0.428)	1.265 * (0.476)	3.047 *** (0.391)	2.582 *** (0.513)	1.581 ** (0.528)	3.393 *** (0.460)	-3.393 *** (0.460)	-0.812 *** (0.206)	-1.813 *** (0.397)
Poverty Category				-0.051 (0.151)	-0.072 (0.182)	-0.167 (0.156)	0.167 (0.156)	0.117 (0.174)	0.095 (0.146)
Race (Ref=White)									
Black				-0.124 (0.509)	0.934 (0.644)	1.215 * (0.522)	-1.215 * (0.522)	-1.339 * (0.535)	-0.281 (0.567)
Hispanic				-0.805 (0.558)	0.664 (0.939)	0.873 (0.626)	-0.873 (0.626)	-1.678 * (0.678)	-0.209 (0.649)
Other Race				1.279 † (0.754)	1.216 (0.843)	0.572 (0.865)	-0.572 (0.865)	0.644 (0.769)	0.644 (0.834)
Male				-0.484 (0.318)	-0.276 (0.311)	-0.263 (0.309)	-0.221 (0.309)	-0.013 (0.332)	0.323 (0.300)
PCG is Teen's Parent				0.845 (0.678)	1.297 (1.825)	0.678 (1.154)	-0.678 (1.154)	0.167 (0.930)	0.619 (1.234)
Household Adult Employed				0.111 (0.611)	-1.324 (1.121)	-0.366 (0.944)	0.366 (0.944)	0.477 (0.646)	-0.958 † (0.549)
PCG Education (Ref=<HS)									
High School				-0.988 † (0.511)	-1.536 † (0.827)	-0.746 (0.591)	0.746 (0.591)	-0.242 (0.613)	-0.790 (0.678)
Some College				-0.607 (0.492)	0.072 (0.666)	0.033 (0.533)	-0.033 (0.533)	-0.640 (0.508)	0.039 (0.614)
College +				-1.282 * (0.583)	-1.020 (0.832)	-1.344 † (0.710)	1.344 † (0.710)	0.062 (0.736)	0.323 (0.799)
Household Size				-0.165 (0.106)	-0.051 (0.222)	-0.059 (0.162)	0.059 (0.162)	-0.106 (0.145)	0.008 (0.121)
Mother Married at Teen's Birth				-0.327 (0.388)	-0.096 (0.433)	-0.253 (0.375)	0.253 (0.375)	-0.075 (0.433)	0.157 (0.381)
Mother's Age at Teen's Birth				-0.060 * (0.029)	-0.025 (0.032)	-0.047 (0.030)	0.047 (0.030)	-0.013 (0.032)	0.021 (0.029)
Mother U.S. Born				-0.388 (0.568)	0.049 (0.688)	1.168 * (0.582)	-1.168 * (0.582)	-1.556 * (0.638)	-1.119 * (0.499)
Teen Weekly Work Hours				0.018 (0.027)	-0.001 (0.054)	-0.021 (0.043)	0.021 (0.043)	0.038 (0.037)	0.019 (0.038)
Parental Drug Use				0.674 (0.501)	-0.271 (0.445)	-0.355 (0.417)	0.355 (0.417)	1.028 * (0.454)	0.084 (0.497)
Father Ever Incarcerated				0.083 (0.324)	-0.200 (0.297)	-0.105 (0.303)	0.105 (0.303)	0.188 (0.336)	-0.095 (0.300)
Constant	-3.058 *** (0.383)	-0.595 ** (0.218)	-2.407 *** (0.296)	0.034 (1.611)	-0.075 (2.520)	-1.539 (1.924)	1.539 (1.924)	1.572 (1.654)	1.463 (1.858)

† p<0.1 *p<0.05 **p<0.01 ***p<0.001

Table 4.2
Multinomial Logistic Regression Estimation of Change in Virtual Supervision (Ref=No Change)

		Model 1		Model 2		Model 3	
		More Supervision	Less Supervision	More Supervision	Less Supervision	More Supervision	Same Supervision
		Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)
Any Benefits		0.116 (0.526)	0.273 (0.422)	-0.035 (0.410)	-0.105 (0.366)	0.105 (0.366)	0.071 (0.413)
Supervision at Age 9		-2.575 *** (0.407)	0.285 (0.474)	-2.786 *** (0.465)	0.193 (0.476)	-0.193 (0.476)	-2.978 *** (0.758)
Poverty Category				-0.006 (0.137)	-0.163 (0.137)	0.163 (0.137)	0.156 (0.182)
Race	(Ref=White)						
	Black			-0.293 (0.480)	-0.228 (0.411)	0.228 (0.411)	-0.065 (0.521)
	Hispanic			-0.569 (0.535)	-0.101 (0.543)	0.101 (0.543)	-0.468 (0.691)
	Other Race			0.055 (0.739)	0.161 (0.643)	-0.161 (0.643)	-0.106 (0.861)
Male				0.319 (0.342)	0.509 (0.327)	-0.509 (0.327)	-0.190 (0.454)
PCG is Teen's Parent				-0.425 (1.082)	-0.867 (0.710)	0.867 (0.710)	0.442 (1.006)
Household Adult Employed				0.186 (0.603)	-0.055 (0.573)	0.055 (0.573)	0.241 (0.713)
PCG Education	(Ref=<HS)						
	High School			0.399 (0.641)	0.382 (0.467)	-0.382 (0.467)	0.017 (0.647)
	Some College			0.015 (0.441)	0.076 (0.423)	-0.076 (0.423)	-0.061 (0.549)
	College +			-0.069 (0.523)	0.754 (0.507)	-0.754 (0.507)	-0.823 (0.638)
Household Size				0.010 (0.112)	0.221 * (0.097)	-0.221 * (0.097)	-0.211 (0.136)
Mother Married at Teen's Birth				-0.054 (0.379)	-0.342 (0.371)	0.342 (0.371)	0.289 (0.494)
Mother's Age at Teen's Birth				0.014 (0.031)	0.060 * (0.027)	-0.060 * (0.027)	-0.045 (0.038)
Mother U.S. Born				-0.179 (0.486)	-0.176 (0.475)	0.176 (0.475)	-0.003 (0.569)
Teen Weekly Work Hours				-0.013 (0.036)	-0.007 (0.031)	0.007 (0.031)	-0.005 (0.044)
Parental Drug Use				-0.349 (0.492)	-0.110 (0.391)	0.110 (0.391)	-0.239 (0.602)
Father Ever Incarcerated				0.024 (0.329)	0.238 (0.316)	-0.238 (0.316)	-0.214 (0.398)
Constant		5.549 *** (0.872)	-2.657 † (1.523)	6.246 ** (1.939)	-3.686 (2.256)	3.686 (2.256)	9.932 ** (2.999)

† p<0.1 *p<0.05 **p<0.01 ***p<0.001

Table 4.3
Multinomial Logistic Regression Estimation of Change in Intimacy of Communication (Ref=No Change)

	Model 1				Model 2				Model 3			
	More Communication		Less Communication		More Communication		Less Communication		More Communication		Same Communication	
	Coef	(SE)	Coef	(SE)	Coef	(SE)	Coef	(SE)	Coef	(SE)	Coef	(SE)
Any Benefits	-1.022 *	(0.383)	0.703 **	(0.238)	-0.636 †	(0.321)	0.642 *	(0.276)	-0.642 *	(0.276)	-1.278 ***	(0.309)
Communication at Age 9	-1.783 ***	(0.383)	-0.069	(0.264)	-2.183 ***	(0.417)	-0.046	(0.283)	0.046	(0.283)	-2.137 ***	(0.382)
Poverty Category					0.084	(0.123)	0.029	(0.113)	-0.029	(0.113)	0.055	(0.125)
Race (Ref=White)												
Black					0.456	(0.483)	0.218	(0.353)	-0.218	(0.353)	0.238	(0.466)
Hispanic					0.412	(0.514)	0.041	(0.333)	-0.041	(0.333)	0.370	(0.502)
Other Race					0.693	(0.641)	0.202	(0.525)	-0.202	(0.525)	0.491	(0.592)
Male					-0.256	(0.257)	-0.545 *	(0.253)	0.545 *	(0.253)	0.289	(0.266)
PCG is Teen's Parent					1.468	(1.096)	-1.255 *	(0.488)	1.255 *	(0.488)	2.724 *	(1.012)
Household Adult Employed					-0.330	(0.701)	0.232	(0.339)	-0.232	(0.339)	-0.561	(0.651)
PCG Education (Ref=<HS)												
High School					-0.237	(0.498)	-0.122	(0.352)	0.122	(0.352)	-0.116	(0.475)
Some College					0.236	(0.455)	-0.381	(0.326)	0.381	(0.326)	0.617	(0.406)
College +					-0.452	(0.519)	-0.711 †	(0.414)	0.711 †	(0.414)	0.259	(0.496)
Household Size					-0.112	(0.142)	-0.044	(0.078)	0.044	(0.078)	-0.068	(0.138)
Mother Married at Teen's Birth					-0.536	(0.300)	-0.163 †	(0.333)	0.163	(0.333)	-0.373	(0.363)
Mother's Age at Teen's Birth					-0.003	(0.025)	-0.011	(0.025)	0.011	(0.025)	0.008	(0.022)
Mother U.S. Born					-0.149	(0.455)	-0.149	(0.346)	0.149	(0.346)	0.000	(0.446)
Teen Weekly Work Hours					-0.005	(0.029)	-0.032	(0.021)	0.032	(0.021)	0.027	(0.030)
Parental Drug Use					-0.096	(0.385)	0.247	(0.367)	-0.247	(0.367)	-0.343	(0.358)
Father Ever Incarcerated					-0.770	(0.278)	-0.324 **	(0.266)	0.324	(0.266)	-0.446	(0.272)
Constant	7.390 ***	(1.390)	-0.381	(1.015)	8.242 **	(2.367)	1.932	(1.502)	-1.932	(1.502)	6.310 **	(2.034)

† p<0.1 *p<0.05 **p<0.01 ***p<0.001

Table 4.4
Logistic Regression Estimation of Any Delinquency

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7
	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)
Any Benefits	0.785 * (0.317)	0.032 (0.293)	-0.328 (0.314)	0.557 * (0.248)	-0.098 (0.288)	0.320 (0.267)	-0.237 (0.297)
Change in Strain (Ref=No Strain)							
Same Strain		-1.820 * (0.761)	-1.360 * (0.593)				
More Strain		1.186 * (0.515)	0.771 † (0.397)				
Less Strain		0.400 (0.400)	0.012 (0.358)				
Change in Virtual Supervision							
More Supervision				0.047 (0.341)	0.146 (0.313)		
Less Supervision				1.849 *** (0.345)	1.199 ** (0.353)		
Change in Intimacy of Communication							
More Communication						0.076 (0.430)	-0.028 (0.327)
Less Communication						1.228 ** (0.336)	0.758 ** (0.272)
Poverty Category			0.136 (0.098)		0.245 * (0.097)		0.209 * (0.095)
Race (Ref=White)							
Black			0.505 (0.432)		0.755 * (0.343)		0.706 † (0.365)
Hispanic			0.153 (0.376)		0.243 (0.396)		0.256 (0.409)
Other Race			0.134 (0.536)		0.616 (0.485)		0.641 (0.469)
Male			0.574 ** (0.201)		0.500 * (0.217)		0.625 ** (0.226)
PCG is Teen's Parent			-0.715 (0.616)		-1.516 (0.963)		-1.445 (1.037)
Household Adult Employed			-0.486 (0.383)		-0.708 * (0.355)		-0.784 * (0.371)
PCG Education (Ref=<HS)							
High School			-0.836 * (0.370)		-0.254 (0.394)		-0.207 (0.396)
Some College			-0.224 (0.320)		-0.481 † (0.289)		-0.401 (0.294)
College +			-0.595 (0.398)		-0.682 † (0.376)		-0.480 (0.373)
Household Size			-0.025 (0.115)		0.010 (0.070)		0.036 (0.068)
Mother Married at Teen's Birth			-0.449 * (0.223)		-0.247 (0.247)		-0.286 (0.258)
Mother's Age at Teen's Birth			-0.027 (0.021)		-0.035 † (0.020)		-0.025 (0.019)
Mother U.S. Born			-0.117 (0.373)		0.103 (0.357)		0.062 (0.347)
Teen Weekly Work Hours			0.014 (0.030)		0.029 (0.024)		0.031 (0.024)
Parental Drug Use			0.314 (0.283)		0.210 (0.281)		0.138 (0.295)
Father Ever Incarcerated			0.095 (0.220)		0.058 (0.226)		0.120 (0.223)
Constant	-0.371 (0.253)	-0.384 † (0.203)	1.546 (1.197)	-0.779 ** (0.271)	1.481 (1.436)	-0.812 * (0.366)	1.139 (1.513)

† p<0.1 *p<0.05 **p<0.01 ***p<0.001

Table 4.5
Logistic Regression Estimation of Any Violence

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7
	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)
Any Benefits	1.440 ** (0.426)	0.546 (0.357)	0.189 (0.401)	1.344 *** (0.331)	0.524 (0.352)	1.017 ** (0.309)	0.399 (0.357)
Change in Strain							
Same Strain		-2.945 * (1.140)	-1.967 * (0.946)				
More Strain		1.316 * (0.535)	0.861 * (0.395)				
Less Strain		0.685 (0.451)	0.165 (0.425)				
Change in Virtual Supervision							
More Supervision				-0.009 (0.457)	0.139 (0.400)		
Less Supervision				1.899 *** (0.406)	1.020 ** (0.371)		
Change in Intimacy of Communication							
More Communication						0.531 (0.600)	0.434 (0.423)
Less Communication						1.541 ** (0.425)	0.890 ** (0.328)
Poverty Category			0.037 (0.109)		0.156 (0.110)		0.117 (0.114)
Race (Ref=White)							
Black			0.599 (0.519)		0.965 * (0.445)		0.926 † (0.474)
Hispanic			0.160 (0.473)		0.321 (0.514)		0.333 (0.527)
Other Race			-0.194 (0.776)		0.624 (0.599)		0.593 (0.572)
Male			0.574 * (0.225)		0.522 † (0.274)		0.654 * (0.284)
PCG is Teen's Parent			-0.856 (0.616)		-1.725 (1.032)		-1.562 (1.124)
Household Adult Employed			-0.608 (0.402)		-0.904 * (0.389)		-0.966 * (0.407)
PCG Education (Ref=<HS)							
High School			-0.685 (0.422)		0.040 (0.464)		0.062 (0.460)
Some College			-0.070 (0.337)		-0.368 (0.318)		-0.293 (0.327)
College +			-0.925 † (0.472)		-1.032 * (0.469)		-0.810 † (0.465)
Household Size			-0.071 (0.143)		-0.018 (0.088)		0.007 (0.087)
Mother Married at Teen's Birth			-0.065 (0.248)		0.190 (0.274)		0.146 (0.294)
Mother's Age at Teen's Birth			-0.043 † (0.025)		-0.054 * (0.025)		-0.045 † (0.024)
Mother U.S. Born			-0.037 (0.472)		0.282 (0.452)		0.250 (0.439)
Teen Weekly Work Hours			0.000 (0.038)		0.022 (0.025)		0.023 (0.025)
Parental Drug Use			0.201 (0.314)		0.083 (0.326)		0.007 (0.336)
Father Ever Incarcerated			-0.062 (0.215)		-0.137 (0.224)		-0.076 (0.227)
Constant	-1.331 ** (0.385)	-1.450 *** (0.281)	1.485 (1.386)	-1.932 *** (0.450)	1.260 (1.627)	-2.184 ** (0.582)	0.643 (1.724)

† p<0.1 *p<0.05 **p<0.01 ***p<0.001

Table 4.6
Logistic Regression Estimation of Any Property Offending

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7
	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)
Any Benefits	1.250 *	-0.023	-0.426	1.012 *	-0.076	0.566	-0.189
	(0.547)	(0.410)	(0.437)	(0.411)	(0.407)	(0.409)	(0.411)
Change in Strain							
Same Strain		-5.684 **	-4.297 *				
		(1.665)	(1.935)				
More Strain		1.348 *	0.946 *				
		(0.555)	(0.428)				
Less Strain		0.646	0.134				
		(0.572)	(0.521)				
Change in Virtual Supervision							
More Supervision				-0.169	-0.070		
				(0.587)	(0.447)		
Less Supervision				2.217 ***	1.022 *		
				(0.495)	(0.391)		
Change in Intimacy of Communication							
More Communication						0.344	-0.084
						(0.860)	(0.482)
Less Communication						1.761 *	0.690 †
						(0.645)	(0.388)
Poverty Category			-0.044		0.138		0.100
			(0.125)		(0.131)		(0.135)
Race (Ref=White)							
Black			0.575		1.070 †		1.061 †
			(0.605)		(0.574)		(0.602)
Hispanic			0.231		0.400		0.437
			(0.495)		(0.607)		(0.637)
Other Race			-0.362		0.747		0.774
			(1.091)		(0.716)		(0.688)
Male			0.294		0.168		0.292
			(0.260)		(0.309)		(0.309)
PCG is Teen's Parent			-0.909		-1.895 †		-1.775
			(0.557)		(0.964)		(1.064)
Household Adult Employed			-0.451		-0.946 †		-1.024 *
			(0.443)		(0.483)		(0.496)
PCG Education (Ref=<HS)							
High School			-0.175		0.529		0.567
			(0.538)		(0.579)		(0.576)
Some College			0.283		-0.109		-0.038
			(0.374)		(0.388)		(0.403)
College +			-0.652		-0.941 †		-0.718
			(0.533)		(0.552)		(0.559)
Household Size			-0.032		0.040		0.065
			(0.165)		(0.101)		(0.099)
Mother Married at Teen's Birth			0.146		0.491		0.449
			(0.291)		(0.347)		(0.355)
Mother's Age at Teen's Birth			-0.017		-0.027		-0.017
			(0.029)		(0.028)		(0.027)
Mother U.S. Born			-0.394		-0.163		-0.213
			(0.542)		(0.477)		(0.459)
Teen Weekly Work Hours			0.013		0.038		0.039
			(0.045)		(0.031)		(0.031)
Parental Drug Use			0.087		-0.045		-0.105
			(0.330)		(0.371)		(0.381)
Father Ever Incarcerated			0.207		0.150		0.203
			(0.258)		(0.292)		(0.290)
Constant	-1.584 **	-1.823 ***	0.287	-2.321 ***	0.187	-2.549 **	-0.244
	(0.487)	(0.331)	(1.480)	(0.574)	(1.567)	(0.805)	(1.684)

† p<0.1 *p<0.05 **p<0.01 ***p<0.001

Table 4.7
KHB Calculation of Mediation of Benefits-Delinquency Effect

	Strain			Virtual Supervision			Communication		
	Confounding Ratio	Confounding Percent	P of Diff.	Confounding Ratio	Confounding Percent	P of Diff.	Confounding Ratio	Confounding Percent	P of Diff.
Outcome: Any Delinquency	0.994	-0.560	0.984	0.885	-13.020	0.960	4.710	78.770	0.736
Outcome: Any Violence	0.615	-62.640	0.919	0.989	-1.120	0.976	1.135	11.930	0.714
Outcome: Any Property	1.024	2.300	0.951	0.995	-0.460	0.996	1.353	26.070	0.813

All models control for: poverty category, sex, race, employment, household size, primary caregiver education, relationship between teen and primary caregiver, parents' relationship status at teen's birth, mother U.S. born, mother's age at teen's birth, and probability of attrition.

CHAPTER 5

Discussion and Conclusions

The sociological study of criminal behavior highlights poverty as an important structural force that may be at the root of crime. Despite theoretical expectations of a poverty-crime relationship, the empirical literature yields only mixed evidence (Braithwaite 1981; Tittle et al. 1978). Nevertheless, social class and poverty shape the experience of everyday life and may influence the way other factors impact crime (Hagan, Gillis, and Simpson 1985; Uggen 2000). The public and political discourse on poverty and crime generally focuses on an area that has been mostly left out of the criminological literature, government assistance programs for the poor. Many believe that providing income support and other assistance to the poor creates or exacerbates criminal tendencies among the poor, while others argue that these benefits reduce motivations for crime by relieving the hardships of poverty (DeFronzo 1996).

To date, a relatively small body of literature examines the empirical association between government assistance and crime. The majority of these studies document a macro-level association between welfare spending, most often AFDC, and criminal behavior. The modal finding in this literature is of a significant negative association between AFDC spending per person and crime. Both within the United States and internationally, generosity of welfare spending appears to be negatively associated with homicide (DeFronzo 1983; Pratt and Godsey 2002; DeFronzo 1997; Hannon 1997; DeFronzo and Hannon 1998), however some studies report null results (Devine et al. 1988). Similarly, studies report negative associations between welfare spending and

robbery (DeFronzo 1983), burglary (DeFronzo 1983; Devine et al. 1988; Hannon and DeFronzo 1998), and other property crimes (DeFronzo 1983; Hannon and DeFronzo 1998; Fishback et al. 2010; Zhang 1997).

The existing literature has been justifiably critiqued for being primarily cross-sectional and macro-level. Longitudinal and individual-level research presents less cohesive findings regarding the association between benefits and crime. Longitudinal macro-level studies report limited evidence of a negative association with homicide (Chamlin et al. 2002) or other serious crime (Worrall 2005), and even a positive association between welfare spending and less serious, Part II, crimes (Burek 2005). Similarly, individual-level research finds evidence that receiving welfare benefits is associated with decreases (Monte and Lewis 2011; Verbruggen et al. 2015), increases (Verbruggen et al. 2015), and no change (Brown et al. 2004) in recipients' criminal behavior.

With this dissertation, I seek to contribute to this literature by studying the individual association between household receipt of government benefits and children's delinquent behavior. Second, I expand the types of government benefits under study to include benefits other than cash welfare. Third, I incorporate a set of theoretical measures to explicitly test whether strain or parental attachment contribute to explaining previous findings of a benefits-crime association. In this chapter, I begin by connecting the findings from Chapters 3 and 4 to the prior literature and theoretical perspectives on poverty and crime, with implications for the criminological study of poverty. I conclude with a discussion of important directions for future research.

Overview of the Current Research

In Chapter 1, I presented multiple theoretical perspectives on the potential association between receiving government assistance benefits and criminal behavior, with an emphasis on strain and parental attachment. Although government programs themselves have not been of central consideration to criminological theorists, poverty and inequality have. Consistent with public and political perspectives on government benefits, criminological theories provide rationales for findings of increases or decreases in criminal behavior among benefits recipients.

Proponents of government assistance programs often argue that these programs play a vital role in relieving the hardships of poverty. Such hardships make up many of the experiences highlighted by general strain theory (Agnew 1992) as examples of strains that may lead to criminal coping, such as hunger or homelessness. These types of strains indicate both the presence of noxious stimuli and the loss of valued stimuli. Furthermore, these strains are part of daily life activities, which makes them of particularly high magnitude compared to more easily avoidable strains (Agnew 2012). Although the poor generally have fewer resources with which to legally cope with strains, applying for government benefits is one legal avenue. To the extent that government benefits do decrease hardships, we may expect benefits receipt to decrease criminal behavior.

While general strain theory posits that strains push individuals towards criminal activity, control theories argue that crime and delinquency will occur when there are not adequate restraints against crime. One important restraint for controlling adolescent delinquency is parental attachment. Drawing from Durkheim, Hirschi (1969) argues that

we internalize society's norms for behavior when we feel attached to others. Attachment represents awareness of the supervision of others as well as confidence in the ability to rely on others.

Poverty has been found to decrease the development of parental attachment (Sampson and Laub 1994), as has single parent family structure (Sokol-Katz et al. 1997). Accordingly, effective parenting and the establishment of attachment are central to policy discussions regarding government assistance programs. It is unclear, however, whether receiving government benefits would increase or decrease parental attachment. On the one hand, the additional resources provided to the family may increase levels of social support provided by parents. Such social support has been found to be positively associated with attachment and part of the concept of "parental efficacy," which is negatively associated with crime (Wright and Cullen 2001). On the other hand, welfare receipt is highly stigmatized in the U.S., and qualitative research has documented that children and adults are sensitive to this stigmatization. As a result, feelings of stigma may lead the children of benefits recipients to feel less attached to their parents, weakening the social controls preventing delinquent behavior.

The results of this dissertation provide some evidence of a positive bivariate association between family receipt of government benefits and adolescent delinquency, violence, and property offending. Although the prior literature predominantly finds negative associations, positive associations have been observed as well. For instance, Burek (2005) documented that an increase in AFDC spending in Kentucky counties between 1980 and 1990 was associated with an increase in arrests for Part II property crimes. Furthermore, Verbruggen and colleagues (2015) found that, among Dutch

women, receiving disability benefits was associated with increased offending, and especially property offending.

In the context of the highly mixed results of the extant literature on government benefits and crime, causality becomes of key concern. Without experimental methodologies, it is very difficult to determine whether observed associations between government assistance benefits and adolescent crime are the result of the benefits themselves or are the result of the numerous factors that influence eligibility for and receipt of the benefits. In other words, individuals are selected for, not randomly assigned to, benefits receipt. This selection creates treatment and control groups that have substantial patterns of difference between them. Multivariate analysis addresses this problem in part by holding measured covariates constant. I find that, when accounting for a number of factors that influence selection in to benefits receipt, the measure of benefits is no longer statistically associated with delinquency.

The next major question in this dissertation is whether measures of strain and social control are associated with benefits receipt and whether they also help to explain the observed bivariate association between assistance and crime. While most prior research provides theoretical explanations for their findings, the majority do not empirically test their theoretical propositions. I find, first, that family receipt of government benefits is associated with experiences of strain, when holding poverty and other controls constant. If, as many proponents of government assistance programs argue, benefits alleviate the hardships of poverty, we would expect receiving benefits to reduce levels of stressful experiences. In contrast, I find that benefits receipt is statistically associated with an increase or maintenance of strain levels, rather than decreasing strain.

This finding indicates that families that receive government benefits are not provided with adequate assistance to avoid the hardships of poverty, and are likely the group that experiences the most negative consequences of poverty. This finding is consistent with arguments put forth in prior work that the monetary value of government benefits are not adequate to alleviate poverty (Chamlin et al. 2002; Worrall 2005) Additionally, I find evidence that changes in strain are associated with delinquency. Increasing levels of strain are statistically associated with reports of delinquency, violence, and property offending. However strain does not mediate the observed association between benefits and delinquency.

I next consider parental attachment as a potential theoretical mediator of the association between benefits and delinquency. I find that family receipt of government benefits is not associated with levels of virtual supervision, and is associated with worsened intimacy of communication between the parent and adolescent. Although both measures of attachment are associated with delinquency, violence, and property offending, they do not mediate the association between benefits and delinquency.

Overall, this set of findings reveals that, although government benefits are associated with both delinquency and strain, the criminological concepts of strain and parental attachment do not explain the bivariate association between benefits and crime. However, statistical controls for measures that influence selection into benefits receipt do appear to account for the bivariate association between benefits and delinquency. Future research is still needed to understand which key criminological variables help to explain the observed association between benefits and delinquency.

Directions for Future Research

Although this dissertation makes a number of novel contributions to the body of literature on government assistance benefits and crime, we remain far from a full understanding of the role government programs may play in shaping crime in the United States. While this area is currently understudied, it remains a fruitful direction for expanding sociological knowledge on poverty and crime. I recommend three particular directions for future research in this area. Specifically, researchers should focus on distinguishing between causality and mere correlation through improved measurement and methodology. Second, additional attention to theoretical mechanisms is needed to unpack how benefits receipt is related to established key predictors of crime. Finally, I recommend that the literature expand to include an aspect of crime that is currently unexamined in relation to government benefits—victimization.

Future research must devote additional attention to determining whether observed associations are in fact causal. The current study uses multivariate analysis to control for selection measures, but more sophisticated methods are available. While an actual experimental study may be unlikely due to ethical concerns, additional improvements can be made in measuring selection criteria perhaps by linking observational data such as the Fragile Families to data recording local laws regulating eligibility. Additionally, within-person analysis comparing individuals to themselves over time would be a useful way to rule out the influence of unmeasurable factors. Ideally, researchers will continue to use methods of causal analysis of observational data to understand the role of selection in the benefits-delinquency association.

Without clear theoretical explanations of an observed association between two variables, it is not possible to present a convincing argument for a causal relationship. Even as scholars improve methodologically in the study of government assistance programs and crime, causal arguments will be implausible without closer examination of theoretical explanations. In this dissertation, I examine the mediating effects of measures of two criminological theories, neither of which appear to explain the observed association between benefits and delinquency. I recommend that future researchers use qualitative methods to explore the experiences of benefits recipients, particularly as related to feelings of social support, interpersonal bonds, and decision making processes regarding criminal behavior. Additionally, quantitative researchers should seek to improve the measurement precision across theoretical propositions in order to test additional explanations.

Finally, it is possible that aggregate findings of a negative association between benefits and crime rates do not imply an impact of benefits on recipients' criminal behavior, but on their risk of victimization. It is possible that the financial resources provided by government assistance programs are an attractive target for motivated offenders. In contrast, these financial resources could make it easier for recipients to protect themselves from crime by paying for security measures. Additionally, the program requirements for participation in employment and job training programs may shape recipients routine activities in ways that influence their risk for victimization. Finally, if receiving benefits increases participation in delinquency, it may also place adolescents at risk for victimization associated with those risky behaviors.

Conclusion

Does receiving government benefits shape adolescent delinquent behaviors? The findings presented here provide evidence that adolescent children of families that receive government benefits have higher levels of delinquency, violence, and property offending than children of families that do not receive benefits. However, these differences are not robust to adjustment for factors that influence selection into benefits. In contrast, measures of changes in strain and parental attachment do not influence the observed association between benefits and delinquency. These findings indicate that families predisposed to receiving government benefits are uniquely disadvantaged in ways that influence the likelihood of delinquency. However, the criminological explanation of this influence remains unclear. Future research should focus on expanding our understanding of the unique risk factors experienced in these families.

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APPENDIX
Robustness Checks

Variety Scale Delinquency Measures

Table VS3.1
 OLS Regression Estimation of Any Delinquency - Poverty Analysis

	Model 1	Model 2	Model 3	Model 4	Model 5
	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)
Poverty Category	-0.114 *			0.023	
	(0.055)			(0.070)	
Number of Waves in Poverty		0.142 **			0.041
		(0.049)			(0.074)
Change in Poverty (Ref=No Change)					
Moved Into Poverty			0.011		
			(0.182)		
Moved Out of Poverty			0.218		
			(0.228)		
Race (Ref=White)					
Black				0.284	0.243
				(0.325)	(0.332)
Hispanic				0.204	0.166
				(0.258)	(0.265)
Other Race				0.167	0.176
				(0.260)	(0.257)
Male				0.366 **	0.371 **
				(0.132)	(0.133)
PCG is Teen's Parent				-0.645	-0.661
				(0.659)	(0.655)
Household Adult Employed				-0.240	-0.220
				(0.344)	(0.341)
PCG Education (Ref=<HS)					
High School				-0.152	-0.118
				(0.238)	(0.253)
Some College				-0.158	-0.115
				(0.205)	(0.219)
College +				-0.173	-0.109
				(0.246)	(0.250)
Household Size				0.005	0.002
				(0.051)	(0.051)
Mother Married at Teen's Birth				-0.182	-0.157
				(0.205)	(0.209)
Mother's Age at Teen's Birth				-0.020	-0.018
				(0.013)	(0.013)
Mother U.S. Born				0.113	0.137
				(0.187)	(0.193)
Teen Weekly Work Hours				0.010	0.010
				(0.014)	(0.014)
Parental Drug Use				0.187	0.179
				(0.197)	(0.195)
Father Ever Incarcerated				0.214	0.166
				(0.159)	(0.158)
Constant	1.333 ***	0.762 **	0.922 ***	1.790 †	1.739
	(0.243)	(0.216)	(0.192)	(0.890)	(1.035)

† p<0.1 *p<0.05 **p<0.01 ***p<0.001

Table VS3.2
 OLS Regression Estimation of Any Violence - Poverty Analysis

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)
Poverty Category	-0.079 ** (0.028)			-0.019 (0.039)		
Number of Waves in Poverty		0.089 *** (0.025)			0.040 (0.036)	
Change in Poverty (Ref=No Change)						
Moved Into Poverty			0.106 (0.098)			0.004 (0.097)
Moved Out of Poverty			0.140 (0.154)			0.004 (0.129)
Race (Ref=White)						
Black				0.092 (0.169)	0.072 (0.174)	0.101 (0.157)
Hispanic				0.160 (0.152)	0.141 (0.153)	0.169 (0.147)
Other Race				-0.046 (0.164)	-0.037 (0.159)	-0.049 (0.166)
Male				0.213 ** (0.077)	0.216 ** (0.078)	0.212 ** (0.077)
PCG is Teen's Parent				-0.024 (0.396)	-0.023 (0.395)	-0.011 (0.402)
Household Adult Employed				-0.007 (0.205)	-0.002 (0.202)	-0.010 (0.201)
PCG Education (Ref=<HS)						
High School				-0.112 (0.118)	-0.091 (0.122)	-0.121 (0.117)
Some College				-0.026 (0.118)	-0.001 (0.124)	-0.035 (0.115)
College +				-0.023 (0.159)	0.003 (0.160)	-0.039 (0.153)
Household Size				-0.009 (0.029)	-0.009 (0.028)	-0.008 (0.028)
Mother Married at Teen's Birth				-0.161 † (0.095)	-0.150 (0.095)	-0.167 (0.102)
Mother's Age at Teen's Birth				-0.011 (0.007)	-0.010 (0.007)	-0.012 (0.008)
Mother U.S. Born				0.144 (0.095)	0.157 (0.097)	0.140 (0.096)
Teen Weekly Work Hours				-0.002 (0.008)	-0.002 (0.008)	-0.002 (0.008)
Parental Drug Use				0.066 (0.106)	0.063 (0.104)	0.068 (0.106)
Father Ever Incarcerated				0.094 (0.080)	0.072 (0.079)	0.106 (0.091)
Constant	0.523 *** (0.129)	0.139 (0.161)	0.224 (0.137)	0.570 (0.521)	0.400 (0.611)	0.509 (0.571)

† p<0.1 *p<0.05 **p<0.01 ***p<0.001

Table VS3.3
 OLS Regression Estimation of Any Property Offending - Poverty Analysis

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)
Poverty Category	-0.038 (0.025)			0.011 (0.028)		
Number of Waves in Poverty		0.037 † (0.021)			-0.001 (0.030)	
Change in Poverty (Ref=No Change)						
Moved Into Poverty			-0.026 (0.094)			-0.105 (0.076)
Moved Out of Poverty			0.103 (0.117)			-0.046 (0.098)
Race (Ref=White)						
Black				0.139 (0.123)	0.135 (0.124)	0.134 (0.119)
Hispanic				0.075 (0.111)	0.070 (0.113)	0.074 (0.109)
Other Race				0.069 (0.125)	0.069 (0.126)	0.071 (0.126)
Male				0.062 (0.050)	0.062 (0.050)	0.064 (0.050)
PCG is Teen's Parent				-0.377 † (0.207)	-0.380 † (0.206)	-0.371 † (0.210)
Household Adult Employed				-0.171 (0.125)	-0.167 (0.124)	-0.177 (0.124)
PCG Education (Ref=<HS)						
High School				0.023 (0.117)	0.025 (0.122)	0.020 (0.115)
Some College				-0.032 (0.095)	-0.029 (0.100)	-0.030 (0.093)
College +				-0.120 (0.126)	-0.112 (0.125)	-0.119 (0.124)
Household Size				0.018 (0.021)	0.017 (0.020)	0.018 (0.020)
Mother Married at Teen's Birth				0.049 (0.089)	0.052 (0.093)	0.041 (0.088)
Mother's Age at Teen's Birth				-0.002 (0.006)	-0.002 (0.005)	-0.002 (0.006)
Mother U.S. Born				-0.033 (0.091)	-0.031 (0.093)	-0.037 (0.089)
Teen Weekly Work Hours				0.006 (0.006)	0.007 (0.006)	0.007 (0.006)
Parental Drug Use				0.033 (0.083)	0.033 (0.083)	0.037 (0.082)
Father Ever Incarcerated				0.071 (0.072)	0.066 (0.074)	0.069 (0.078)
Constant	0.457 *** (0.106)	0.281 ** (0.078)	0.321 *** (0.073)	0.566 (0.341)	0.600 (0.375)	0.628 † (0.357)

† p<0.1 **p<0.05 ***p<0.01 ****p<0.001

Table VS3.4

OLS Regression Estimation of Any Delinquency - Benefits Analysis

	Model 1	Model 2	Model 3	Model 4
	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)
Any Benefits	0.595 *	0.221		
	(0.246)	(0.146)		
Any Benefits (excluding UI/WC)			0.549 *	0.101
			(0.259)	(0.138)
Race (Ref=White)				
Black		0.224		0.249
		(0.300)		(0.311)
Hispanic		0.165		0.180
		(0.242)		(0.251)
Other Race		0.125		0.151
		(0.263)		(0.264)
Male		0.357 **		0.364 **
		(0.132)		(0.132)
PCG is Teen's Parent		-0.644		-0.644
		(0.652)		(0.661)
Household Adult Employed		-0.175		-0.200
		(0.315)		(0.332)
PCG Education (Ref=<HS)				
High School		-0.143		-0.145
		(0.239)		(0.238)
Some College		-0.133		-0.143
		(0.199)		(0.200)
College +		-0.102		-0.127
		(0.258)		(0.256)
Household Size		-0.002		0.000
		(0.050)		(0.050)
Mother Married at Teen's Birth		-0.134		-0.158
		(0.211)		(0.208)
Mother's Age at Teen's Birth		-0.020		-0.019
		(0.013)		(0.013)
Mother U.S. Born		0.109		0.115
		(0.186)		(0.187)
Teen Weekly Work Hours		0.010		0.010
		(0.014)		(0.014)
Parental Drug Use		0.168		0.175
		(0.196)		(0.197)
Father Ever Incarcerated		0.171		0.186
		(0.180)		(0.176)
Constant	0.565 ***	1.722 †	0.646 ***	1.779 †
	(0.129)	(0.908)	(0.150)	(0.934)

† p<0.1 *p<0.05 **p<0.01 ***p<0.001

Table VS3.5

OLS Regression Estimation of Any Violence - Benefits Analysis

	Model 1	Model 2	Model 3	Model 4
	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)
Any Benefits	0.177 (0.197)	0.196 * (0.086)	0.118 (0.221)	0.088 (0.084)
Any Benefits (excluding UI/WC)				
Race (Ref=White)				
Black		0.058 (0.153)		0.081 (0.159)
Hispanic		0.142 (0.142)		0.155 (0.148)
Other Race		-0.081 (0.165)		-0.058 (0.165)
Male		0.203 * (0.077)		0.209 ** (0.077)
PCG is Teen's Parent		-0.008 (0.399)		-0.007 (0.403)
Household Adult Employed		0.038 (0.191)		0.016 (0.193)
PCG Education (Ref=<HS)				
High School		-0.114 (0.117)		-0.116 (0.117)
Some College		-0.020 (0.115)		-0.030 (0.114)
College +		0.004 (0.153)		-0.020 (0.153)
Household Size		-0.013 (0.028)		-0.011 (0.028)
Mother Married at Teen's Birth		-0.131 (0.106)		-0.152 (0.104)
Mother's Age at Teen's Birth		-0.012 (0.007)		-0.011 (0.007)
Mother U.S. Born		0.131 (0.094)		0.136 (0.096)
Teen Weekly Work Hours		-0.002 (0.008)		-0.002 (0.008)
Parental Drug Use		0.054 (0.105)		0.060 (0.106)
Father Ever Incarcerated		0.081 (0.095)		0.094 (0.093)
Constant	0.146 † (0.075)	0.394 (0.554)	(0.201) * (0.096)	0.447 (0.550)

† p<0.1 *p<0.05 **p<0.01 ***p<0.001

Table VS3.6

OLS Regression Estimation of Any Property Offending - Benefits Analysis

	Model 1	Model 2	Model 3	Model 4
	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)
Any Benefits	0.284 * (0.121)	0.044913 0.06882		
Any Benefits (excluding UI/WC)			0.272 † 0.140	0.006122 0.066911
Race (Ref=White)				
Black		0.123211 0.117612		0.131725 0.121086
Hispanic		0.063256 0.105839		0.068699 0.108845
Other Race		0.059599 0.129641		0.066181 0.127837
Male		0.060364 0.049758		0.062241 0.049525
PCG is Teen's Parent		-0.377494 † 0.206815		-0.378267 † 0.207351
Household Adult Employed		-0.154911 0.118535		-0.164336 0.122119
PCG Education (Ref=<HS)				
High School		0.026059 0.116995		0.025192 0.116275
Some College		-0.024551 0.092697		-0.027084 0.093228
College +		-0.09983 0.128583		-0.107878 0.127028
Household Size		0.015623 0.02013		0.016572 0.020004
Mother Married at Teen's Birth		0.06032 0.090081		0.053164 0.088857
Mother's Age at Teen's Birth		-0.002341 0.005556		-0.002165 0.005621
Mother U.S. Born		-0.032796 0.090369		-0.031129 0.090153
Teen Weekly Work Hours		0.006499 0.006356		0.006526 0.006329
Parental Drug Use		0.029138 0.081869		0.031495 0.082552
Father Ever Incarcerated		0.058538 0.079316		0.06393 0.077519
Constant	0.143 † (0.079)	0.569882 0.344579	0.173 † (0.093)	0.591308 0.355337

† p<0.1 *p<0.05 **p<0.01 ***p<0.001

Table VS3.7
OLS Regression Estimation of Any Delinquency - Mediation and Moderation Analysis

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)
Poverty Category	0.035 (0.071)			0.096 (0.078)		
Number of Waves in Poverty		0.034 (0.074)			0.005 (0.100)	
Change in Poverty (Ref=No Change)						
Moved Into Poverty			-0.258 (0.174)			-0.246 (0.319)
Moved Out of Poverty			-0.187 (0.210)			-0.179 (0.423)
Any Benefits	0.232 (0.151)	0.208 (0.152)	0.250 † (0.146)	0.542 (0.351)	0.171 (0.181)	0.256 (0.167)
Poverty Category*Any Benefits				-0.087 (0.091)		
Waves in Poverty*Any Benefits					0.035 (0.093)	
Into Poverty*Any Benefits						-0.020 (0.324)
Out of Poverty*Any Benefits						-0.020 (0.460)
Race (Ref=White)						
Black	0.238 (0.311)	0.201 (0.318)	0.224 (0.296)	0.240 (0.311)	0.204 (0.317)	0.224 (0.295)
Hispanic	0.176 (0.251)	0.141 (0.257)	0.175 (0.242)	0.184 (0.249)	0.148 (0.256)	0.175 (0.240)
Other Race	0.127 (0.260)	0.138 (0.258)	0.126 (0.262)	0.124 (0.261)	0.140 (0.257)	0.125 (0.262)
Male	0.355 ** (0.132)	0.361 ** (0.134)	0.361 ** (0.132)	0.354 ** (0.132)	0.360 ** (0.134)	0.360 ** (0.131)
PCG is Teen's Parent	-0.636 (0.647)	-0.654 (0.643)	-0.630 (0.653)	-0.638 (0.647)	-0.650 (0.645)	-0.632 (0.654)
Household Adult Employed	-0.184 (0.323)	-0.169 (0.320)	-0.192 (0.320)	-0.170 (0.325)	-0.162 (0.320)	-0.193 (0.318)
PCG Education (Ref=<HS)						
High School	-0.149 (0.239)	-0.116 (0.255)	-0.157 (0.237)	-0.138 (0.236)	-0.111 (0.252)	-0.157 (0.235)
Some College	-0.147 (0.204)	-0.106 (0.217)	-0.138 (0.198)	-0.145 (0.203)	-0.107 (0.217)	-0.137 (0.199)
College +	-0.133 (0.248)	-0.071 (0.251)	-0.123 (0.258)	-0.144 (0.248)	-0.076 (0.253)	-0.123 (0.260)
Household Size	0.000 (0.051)	-0.003 (0.050)	0.000 (0.050)	0.000 (0.051)	-0.004 (0.050)	0.000 (0.049)
Mother Married at Teen's Birth	-0.143 (0.211)	-0.122 (0.213)	-0.163 (0.208)	-0.137 (0.209)	-0.120 (0.213)	-0.163 (0.210)
Mother's Age at Teen's Birth	-0.021 (0.013)	-0.019 (0.013)	-0.021 (0.013)	-0.020 (0.013)	-0.019 (0.013)	-0.021 (0.013)
Mother U.S. Born	0.101 (0.186)	0.126 (0.193)	0.093 (0.185)	0.097 (0.186)	0.118 (0.189)	0.094 (0.184)
Teen Weekly Work Hours	0.010 (0.014)	0.010 (0.013)	0.010 (0.013)	0.009 (0.014)	0.010 (0.013)	0.010 (0.013)
Parental Drug Use	0.171 (0.195)	0.165 (0.194)	0.179 (0.193)	0.170 (0.195)	0.164 (0.194)	0.180 (0.193)
Father Ever Incarcerated	0.191 (0.162)	0.144 (0.160)	0.179 (0.178)	0.191 (0.162)	0.147 (0.162)	0.180 (0.178)
Constant	1.617 † (0.850)	1.634 (0.993)	1.806 † (0.917)	1.358 † (0.919)	1.651 (0.988)	1.803 † (0.915)

† p<0.1 **p<0.05 ***p<0.01 ****p<0.001

Table VS3.8
 OLS Regression Estimation of Any Violence - Mediation and Moderation Analysis

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)
Poverty Category	-0.008 (0.041)			-0.004 (0.043)		
Number of Waves in Poverty		0.034 (0.036)			0.038 (0.052)	
Change in Poverty (Ref=No Change)						
Moved Into Poverty			-0.026 (0.099)			-0.040 (0.190)
Moved Out of Poverty			-0.010 (0.131)			0.013 (0.224)
Any Benefits	0.192 * (0.092)	0.185 * (0.089)	0.199 * (0.087)	0.213 (0.168)	0.191 (0.116)	0.201 * (0.093)
Poverty Category*Any Benefits				-0.006 (0.050)		
Waves in Poverty*Any Benefits					-0.006 (0.051)	
Into Poverty*Any Benefits						0.014 (0.193)
Out of Poverty*Any Benefits						-0.029 (0.220)
Race (Ref=White)						
Black	0.055 (0.162)	0.036 (0.167)	0.057 (0.152)	0.055 (0.161)	0.034 (0.165)	0.058 (0.152)
Hispanic	0.138 (0.147)	0.119 (0.148)	0.142 (0.142)	0.138 (0.145)	0.118 (0.146)	0.142 (0.142)
Other Race	-0.078 (0.163)	-0.069 (0.158)	-0.082 (0.165)	-0.079 (0.163)	-0.070 (0.157)	-0.083 (0.164)
Male	0.204 * (0.077)	0.207 * (0.078)	0.203 * (0.077)	0.204 * (0.077)	0.208 * (0.078)	0.202 ** (0.076)
PCG is Teen's Parent	-0.018 (0.390)	-0.020 (0.389)	-0.008 (0.396)	-0.017 (0.390)	-0.018 (0.390)	-0.011 (0.396)
Household Adult Employed	0.037 (0.195)	0.042 (0.192)	0.036 (0.193)	0.037 (0.197)	0.041 (0.194)	0.036 (0.192)
PCG Education (Ref=<HS)						
High School	-0.108 (0.119)	-0.088 (0.123)	-0.116 (0.117)	-0.107 (0.117)	-0.089 (0.121)	-0.116 (0.117)
Some College	-0.017 (0.119)	0.007 (0.125)	-0.021 (0.115)	-0.016 (0.119)	0.007 (0.125)	-0.021 (0.115)
College +	0.010 (0.157)	0.037 (0.158)	0.002 (0.152)	0.008 (0.157)	0.038 (0.159)	0.003 (0.152)
Household Size	-0.013 (0.028)	-0.013 (0.028)	-0.013 (0.028)	-0.013 (0.028)	-0.013 (0.027)	-0.013 (0.027)
Mother Married at Teen's Birth	-0.129 (0.101)	-0.118 (0.101)	-0.133 (0.107)	-0.128 (0.099)	-0.118 (0.099)	-0.132 (0.106)
Mother's Age at Teen's Birth	-0.012 (0.007)	-0.011 (0.007)	-0.012 (0.007)	-0.012 (0.007)	-0.011 (0.007)	-0.012 † (0.007)
Mother U.S. Born	0.134 (0.093)	0.147 (0.094)	0.130 (0.094)	0.133 (0.093)	0.149 (0.093)	0.130 (0.093)
Teen Weekly Work Hours	-0.002 (0.008)	-0.002 (0.008)	-0.002 (0.008)	-0.002 (0.008)	-0.002 (0.008)	-0.002 (0.008)
Parental Drug Use	0.053 (0.105)	0.050 (0.104)	0.055 (0.105)	0.053 (0.105)	0.051 (0.104)	0.055 (0.105)
Father Ever Incarcerated	0.075 (0.084)	0.053 (0.083)	0.082 (0.095)	0.075 (0.084)	0.053 (0.085)	0.082 (0.095)
Constant	0.428 (0.504)	0.310 (0.590)	0.403 (0.555)	0.409 (0.554)	0.306 (0.581)	0.404 (0.555)

† p<0.1 *p<0.05 **p<0.01 ***p<0.001

Table VS3.9

OLS Regression Estimation of Any Property Offending - Mediation and Moderation Analysis

	Model 1	Model 2	Model 3	Model 4	Model 5
	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)
Poverty Category	0.014 (0.028)			0.029 (0.034)	
Number of Waves in Poverty		-0.003 (0.030)			-0.012 (0.044)
Change in Poverty (Ref=No Change)					
Moved Into Poverty			-0.113 (0.076)		
Moved Out of Poverty			-0.050 (0.098)		
Any Benefits	0.049 (0.069)	0.045 (0.070)	0.057 (0.069)	0.128 (0.170)	0.033 (0.076)
Poverty Category*Any Benefits				-0.022 (0.041)	
Waves in Poverty*Any Benefits					0.011 (0.043)
Into Poverty*Any Benefits					
Out of Poverty*Any Benefits					
Race (Ref=White)					
Black	0.129 (0.120)	0.125 (0.120)	0.121 (0.115)	0.129 (0.120)	0.126 (0.120)
Hispanic	0.068 (0.108)	0.064 (0.109)	0.066 (0.106)	0.070 (0.107)	0.066 (0.109)
Other Race	0.060 (0.126)	0.060 (0.128)	0.061 (0.128)	0.059 (0.126)	0.061 (0.128)
Male	0.060 (0.050)	0.060 (0.050)	0.062 (0.050)	0.060 (0.050)	0.060 (0.050)
PCG is Teen's Parent	-0.374 † (0.205)	-0.377 † (0.205)	-0.368 † (0.208)	-0.375 † (0.205)	-0.376 † (0.205)
Household Adult Employed	-0.158 (0.121)	-0.155 (0.119)	-0.164 (0.120)	-0.155 (0.123)	-0.153 (0.120)
PCG Education (Ref=<HS)					
High School	0.024 (0.117)	0.026 (0.123)	0.021 (0.116)	0.026 (0.117)	0.027 (0.122)
Some College	-0.030 (0.095)	-0.027 (0.099)	-0.026 (0.093)	-0.029 (0.095)	-0.027 (0.099)
College +	-0.111 (0.129)	-0.103 (0.127)	-0.108 (0.127)	-0.114 (0.129)	-0.105 (0.128)
Household Size	0.016 (0.020)	0.016 (0.020)	0.017 (0.020)	0.016 (0.020)	0.015 (0.020)
Mother Married at Teen's Birth	0.057 (0.090)	0.059 (0.093)	0.050 (0.089)	0.058 (0.090)	0.060 (0.093)
Mother's Age at Teen's Birth	-0.003 (0.006)	-0.002 (0.005)	-0.003 (0.006)	-0.002 (0.006)	-0.002 (0.005)
Mother U.S. Born	-0.036 (0.091)	-0.033 (0.093)	-0.039 (0.089)	-0.037 (0.090)	-0.036 (0.090)
Teen Weekly Work Hours	0.006 (0.006)	0.006 (0.006)	0.006 (0.006)	0.006 (0.006)	0.006 (0.006)
Parental Drug Use	0.030 (0.082)	0.030 (0.082)	0.033 (0.081)	0.030 (0.082)	0.030 (0.082)
Father Ever Incarcerated	0.066 (0.073)	0.061 (0.073)	0.062 (0.079)	0.066 (0.072)	0.062 (0.074)
Constant	0.529 (0.329)	0.577 (0.364)	0.597 † (0.347)	0.463 (0.361)	0.582 (0.361)

† p<0.1 *p<0.05 **p<0.01 ***p<0.001

Table VS3.10
KHB Calculation of Mediation of Poverty-Delinquency Effect

	Poverty Category			Number of Waves in Poverty			Into Poverty			Out of Poverty		
	Confound- ing Ratio	Confound- ing Percent	P of Diff.	Confound- ing Ratio	Confound- ing Percent	P of Diff.	Confound- ing Ratio	Confound- ing Percent	P of Diff.	Confound- ing Ratio	Confound- ing Percent	P of Diff.
Outcome: Variety Delinquency	0.727	-37.510	0.780	0.603	-65.960	0.895	0.220	-353.780	0.493	1.066	6.200	0.936
Outcome: Variety Violence	0.581	-72.120	0.780	0.667	-49.820	0.895	2.001	50.020	0.492	0.944	-5.970	0.936
Outcome: Variety Property	0.844	-18.450	0.781	0.914	-9.440	0.895	0.789	-26.820	0.508	1.064	6.030	0.936

All models control for: sex, race, employment, household size, primary caregiver education, relationship between teen and primary caregiver, parents' relationship status at teen's birth, mother U.S. born, mother's age at teen's birth, and probability of attrition.

Table VS4.4
OLS Regression Estimation of Variety Scale Delinquency

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7
	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)
Any Benefits	0.595 * (0.246)	0.321 (0.193)	0.109 (0.180)	0.516 * (0.198)	0.252 † (0.150)	0.491 ** (0.178)	0.208 (0.148)
Change in Strain (Ref=No Strain)							
Same Strain		-0.635 (0.553)	-0.570 (0.438)				
More Strain		1.007 † (0.525)	0.665 † (0.333)				
Less Strain		0.298 (0.247)	0.039 (0.175)				
Change in Virtual Supervision							
More Supervision				-0.002 (0.188)	0.012 (0.162)		
Less Supervision				0.494 (0.413)	0.484 * (0.228)		
Change in Intimacy of Communication							
More Communication						-0.104 (0.193)	-0.047 (0.161)
Less Communication						0.260 (0.283)	0.284 † (0.157)
Poverty Category			0.028 (0.059)		0.031 (0.074)		0.021 (0.072)
Race (Ref=White)							
Black			0.206 (0.225)		0.188 (0.297)		0.181 (0.314)
Hispanic			0.107 (0.189)		0.186 (0.233)		0.190 (0.251)
Other Race			0.064 (0.251)		0.034 (0.250)		0.058 (0.262)
Male			0.358 ** (0.108)		0.334 * (0.134)		0.380 ** (0.132)
PCG is Teen's Parent			-0.514 (0.503)		-0.459 (0.630)		-0.439 (0.624)
Household Adult Employed			-0.097 (0.259)		-0.085 (0.301)		-0.118 (0.322)
PCG Education (Ref=<HS)							
High School			-0.388 (0.264)		-0.177 (0.224)		-0.164 (0.231)
Some College			-0.132 (0.200)		-0.126 (0.202)		-0.108 (0.203)
College +			-0.318 (0.269)		-0.114 (0.235)		-0.057 (0.242)
Household Size			-0.023 (0.059)		-0.014 (0.048)		-0.005 (0.049)
Mother Married at Teen's Birth			-0.176 (0.181)		-0.148 (0.212)		-0.156 (0.213)
Mother's Age at Teen's Birth			-0.020 (0.014)		-0.023 † (0.013)		-0.020 (0.013)
Mother U.S. Born			0.038 (0.181)		0.120 (0.177)		0.109 (0.178)
Teen Weekly Work Hours			0.004 (0.015)		0.008 (0.013)		0.009 (0.014)
Parental Drug Use			0.235 (0.169)		0.180 (0.190)		0.160 (0.196)
Father Ever Incarcerated			0.187 (0.132)		0.202 (0.160)		0.223 (0.155)
Constant	0.565 *** (0.129)	0.540 * (0.110)	1.745 * (0.760)	0.466 *** (0.118)	1.421 † (0.815)	0.506 ** (0.165)	1.315 (0.796)

† p<0.1 *p<0.05 **p<0.01 ***p<0.001

Table VS4.5
OLS Regression Estimation of Variety Violence

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7
	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)
Any Benefits	0.177 (0.197)	0.284 ** (0.095)	0.164 (0.099)	0.247 † (0.136)	0.194 * (0.093)	0.290 ** (0.105)	0.190 * (0.091)
Change in Strain							
Same Strain		-0.202 (0.270)	-0.197 (0.199)				
More Strain		0.329 (0.227)	0.179 (0.146)				
Less Strain		0.100 (0.136)	-0.012 (0.095)				
Change in Virtual Supervision							
More Supervision				0.002 (0.116)	-0.004 (0.094)		
Less Supervision				-0.160 (0.319)	0.079 (0.147)		
Change in Intimacy of Communication							
More Communication						-0.063 (0.153)	0.016 (0.095)
Less Communication						-0.155 (0.235)	0.039 (0.109)
Poverty Category			0.013 (0.029)		-0.008 (0.042)		-0.008 (0.040)
Race (Ref=White)							
Black			0.123 (0.106)		0.048 (0.153)		0.054 (0.157)
Hispanic			0.076 (0.117)		0.137 (0.141)		0.136 (0.148)
Other Race			0.029 (0.117)		-0.085 (0.154)		-0.078 (0.155)
Male			0.196 ** (0.059)		0.201 * (0.079)		0.206 ** (0.076)
PCG is Teen's Parent			-0.268 (0.273)		0.005 (0.375)		-0.007 (0.373)
Household Adult Employed			-0.079 (0.142)		0.051 (0.185)		0.038 (0.191)
PCG Education (Ref=<HS)							
High School			-0.142 (0.146)		-0.109 (0.117)		-0.106 (0.119)
Some College			-0.080 (0.112)		-0.014 (0.120)		-0.013 (0.118)
College +			-0.179 (0.152)		0.007 (0.156)		0.013 (0.155)
Household Size			-0.013 (0.024)		-0.016 (0.027)		-0.013 (0.028)
Mother Married at Teen's Birth			-0.088 (0.082)		-0.128 (0.102)		-0.128 (0.102)
Mother's Age at Teen's Birth			-0.011 (0.007)		-0.012 † (0.007)		-0.012 (0.007)
Mother U.S. Born			0.095 (0.115)		0.136 (0.091)		0.135 (0.092)
Teen Weekly Work Hours			-0.002 (0.007)		-0.002 (0.008)		-0.002 (0.008)
Parental Drug Use			0.071 (0.088)		0.055 (0.103)		0.051 (0.106)
Father Ever Incarcerated			0.054 (0.069)		0.077 (0.083)		0.078 (0.081)
Constant	0.146 † (0.075)	0.154 * (0.058)	0.801 † (0.434)	0.178 ** (0.061)	0.404 (0.486)	0.213 † (0.105)	0.391 (0.482)

† p<0.1 *p<0.05 **p<0.01 ***p<0.001

Table VS4.6
OLS Regression Estimation of Variety Property Offending

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7
	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)
Any Benefits	0.284 * (0.121)	0.079 (0.054)	0.019 (0.060)	0.195 * (0.073)	0.060 (0.068)	0.156 * (0.076)	0.041 (0.068)
Change in Strain							
Same Strain		-0.081 (0.164)	-0.132 (0.126)				
More Strain		0.214 † (0.128)	0.164 (0.100)				
Less Strain		0.014 (0.086)	-0.036 (0.070)				
Change in Virtual Supervision							
More Supervision				-0.005 (0.075)	0.005 (0.062)		
Less Supervision				0.391 * (0.148)	0.216 * (0.085)		
Change in Intimacy of Communication							
More Communication						-0.009 (0.111)	-0.037 (0.073)
Less Communication						0.235 † (0.129)	0.106 (0.079)
Poverty Category			-0.009 (0.025)		0.012 (0.029)		0.007 (0.029)
Race (Ref=White)							
Black			0.036 (0.073)		0.105 (0.114)		0.101 (0.119)
Hispanic			0.067 (0.075)		0.074 (0.099)		0.077 (0.105)
Other Race			-0.036 (0.089)		0.013 (0.110)		0.025 (0.107)
Male			0.066 (0.048)		0.050 (0.051)		0.070 (0.050)
PCG is Teen's Parent			-0.061 (0.153)		-0.293 (0.205)		-0.287 (0.205)
Household Adult Employed			0.007 (0.106)		-0.114 (0.116)		-0.128 (0.122)
PCG Education (Ref=<HS)							
High School			-0.012 (0.104)		0.009 (0.110)		0.014 (0.109)
Some College			0.004 (0.087)		-0.020 (0.092)		-0.014 (0.092)
College +			-0.047 (0.099)		-0.100 (0.119)		-0.076 (0.115)
Household Size			0.007 (0.019)		0.010 (0.019)		0.014 (0.019)
Mother Married at Teen's Birth			0.005 (0.078)		0.054 (0.091)		0.049 (0.090)
Mother's Age at Teen's Birth			-0.004 (0.005)		-0.004 (0.006)		-0.002 (0.005)
Mother U.S. Born			-0.002 (0.074)		-0.027 (0.086)		-0.033 (0.087)
Teen Weekly Work Hours			0.003 (0.005)		0.006 (0.006)		0.006 (0.006)
Parental Drug Use			0.053 (0.087)		0.033 (0.081)		0.027 (0.082)
Father Ever Incarcerated			0.093 (0.057)		0.072 (0.072)		0.080 (0.069)
Constant	0.143 † (0.079)	0.098 ** (0.034)	0.217 (0.252)	0.060 (0.067)	0.440 (0.315)	0.062 (0.102)	0.411 (0.325)

† p<0.1 **p<0.05 ***p<0.01 ****p<0.001

Table YS4.7
 KHB Calculation of Mediation of Benefits-Delinquency Effect

	Strain			Virtual Supervision			Communication		
	Confounding Ratio	Confounding Percent	P of Diff.	Confounding Ratio	Confounding Percent	P of Diff.	Confounding Ratio	Confounding Percent	P of Diff.
Outcome: Variety Delinquency	1.260	20.610	0.622	0.983	-1.750	0.953	1.058	5.500	0.808
Outcome: Variety Violence	1.072	6.670	0.647	0.992	-0.850	0.967	1.032	3.070	0.728
Outcome: Variety Property	1.310	23.690	0.770	0.979	-2.160	0.961	1.050	4.770	0.895

All models control for: poverty category, sex, race, employment, household size, primary caregiver education, relationship between teen and primary caregiver, parents' relationship status at teen's birth, mother U.S. bom, mother's age at teen's birth, and probability of attrition.

Attrition Adjustment

Table A3.1
Logistic Regression Estimation of Any Delinquency - Poverty Analysis

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)
Poverty Category	-0.050 (0.076)			0.126 (0.089)		
Number of Waves in Poverty		0.149 * (0.063)			0.070 (0.079)	
Change in Poverty (Ref=No Change)						
Moved Into Poverty			-0.173 (0.254)			-0.538 * (0.253)
Moved Out of Poverty			-0.025 (0.270)			-0.574 * (0.272)
Race (Ref=White)						
Black				0.277 (0.311)	0.096 (0.317)	0.219 (0.300)
Hispanic				0.138 (0.338)	0.065 (0.347)	0.130 (0.339)
Other Race				0.271 (0.427)	0.239 (0.421)	0.274 (0.424)
Male				0.621 ** (0.203)	0.634 ** (0.203)	0.660 ** (0.204)
PCG is Teen's Parent				-0.157 (0.396)	-0.077 (0.393)	-0.131 (0.407)
Household Adult Employed				-0.130 (0.263)	-0.005 (0.260)	-0.123 (0.263)
PCG Education (Ref=<HS)						
High School				-0.222 (0.320)	-0.161 (0.320)	-0.234 (0.313)
Some College				-0.228 (0.271)	-0.090 (0.277)	-0.192 (0.271)
College +				-0.199 (0.360)	0.029 (0.371)	-0.144 (0.358)
Household Size				-0.016 (0.059)	-0.031 (0.058)	-0.020 (0.058)
Mother Married at Teen's Birth				-0.453 † (0.245)	-0.438 † (0.244)	-0.526 * (0.239)
Mother's Age at Teen's Birth				-0.034 (0.021)	-0.028 (0.020)	-0.033 (0.021)
Mother U.S. Born				0.335 (0.447)	0.357 (0.451)	0.329 (0.446)
Teen Weekly Work Hours				0.019 (0.025)	0.018 (0.025)	0.020 (0.025)
Parental Drug Use				0.216 (0.258)	0.197 (0.261)	0.233 (0.256)
Father Ever Incarcerated				0.122 (0.215)	-0.001 (0.219)	0.087 (0.211)
Probability of Attrition				0.797 (1.945)	0.426 (1.971)	0.658 (1.953)
Constant	-0.239 (0.260)	-0.612 *** (0.146)	-0.380 ** (0.125)	-0.211 (1.169)	-0.110 (1.118)	0.370 (1.129)

† p<0.1 *p<0.05 **p<0.01 ***p<0.001

Table A3.2
Logistic Regression Estimation of Any Violence - Poverty Analysis

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)
Poverty Category	-0.270 ** (0.086)			-0.029 (0.094)		
Number of Waves in Poverty		0.292 *** (0.070)			0.155 † (0.086)	
Change in Poverty (Ref=No Change)						
Moved Into Poverty			0.145 (0.268)			-0.378 (0.261)
Moved Out of Poverty			0.337 (0.295)			-0.385 (0.303)
Race (Ref=White)						
Black				0.523 (0.376)	0.360 (0.385)	0.589 (0.363)
Hispanic				0.205 (0.445)	0.116 (0.455)	0.237 (0.440)
Other Race				0.194 (0.500)	0.180 (0.488)	0.233 (0.499)
Male				0.692 ** (0.239)	0.711 ** (0.240)	0.718 ** (0.241)
PCG is Teen's Parent				-0.286 (0.439)	-0.228 (0.446)	-0.315 (0.459)
Household Adult Employed				-0.286 (0.276)	-0.217 (0.279)	-0.359 (0.278)
PCG Education (Ref=<HS)						
High School				0.112 (0.342)	0.176 (0.344)	0.087 (0.336)
Some College				-0.036 (0.293)	0.090 (0.308)	-0.068 (0.291)
College +				-0.495 (0.439)	-0.329 (0.462)	-0.580 (0.438)
Household Size				-0.050 (0.066)	-0.055 (0.064)	-0.042 (0.064)
Mother Married at Teen's Birth				-0.114 (0.276)	-0.096 (0.275)	-0.160 (0.270)
Mother's Age at Teen's Birth				-0.061 * (0.027)	-0.055 * (0.025)	-0.063 * (0.027)
Mother U.S. Born				1.105 * (0.474)	1.154 * (0.470)	1.105 * (0.471)
Teen Weekly Work Hours				0.010 (0.026)	0.007 (0.026)	0.011 (0.026)
Parental Drug Use				0.141 (0.278)	0.130 (0.275)	0.166 (0.272)
Father Ever Incarcerated				-0.013 (0.212)	-0.115 (0.215)	0.023 (0.209)
Probability of Attrition				3.377 (2.090)	3.084 (2.107)	3.528 † (2.082)
Constant	-0.231 (0.275)	-1.552 *** (0.178)	-1.163 *** (0.144)	-0.925 (1.297)	-1.470 (1.224)	-0.840 (1.254)

† p<0.1 *p<0.05 **p<0.01 ***p<0.001

Table A3.3
 Logistic Regression Estimation of Any Property Offending - Poverty Analysis

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
	<u>Coef (SE)</u>	<u>Coef (SE)</u>	<u>Coef (SE)</u>	<u>Coef (SE)</u>	<u>Coef (SE)</u>	<u>Coef (SE)</u>
Poverty Category	-0.247 ** (0.095)			-0.088 (0.109)		
Number of Waves in Poverty		0.233 ** (0.090)			0.129 (0.119)	
Change in Poverty (Ref=No Change)						
Moved Into Poverty			-0.531 (0.349)			-0.936 ** (0.336)
Moved Out of Poverty			-0.244 (0.347)			-0.771 * (0.362)
Race (Ref=White)						
Black				0.187 (0.466)	0.094 (0.479)	0.327 (0.450)
Hispanic				0.232 (0.453)	0.176 (0.464)	0.299 (0.440)
Other Race				-0.003 (0.648)	0.015 (0.631)	0.110 (0.640)
Male				0.383 (0.293)	0.390 (0.292)	0.434 (0.293)
PCG is Teen's Parent				-0.449 (0.513)	-0.425 (0.511)	-0.496 (0.504)
Household Adult Employed				-0.096 (0.320)	-0.078 (0.327)	-0.265 (0.325)
PCG Education (Ref=<HS)						
High School				0.651 (0.421)	0.694 (0.430)	0.588 (0.411)
Some College				0.293 (0.371)	0.367 (0.393)	0.217 (0.364)
College +				-0.195 (0.483)	-0.128 (0.531)	-0.409 (0.493)
Household Size				-0.017 (0.080)	-0.015 (0.079)	0.001 (0.077)
Mother Married at Teen's Birth				0.117 (0.361)	0.126 (0.358)	0.043 (0.355)
Mother's Age at Teen's Birth				-0.027 (0.032)	-0.023 (0.029)	-0.032 (0.032)
Mother U.S. Born				0.200 (0.542)	0.221 (0.537)	0.201 (0.528)
Teen Weekly Work Hours				0.025 (0.032)	0.023 (0.032)	0.027 (0.033)
Parental Drug Use				0.000 (0.329)	-0.004 (0.326)	0.042 (0.324)
Father Ever Incarcerated				0.291 (0.274)	0.242 (0.289)	0.391 (0.276)
Probability of Attrition				0.678 (2.425)	0.489 (2.373)	1.065 (2.283)
Constant	-0.982 ** (0.337)	-2.142 *** (0.200)	-1.686 *** (0.167)	-1.340 (1.491)	-1.941 (1.380)	-1.288 (1.410)

† p<0.1 *p<0.05 **p<0.01 ***p<0.001

Table A3.4
Logistic Regression Estimation of Any Delinquency - Benefits Analysis

		Model 1	Model 2	Model 3	Model 4
		Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)
Any Benefits		0.186 (0.213)	-0.279 (0.257)		
Any Benefits (excluding UI/WC)				0.262 (0.201)	-0.313 (0.224)
Race	(Ref=White)				
	Black		0.243 (0.308)		0.259 (0.307)
	Hispanic		0.140 (0.338)		0.151 (0.336)
	Other Race		0.292 (0.420)		0.282 (0.422)
Male			0.637 ** (0.201)		0.632 ** (0.202)
PCG is Teen's Parent			-0.124 (0.398)		-0.143 (0.400)
Household Adult Employed			-0.111 (0.260)		-0.141 (0.263)
PCG Education	(Ref=<HS)				
	High School		-0.204 (0.312)		-0.213 (0.313)
	Some College		-0.172 (0.271)		-0.172 (0.270)
	College +		-0.116 (0.363)		-0.125 (0.359)
Household Size			-0.020 (0.058)		-0.016 (0.057)
Mother Married at Teen's Birth			-0.500 * (0.243)		-0.497 * (0.242)
Mother's Age at Teen's Birth			-0.030 (0.021)		-0.033 (0.021)
Mother U.S. Born			0.381 (0.450)		0.381 (0.450)
Teen Weekly Work Hours			0.020 (0.025)		0.021 (0.025)
Parental Drug Use			0.225 (0.261)		0.239 (0.260)
Father Ever Incarcerated			0.092 (0.211)		0.096 (0.209)
Probability of Attrition			0.776 (1.980)		0.779 (1.963)
Constant		-0.511 ** (0.174)	0.190 (1.138)	-0.525 ** (0.160)	0.262 (1.137)

† p<0.1 *p<0.05 **p<0.01 ***p<0.001

Table A3.5
Logistic Regression Estimation of Any Violence - Benefits Analysis

	Model 1	Model 2	Model 3	Model 4
	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)
Any Benefits	0.936 ** (0.271)	0.388 (0.336)		
Any Benefits (excluding UI/WC)			0.802 ** (0.244)	0.015 (0.248)
Race (Ref=White)				
Black		0.457 (0.375)		0.544 (0.371)
Hispanic		0.167 (0.428)		0.211 (0.443)
Other Race		0.143 (0.516)		0.202 (0.504)
Male		0.681 ** (0.241)		0.690 ** (0.239)
PCG is Teen's Parent		-0.282 (0.428)		-0.296 (0.438)
Household Adult Employed		-0.224 (0.273)		-0.300 (0.276)
PCG Education (Ref=<HS)				
High School		0.117 (0.342)		0.107 (0.338)
Some College		-0.035 (0.287)		-0.051 (0.290)
College +		-0.449 (0.443)		-0.524 (0.441)
Household Size		-0.058 (0.066)		-0.048 (0.064)
Mother Married at Teen's Birth		-0.048 (0.278)		-0.112 (0.274)
Mother's Age at Teen's Birth		-0.062 * (0.027)		-0.062 * (0.027)
Mother U.S. Born		1.058 * (0.478)		1.101 * (0.478)
Teen Weekly Work Hours		0.010 (0.027)		0.010 (0.026)
Parental Drug Use		0.120 (0.282)		0.143 (0.276)
Father Ever Incarcerated		-0.050 (0.211)		0.001 (0.203)
Probability of Attrition		3.217 (2.112)		3.426 (2.102)
Constant	-1.672 *** (0.239)	-1.165 (1.291)	-1.500 *** (0.210)	-1.006 (1.263)

† p<0.1 *p<0.05 **p<0.01 ***p<0.001

Table A3.6

Logistic Regression Estimation of Any Property Offending - Benefits Analysis

		Model 1	Model 2	Model 3	Model 4
		Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)
Any Benefits		0.281 (0.311)	-0.243 (0.334)		
Any Benefits (excluding UI/WC)				0.368 (0.285)	-0.266 (0.318)
Race	(Ref=White)				
	Black		0.322 (0.463)		0.341 (0.473)
	Hispanic		0.285 (0.444)		0.304 (0.449)
	Other Race		0.071 (0.652)		0.077 (0.653)
Male			0.390 (0.287)		0.388 (0.288)
PCG is Teen's Parent			-0.493 (0.516)		-0.509 (0.517)
Household Adult Employed			-0.200 (0.321)		-0.223 (0.325)
PCG Education	(Ref=<HS)				
	High School		0.627 (0.414)		0.623 (0.413)
	Some College		0.239 (0.363)		0.243 (0.364)
	College +		-0.344 (0.499)		-0.348 (0.495)
Household Size			-0.003 (0.078)		0.000 (0.078)
Mother Married at Teen's Birth			0.082 (0.361)		0.089 (0.363)
Mother's Age at Teen's Birth			-0.029 (0.032)		-0.031 (0.033)
Mother U.S. Born			0.225 (0.536)		0.227 (0.537)
Teen Weekly Work Hours			0.026 (0.032)		0.027 (0.032)
Parental Drug Use			0.023 (0.327)		0.035 (0.325)
Father Ever Incarcerated			0.373 (0.267)		0.378 (0.264)
Probability of Attrition			1.026 (2.358)		1.034 (2.358)
Constant		-1.936 *** (0.272)	-1.481 (1.432)	-1.949 *** (0.236)	-1.450 (1.443)

† p<0.1 *p<0.05 **p<0.01 ***p<0.001

Table A3.7
Logistic Regression Estimation of Any Delinquency - Mediation and Moderation Analysis

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)
Poverty Category	0.113 (0.091)			0.223 (0.157)		
Number of Waves in Poverty		0.081 (0.078)			0.093 (0.164)	
Change in Poverty (Ref=No Change)						
Moved Into Poverty			-0.500 * (0.254)			-0.966 (0.670)
Moved Out of Poverty			-0.555 * (0.272)			-0.949 † (0.529)
Any Benefits	-0.241 (0.262)	-0.305 (0.260)	-0.209 (0.256)	0.391 (0.711)	-0.288 (0.323)	-0.297 (0.288)
Poverty Category*Any Benefits				-0.175 (0.188)		
Waves in Poverty*Any Benefits					-0.016 (0.170)	
Into Poverty*Any Benefits						0.590 (0.731)
Out of Poverty*Any Benefits						0.522 (0.616)
Race (Ref=White)						
Black	0.327 (0.310)	0.160 (0.318)	0.269 (0.304)	0.323 (0.311)	0.160 (0.316)	0.269 (0.305)
Hispanic	0.165 (0.336)	0.098 (0.345)	0.156 (0.336)	0.186 (0.338)	0.096 (0.346)	0.172 (0.337)
Other Race	0.313 (0.421)	0.295 (0.414)	0.310 (0.420)	0.307 (0.423)	0.295 (0.413)	0.318 (0.423)
Male	0.632 ** (0.201)	0.650 ** (0.201)	0.667 ** (0.203)	0.629 ** (0.202)	0.651 ** (0.202)	0.655 ** (0.203)
PCG is Teen's Parent	-0.163 (0.404)	-0.084 (0.403)	-0.141 (0.414)	-0.159 (0.401)	-0.085 (0.402)	-0.138 (0.411)
Household Adult Employed	-0.177 (0.266)	-0.068 (0.265)	-0.164 (0.267)	-0.132 (0.268)	-0.072 (0.265)	-0.142 (0.266)
PCG Education (Ref=<HS)						
High School	-0.225 (0.319)	-0.162 (0.319)	-0.237 (0.313)	-0.207 (0.318)	-0.164 (0.316)	-0.240 (0.313)
Some College	-0.233 (0.275)	-0.093 (0.283)	-0.199 (0.275)	-0.232 (0.272)	-0.092 (0.284)	-0.194 (0.275)
College +	-0.235 (0.367)	-0.017 (0.379)	-0.180 (0.367)	-0.262 (0.368)	-0.014 (0.383)	-0.185 (0.369)
Household Size	-0.011 (0.058)	-0.023 (0.058)	-0.015 (0.058)	-0.013 (0.059)	-0.022 (0.057)	-0.014 (0.058)
Mother Married at Teen's Birth	-0.498 * (0.244)	-0.494 * (0.242)	-0.563 * (0.238)	-0.501 * (0.244)	-0.493 * (0.242)	-0.592 * (0.242)
Mother's Age at Teen's Birth	-0.033 (0.021)	-0.027 (0.020)	-0.032 (0.021)	-0.032 (0.021)	-0.027 (0.020)	-0.031 (0.021)
Mother U.S. Born	0.370 (0.445)	0.404 (0.449)	0.361 (0.445)	0.360 (0.445)	0.408 (0.447)	0.356 (0.445)
Teen Weekly Work Hours	0.020 (0.025)	0.019 (0.025)	0.020 (0.025)	0.018 (0.025)	0.019 (0.025)	0.020 (0.025)
Parental Drug Use	0.232 (0.258)	0.218 (0.260)	0.246 (0.256)	0.224 (0.255)	0.219 (0.261)	0.232 (0.258)
Father Ever Incarcerated	0.148 (0.211)	0.034 (0.213)	0.113 (0.209)	0.143 (0.212)	0.033 (0.214)	0.114 (0.209)
Probability of Attrition	0.943 (1.959)	0.613 (1.990)	0.799 (1.973)	0.907 (1.953)	0.607 (1.990)	0.728 (1.977)
Constant	-0.107 (1.182)	-0.051 (1.122)	0.418 (1.133)	-0.590 (1.321)	-0.059 (1.125)	0.433 (1.133)

† p<0.1 *p<0.05 **p<0.01 ***p<0.001

Table A3.8
Logistic Regression Estimation of Any Violence - Mediation and Moderation Analysis

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)
Poverty Category	-0.009 (0.100)			-0.118 (0.174)		
Number of Waves in Poverty		0.143 (0.091)			0.323 † (0.188)	
Change in Poverty (Ref=No Change)						
Moved Into Poverty			-0.462 † (0.266)			-1.275 (0.863)
Moved Out of Poverty			-0.434 (0.307)			-0.367 (0.648)
Any Benefits	0.385 (0.349)	0.341 (0.342)	0.461 (0.333)	-0.168 (0.763)	0.620 (0.444)	0.425 (0.374)
Poverty Category*Any Benefits				0.157 (0.211)		
Waves in Poverty*Any Benefits					-0.236 (0.192)	
Into Poverty*Any Benefits						0.900 (0.917)
Out of Poverty*Any Benefits						-0.069 (0.747)
Race (Ref=White)						
Black	0.451 (0.380)	0.294 (0.391)	0.487 (0.370)	0.452 (0.375)	0.288 (0.383)	0.481 (0.371)
Hispanic	0.165 (0.430)	0.083 (0.441)	0.183 (0.426)	0.149 (0.425)	0.041 (0.437)	0.185 (0.425)
Other Race	0.141 (0.511)	0.128 (0.499)	0.169 (0.511)	0.146 (0.505)	0.103 (0.490)	0.167 (0.513)
Male	0.681 ** (0.241)	0.699 ** (0.241)	0.715 ** (0.245)	0.686 ** (0.244)	0.712 ** (0.243)	0.707 ** (0.246)
PCG is Teen's Parent	-0.279 (0.429)	-0.221 (0.437)	-0.299 (0.448)	-0.281 (0.426)	-0.231 (0.432)	-0.316 (0.452)
Household Adult Employed	-0.220 (0.274)	-0.153 (0.280)	-0.279 (0.279)	-0.253 (0.275)	-0.200 (0.275)	-0.265 (0.279)
PCG Education (Ref=<HS)						
High School	0.118 (0.346)	0.179 (0.348)	0.096 (0.339)	0.106 (0.338)	0.144 (0.334)	0.095 (0.340)
Some College	-0.031 (0.290)	0.091 (0.305)	-0.053 (0.288)	-0.027 (0.291)	0.097 (0.304)	-0.053 (0.288)
College +	-0.440 (0.440)	-0.278 (0.467)	-0.501 (0.443)	-0.413 (0.438)	-0.232 (0.477)	-0.499 (0.446)
Household Size	-0.058 (0.066)	-0.063 (0.066)	-0.053 (0.065)	-0.056 (0.065)	-0.052 (0.062)	-0.052 (0.065)
Mother Married at Teen's Birth	-0.049 (0.278)	-0.038 (0.278)	-0.085 (0.272)	-0.045 (0.278)	-0.026 (0.276)	-0.097 (0.274)
Mother's Age at Teen's Birth	-0.062 * (0.027)	-0.056 * (0.025)	-0.064 * (0.027)	-0.062 * (0.026)	-0.057 * (0.025)	-0.063 * (0.027)
Mother U.S. Born	1.059 * (0.476)	1.111 * (0.472)	1.048 * (0.474)	1.065 * (0.472)	1.178 * (0.473)	1.043 * (0.474)
Teen Weekly Work Hours	0.010 (0.027)	0.007 (0.026)	0.010 (0.027)	0.011 (0.026)	0.008 (0.026)	0.010 (0.027)
Parental Drug Use	0.119 (0.281)	0.109 (0.279)	0.142 (0.274)	0.123 (0.283)	0.118 (0.282)	0.137 (0.276)
Father Ever Incarcerated	-0.054 (0.210)	-0.151 (0.216)	-0.035 (0.208)	-0.050 (0.208)	-0.153 (0.211)	-0.030 (0.208)
Probability of Attrition	3.198 (2.107)	2.926 (2.116)	3.290 (2.098)	3.217 (2.089)	2.850 (2.102)	3.209 (2.101)
Constant	-1.143 (1.351)	-1.582 (1.240)	-0.999 (1.279)	-0.704 (1.420)	-1.766 (1.252)	-0.964 (1.284)

† p<0.1 *p<0.05 **p<0.01 ***p<0.001

Table A3.9
Logistic Regression Estimation of Any Property Offending - Mediation and Moderation Analysis

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)
Poverty Category	-0.105 (0.110)			-0.162 (0.192)		
Number of Waves in Poverty		0.139 (0.119)			0.321 (0.201)	
Change in Poverty (Ref=No Change)						
Moved Into Poverty			-0.916 ** (0.338)			-1.489 (1.127)
Moved Out of Poverty			-0.760 * (0.360)			-1.071 (0.866)
Any Benefits	-0.287 (0.340)	-0.294 (0.340)	-0.104 (0.332)	-0.584 (0.856)	0.073 (0.444)	-0.145 (0.368)
Poverty Category*Any Benefits				0.090 (0.225)		
Waves in Poverty*Any Benefits					-0.264 (0.204)	
Into Poverty*Any Benefits						0.650 (1.201)
Out of Poverty*Any Benefits						0.380 (0.978)
Race (Ref=White)						
Black	0.245 (0.470)	0.155 (0.481)	0.351 (0.460)	0.245 (0.466)	0.156 (0.464)	0.355 (0.458)
Hispanic	0.260 (0.449)	0.204 (0.459)	0.312 (0.439)	0.251 (0.450)	0.159 (0.463)	0.321 (0.440)
Other Race	0.041 (0.644)	0.065 (0.629)	0.125 (0.644)	0.045 (0.640)	0.037 (0.624)	0.129 (0.649)
Male	0.395 (0.288)	0.404 (0.287)	0.435 (0.291)	0.399 (0.293)	0.431 (0.292)	0.432 (0.292)
PCG is Teen's Parent	-0.458 (0.514)	-0.436 (0.511)	-0.501 (0.505)	-0.462 (0.515)	-0.457 (0.520)	-0.501 (0.507)
Household Adult Employed	-0.145 (0.327)	-0.133 (0.334)	-0.284 (0.332)	-0.166 (0.333)	-0.202 (0.332)	-0.276 (0.328)
PCG Education (Ref=<HS)						
High School	0.649 (0.417)	0.693 (0.426)	0.587 (0.409)	0.643 (0.411)	0.673 (0.420)	0.588 (0.410)
Some College	0.293 (0.374)	0.367 (0.395)	0.214 (0.365)	0.299 (0.374)	0.392 (0.402)	0.217 (0.365)
College +	-0.232 (0.494)	-0.172 (0.540)	-0.427 (0.504)	-0.212 (0.493)	-0.096 (0.561)	-0.428 (0.508)
Household Size	-0.010 (0.079)	-0.007 (0.078)	0.003 (0.077)	-0.009 (0.078)	0.007 (0.073)	0.005 (0.077)
Mother Married at Teen's Birth	0.071 (0.352)	0.081 (0.348)	0.025 (0.352)	0.074 (0.352)	0.091 (0.351)	0.008 (0.359)
Mother's Age at Teen's Birth	-0.027 (0.032)	-0.023 (0.029)	-0.032 (0.032)	-0.027 (0.031)	-0.024 (0.029)	-0.031 (0.032)
Mother U.S. Born	0.244 (0.533)	0.268 (0.530)	0.219 (0.530)	0.247 (0.530)	0.350 (0.525)	0.216 (0.532)
Teen Weekly Work Hours	0.026 (0.032)	0.023 (0.032)	0.027 (0.033)	0.027 (0.032)	0.025 (0.031)	0.027 (0.032)
Parental Drug Use	0.017 (0.327)	0.014 (0.324)	0.046 (0.323)	0.018 (0.328)	0.023 (0.327)	0.040 (0.324)
Father Ever Incarcerated	0.322 (0.262)	0.275 (0.274)	0.404 (0.266)	0.322 (0.260)	0.268 (0.265)	0.409 (0.266)
Probability of Attrition	0.848 (2.395)	0.655 (2.344)	1.130 (2.292)	0.849 (2.387)	0.512 (2.337)	1.095 (2.300)
Constant	-1.199 (1.476)	-1.869 (1.364)	-1.262 (1.405)	-0.977 (1.592)	-2.071 (1.357)	-1.267 (1.406)

† p<0.1 *p<0.05 **p<0.01 ***p<0.001

Table A.3.10
KHB Calculation of Mediation of Poverty-Delinquency Effect

	Poverty Category			Number of Waves in Poverty			Into Poverty			Out of Poverty		
	Confound- ing Ratio	Confound- ing Percent	P of Diff.	Confound- ing Ratio	Confound- ing Percent	P of Diff.	Confound- ing Ratio	Confound- ing Percent	P of Diff.	Confound- ing Ratio	Confound- ing Percent	P of Diff.
Outcome: Any Delinquency	1.126	11.180	0.903	0.874	-14.370	0.947	1.088	8.090	0.707	1.029	2.780	0.867
Outcome: Any Violence	1.175	14.920	0.733	0.938	-6.560	0.855	1.324	24.460	0.739	-0.037	2773.210	0.903
Outcome: Any Property	-0.037	2773.210	0.903	1.084	7.730	0.947	0.803	-24.490	0.686	0.899	-11.220	0.865

All models control for: sex, race, employment, household size, primary caregiver education, relationship between teen and primary caregiver, parents' relationship status at teen's birth, mother U.S. born, mother's age at teen's birth, and probability of attrition.

Table A4.1
Multinomial Logistic Regression Estimation of Change in Strain (Ref=No Strain)

	Model 1			Model 2		
	Same Strain	More Strain	Less Strain	Same Strain	More Strain	Less Strain
	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)
Any Benefits	1.515 *** (0.390)	2.201 ** (0.692)	0.582 (0.380)	0.859 * (0.412)	1.714 ** (0.563)	0.218 (0.428)
Strain Age 9	4.710 *** (0.871)	2.972 *** (0.747)	5.502 *** (0.832)	4.623 *** (0.864)	2.924 *** (0.732)	5.574 *** (0.808)
Poverty Category				-0.123 (0.151)	-0.158 (0.130)	-0.084 (0.139)
Race (Ref=White)						
Black				-0.496 (0.529)	0.040 (0.522)	0.836 (0.554)
Hispanic				-0.872 (0.626)	0.173 (0.447)	0.609 (0.525)
Other Race				-0.048 (0.848)	-0.706 (0.646)	-0.993 (1.008)
Male				-0.366 (0.350)	-0.248 (0.405)	-0.343 (0.367)
PCG is Teen's Parent				1.099 (0.738)	-0.471 (0.706)	-0.099 (0.620)
Household Adult Employed				0.424 (0.532)	-0.657 (0.404)	0.395 (0.632)
PCG Education (Ref=<HS)						
High School				-0.541 (0.499)	-0.583 (0.460)	-0.006 (0.512)
Some College				-0.675 (0.466)	-0.395 (0.406)	-0.070 (0.489)
College +				-1.647 * (0.642)	-0.553 (0.583)	-1.076 † (0.635)
Household Size				-0.074 (0.112)	0.042 (0.068)	0.023 (0.098)
Mother Married at Teen's Birth				-0.606 (0.440)	-0.169 (0.484)	0.108 (0.385)
Mother's Age at Teen's Birth				-0.041 (0.037)	-0.002 (0.043)	-0.045 (0.037)
Mother U.S. Born				-0.550 (0.824)	0.392 (0.668)	1.142 (0.856)
Teen Weekly Work Hours				0.020 (0.028)	-0.013 (0.025)	-0.026 (0.032)
Parental Drug Use				0.261 (0.480)	-0.502 (0.383)	-0.592 (0.461)
Father Ever Incarcerated				0.161 (0.349)	0.341 (0.265)	-0.398 (0.337)
Probability of Attrition				-3.168 (3.246)	-1.812 (3.089)	-1.129 (3.651)
Constant	-4.292 *** (0.435)	-3.547 *** (0.694)	-4.041 *** (0.344)	-0.728 (1.891)	-1.046 (1.648)	-3.212 † (1.881)

† p<0.1 *p<0.05 **p<0.01 ***p<0.001

Table A4.2

Multinomial Logistic Regression Estimation of Change in Virtual Supervision (Ref=No Change)

		Model 1		Model 2	
		More Supervision	Less Supervision	More Supervision	Less Supervision
		Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)
Any Benefits		-0.351 (0.376)	-0.315 (0.340)	-0.278 (0.452)	-0.503 (0.367)
Supervision Age 9		-3.446 (0.404)	*** 0.204 (0.532)	-3.672 (0.404)	*** 0.205 (0.562)
Poverty Category				0.014 (0.150)	-0.173 (0.142)
Race	(Ref=White)				
	Black			-0.207 (0.568)	-0.239 (0.416)
	Hispanic			-0.466 (0.635)	0.058 (0.524)
	Other Race			0.243 (0.814)	0.314 (0.585)
Male				0.265 (0.433)	0.513 (0.317)
PCG is Teen's Parent				-0.588 (0.933)	-0.654 (0.663)
Household Adult Employed				-0.012 (0.499)	-0.372 (0.428)
PCG Education	(Ref=<HS)				
	High School			0.876 (0.684)	0.239 (0.500)
	Some College			0.401 (0.564)	0.196 (0.438)
	College +			0.059 (0.721)	0.632 (0.454)
Household Size				-0.074 (0.112)	0.196 (0.095)
Mother Married at Teen's Birth				0.023 (0.379)	-0.514 (0.374)
Mother's Age at Teen's Birth				0.012 (0.044)	0.069 (0.027)
Mother U.S. Born				0.132 (0.856)	-0.441 (0.637)
Teen Weekly Work Hours				-0.021 (0.035)	-0.009 (0.032)
Parental Drug Use				-0.330 (0.530)	-0.256 (0.419)
Father Ever Incarcerated				-0.042 (0.410)	0.314 (0.337)
Probability of Attrition				1.564 (3.353)	-1.183 (2.745)
Constant		8.032 (1.025)	*** -1.994 (1.578)	8.333 (2.578)	** -2.904 (2.524)

† p<0.1 *p<0.05 **p<0.01 ***p<0.001

Table A4.3
Multinomial Logistic Regression Estimation of Change in Intimacy of Communication (Ref=No Change)

	Model 1				Model 2			
	More Communication		Less Communication		More Communication		Less Communication	
	Coef	(SE)	Coef	(SE)	Coef	(SE)	Coef	(SE)
Any Benefits	-0.041		0.778	**	0.034		0.627	*
	(0.267)		(0.258)		(0.309)		(0.303)	
Communication Age 9	-2.411	***	-0.242		-2.594	***	-0.259	
	(0.373)		(0.309)		(0.390)		(0.305)	
Poverty Category					0.106		0.047	
					(0.110)		(0.116)	
Race (Ref=White)								
Black					0.103		0.301	
					(0.455)		(0.361)	
Hispanic					0.168		-0.012	
					(0.383)		(0.343)	
Other Race					0.061		0.237	
					(0.579)		(0.480)	
Male					-0.189		-0.546	*
					(0.274)		(0.249)	
PCG is Teen's Parent					-0.421		-1.377	*
					(0.868)		(0.534)	
Household Adult Employed					0.110		0.266	
					(0.369)		(0.342)	
PCG Education (Ref=<HS)								
High School					0.206		-0.014	
					(0.406)		(0.379)	
Some College					0.007		-0.318	
					(0.377)		(0.320)	
College +					-0.319		-0.585	
					(0.453)		(0.412)	
Household Size					-0.104		-0.037	
					(0.084)		(0.082)	
Mother Married at Teen's Birth					-0.432		-0.152	
					(0.309)		(0.338)	
Mother's Age at Teen's Birth					-0.009		-0.014	
					(0.028)		(0.026)	
Mother U.S. Born					0.045		0.263	
					(0.547)		(0.544)	
Teen Weekly Work Hours					-0.017		-0.034	
					(0.025)		(0.022)	
Parental Drug Use					-0.153		0.262	
					(0.380)		(0.365)	
Father Ever Incarcerated					-0.878	**	-0.397	
					(0.288)		(0.272)	
Probability of Attrition					0.411		2.068	
					(2.511)		(2.395)	
Constant	8.775	***	0.218		10.608	***	1.894	
	(1.321)		(1.155)		(2.139)		(1.862)	

† p<0.1 *p<0.05 **p<0.01 ***p<0.001

Table A4.4
Logistic Regression Estimation of Any Delinquency

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7
	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)
Any Benefits	0.186 (0.213)	0.162 (0.237)	-0.227 (0.275)	0.226 (0.214)	-0.187 (0.268)	0.132 (0.212)	-0.285 (0.265)
Change in Strain (Ref=No Strain)							
Same Strain		-0.117 (0.433)	-0.396 (0.421)				
More Strain		0.443 (0.348)	0.310 (0.299)				
Less Strain		-0.439 † (0.259)	-0.616 * (0.249)				
Change in Virtual Supervision							
More Supervision				0.147 (0.272)	0.182 (0.267)		
Less Supervision				0.787 * (0.367)	0.882 * (0.382)		
Change in Intimacy of Communication							
More Communication						-0.144 (0.290)	-0.110 (0.305)
Less Communication						0.401 (0.255)	0.473 † (0.253)
Poverty Category			0.061 (0.094)		0.137 (0.094)		0.107 (0.091)
Race (Ref=White)							
Black			0.382 (0.342)		0.362 (0.311)		0.289 (0.312)
Hispanic			0.169 (0.363)		0.181 (0.347)		0.191 (0.346)
Other Race			0.389 (0.466)		0.274 (0.413)		0.304 (0.423)
Male			0.628 ** (0.210)		0.600 ** (0.202)		0.688 ** (0.203)
PCG is Teen's Parent			-0.126 (0.388)		-0.094 (0.410)		-0.033 (0.393)
Household Adult Employed			-0.136 (0.284)		-0.145 (0.272)		-0.175 (0.270)
PCG Education (Ref=<HS)							
High School			-0.083 (0.326)		-0.259 (0.329)		-0.229 (0.319)
Some College			-0.125 (0.278)		-0.254 (0.279)		-0.209 (0.276)
College +			-0.140 (0.374)		-0.295 (0.371)		-0.186 (0.370)
Household Size			-0.003 (0.062)		-0.029 (0.060)		-0.011 (0.058)
Mother Married at Teen's Birth			-0.431 † (0.244)		-0.458 † (0.246)		-0.512 * (0.250)
Mother's Age at Teen's Birth			-0.037 † (0.021)		-0.040 † (0.021)		-0.030 (0.021)
Mother U.S. Born			0.363 (0.476)		0.401 (0.448)		0.318 (0.449)
Teen Weekly Work Hours			0.024 (0.028)		0.022 (0.025)		0.022 (0.024)
Parental Drug Use			0.312 (0.271)		0.262 (0.255)		0.200 (0.264)
Father Ever Incarcerated			0.108 (0.216)		0.135 (0.217)		0.197 (0.214)
Probability of Attrition			0.355 (2.098)		1.021 (2.014)		0.588 (1.959)
Constant	-0.511 ** (0.174)	-0.476 * (0.189)	0.150 (1.272)	-0.682 *** (0.192)	-0.227 (1.210)	-0.574 * (0.229)	-0.319 (1.214)

† p<0.1 *p<0.05 **p<0.01 ***p<0.001

Table A4.5
Logistic Regression Estimation of Any Violence

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7
	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)
Any Benefits	0.936 ** (0.271)	0.942 ** (0.299)	0.451 (0.379)	0.971 *** (0.275)	0.428 (0.350)	0.889 ** (0.272)	0.348 (0.346)
Change in Strain							
Same Strain		-0.158 (0.448)	-0.414 (0.430)				
More Strain		0.581 † (0.330)	0.363 (0.280)				
Less Strain		-0.197 (0.278)	-0.574 * (0.279)				
Change in Virtual Supervision							
More Supervision				0.135 (0.332)	0.166 (0.332)		
Less Supervision				0.503 (0.421)	0.612 (0.444)		
Change in Intimacy of Communication							
More Communication						0.264 (0.378)	0.379 (0.393)
Less Communication						0.496 (0.307)	0.530 † (0.309)
Poverty Category			-0.070 (0.105)		0.010 (0.102)		-0.012 (0.100)
Race (Ref=White)							
Black			0.523 (0.454)		0.481 (0.383)		0.442 (0.378)
Hispanic			0.185 (0.480)		0.180 (0.433)		0.168 (0.426)
Other Race			0.014 (0.684)		0.124 (0.510)		0.109 (0.507)
Male			0.672 ** (0.256)		0.654 ** (0.242)		0.721 ** (0.242)
PCG is Teen's Parent			-0.247 (0.435)		-0.235 (0.438)		-0.181 (0.420)
Household Adult Employed			-0.117 (0.295)		-0.205 (0.278)		-0.253 (0.274)
PCG Education (Ref=<HS)							
High School			0.268 (0.363)		0.096 (0.351)		0.116 (0.343)
Some College			0.109 (0.295)		-0.048 (0.291)		-0.006 (0.292)
College +			-0.288 (0.470)		-0.475 (0.447)		-0.385 (0.440)
Household Size			-0.045 (0.070)		-0.070 (0.068)		-0.052 (0.065)
Mother Married at Teen's Birth			-0.010 (0.286)		-0.011 (0.279)		-0.044 (0.287)
Mother's Age at Teen's Birth			-0.066 * (0.029)		-0.068 * (0.028)		-0.061 * (0.027)
Mother U.S. Born			1.137 * (0.532)		1.089 * (0.484)		1.075 * (0.482)
Teen Weekly Work Hours			0.011 (0.031)		0.012 (0.026)		0.013 (0.026)
Parental Drug Use			0.184 (0.296)		0.152 (0.281)		0.099 (0.284)
Father Ever Incarcerated			-0.094 (0.220)		-0.067 (0.214)		-0.018 (0.213)
Probability of Attrition			3.363 (2.295)		3.241 (2.149)		3.118 (2.097)
Constant	-1.672 *** (0.239)	-1.742 *** (0.273)	-1.289 (1.504)	-1.804 *** (0.262)	-1.247 (1.355)	-1.896 *** (0.282)	-1.586 (1.392)

† p<0.1 *p<0.05 **p<0.01 ***p<0.001

Table A4.6
Logistic Regression Estimation of Any Property Offending

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7
	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)
Any Benefits	0.281 (0.311)	0.200 (0.325)	-0.362 (0.373)	0.310 (0.313)	-0.264 (0.342)	0.266 (0.317)	-0.291 (0.335)
Change in Strain							
Same Strain		-0.640 (0.481)	-1.049 † (0.554)				
More Strain		0.689 † (0.409)	0.445 (0.338)				
Less Strain		-0.399 (0.315)	-0.813 * (0.337)				
Change in Virtual Supervision							
More Supervision				0.125 (0.386)	0.059 (0.387)		
Less Supervision				0.448 (0.554)	0.495 (0.545)		
Change in Intimacy of Communication							
More Communication						-0.260 (0.512)	-0.265 (0.489)
Less Communication						0.105 (0.383)	0.091 (0.347)
Poverty Category			-0.226 * (0.113)		-0.090 (0.113)		-0.108 (0.109)
Race (Ref=White)							
Black			0.400 (0.616)		0.265 (0.474)		0.226 (0.466)
Hispanic			0.381 (0.526)		0.267 (0.445)		0.277 (0.454)
Other Race			0.006 (1.121)		0.011 (0.639)		0.049 (0.637)
Male			0.443 (0.320)		0.370 (0.289)		0.403 (0.285)
PCG is Teen's Parent			-0.457 (0.502)		-0.413 (0.508)		-0.413 (0.511)
Household Adult Employed			-0.127 (0.356)		-0.129 (0.327)		-0.134 (0.329)
PCG Education (Ref=<HS)							
High School			1.051 * (0.431)		0.634 (0.419)		0.642 (0.414)
Some College			0.677 † (0.377)		0.278 (0.373)		0.299 (0.376)
College +			0.145 (0.514)		-0.276 (0.500)		-0.219 (0.496)
Household Size			0.016 (0.085)		-0.020 (0.079)		-0.010 (0.078)
Mother Married at Teen's Birth			0.191 (0.364)		0.101 (0.359)		0.051 (0.347)
Mother's Age at Teen's Birth			-0.027 (0.033)		-0.031 (0.032)		-0.024 (0.031)
Mother U.S. Born			0.336 (0.591)		0.248 (0.542)		0.200 (0.531)
Teen Weekly Work Hours			0.027 (0.042)		0.027 (0.031)		0.026 (0.032)
Parental Drug Use			0.144 (0.337)		0.041 (0.328)		0.004 (0.333)
Father Ever Incarcerated			0.319 (0.278)		0.321 (0.269)		0.344 (0.259)
Probability of Attrition			0.070 (2.468)		0.836 (2.450)		0.627 (2.388)
Constant	-1.936 *** (0.272)	-1.988 *** (0.313)	-1.335 (1.625)	-2.062 *** (0.313)	-1.253 (1.486)	-1.907 *** (0.322)	-1.192 (1.492)

† p<0.1 *p<0.05 **p<0.01 ***p<0.001

Table A4.7
KHB Calculation of Mediation of Benefits-Delinquency Effect

	Strain			Virtual Supervision			Communication		
	Confounding Ratio	Confounding Percent	P of Diff.	Confounding Ratio	Confounding Percent	P of Diff.	Confounding Ratio	Confounding Percent	P of Diff.
Outcome: Any Delinquency	1.088	8.080	0.953	1.220	18.050	0.886	0.905	-10.540	0.922
Outcome: Any Violence	0.966	-3.490	0.962	0.944	-5.990	0.890	1.119	10.630	0.913
Outcome: Any Property	1.122	10.900	0.925	1.034	3.290	0.904	0.926	-7.990	0.910

All models control for: poverty category, sex, race, employment, household size, primary caregiver education, relationship between teen and primary caregiver, parents' relationship status at teen's birth, mother U.S. born, mother's age at teen's birth, and probability of attrition.

City Weight

Table C3.1
Logistic Regression Estimation of Any Delinquency - Poverty Analysis

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)
Poverty Category	-0.078 (0.061)			0.126 (0.082)		
Number of Waves in Poverty		0.056 (0.043)			-0.083 (0.066)	
Change in Poverty (Ref=No Change)						
Moved Into Poverty			0.188 (0.258)			-0.133 (0.269)
Moved Out of Poverty			0.410 † (0.241)			-0.050 (0.250)
Race (Ref=White)						
Black				0.666 † (0.357)	0.650 † (0.356)	0.607 † (0.353)
Hispanic				0.082 (0.428)	0.078 (0.433)	0.039 (0.427)
Other Race				1.212 * (0.483)	1.214 * (0.486)	1.210 * (0.493)
Male				0.449 ** (0.167)	0.463 ** (0.167)	0.462 ** (0.167)
PCG is Teen's Parent				-1.655 (1.086)	-1.648 (1.081)	-1.701 (1.114)
Household Adult Employed				-0.632 (0.384)	-0.613 (0.382)	-0.584 (0.391)
PCG Education (Ref=<HS)						
High School				-0.101 (0.389)	-0.110 (0.403)	-0.058 (0.390)
Some College				-0.326 (0.271)	-0.330 (0.277)	-0.252 (0.266)
College +				-0.686 * (0.335)	-0.660 † (0.335)	-0.573 † (0.345)
Household Size				0.112 † (0.061)	0.109 † (0.062)	0.104 † (0.061)
Mother Married at Teen's Birth				-0.260 (0.213)	-0.263 (0.216)	-0.209 (0.212)
Mother's Age at Teen's Birth				-0.010 (0.015)	-0.009 (0.015)	-0.007 (0.016)
Mother U.S. Born				-0.174 (0.259)	-0.179 (0.261)	-0.165 (0.259)
Teen Weekly Work Hours				0.031 (0.019)	0.032 (0.019)	0.032 (0.020)
Parental Drug Use				0.519 * (0.257)	0.536 * (0.256)	0.515 * (0.257)
Father Ever Incarcerated				0.107 (0.182)	0.108 (0.183)	0.069 (0.181)
Constant	0.634 ** (0.214)	0.294 ** (0.101)	0.303 ** (0.091)	1.164 (1.507)	1.652 (1.537)	1.514 (1.556)

† p<0.1 *p<0.05 **p<0.01 ***p<0.001

Table C3.2
Logistic Regression Estimation of Any Violence - Poverty Analysis

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)
Poverty Category	-0.133 * (0.064)			0.037 (0.095)		
Number of Waves in Poverty		0.088 * (0.064)			0.000 (0.079)	
Change in Poverty (Ref=No Change)						
Moved Into Poverty			0.236 (0.268)			-0.159 (0.292)
Moved Out of Poverty			0.538 * (0.263)			0.097 (0.295)
Race (Ref=White)						
Black				1.059 * (0.477)	1.043 * (0.472)	1.041 * (0.467)
Hispanic				0.321 (0.562)	0.305 (0.567)	0.307 (0.548)
Other Race				1.021 † (0.603)	1.025 † (0.603)	1.016 (0.603)
Male				0.441 * (0.191)	0.444 * (0.189)	0.450 * (0.188)
PCG is Teen's Parent				-1.981 † (1.144)	-1.989 † (1.143)	-1.991 † (1.146)
Household Adult Employed				-1.095 * (0.435)	-1.075 * (0.436)	-1.107 * (0.437)
PCG Education (Ref=<HS)						
High School				0.154 (0.456)	0.170 (0.475)	0.154 (0.444)
Some College				-0.159 (0.296)	-0.136 (0.304)	-0.145 (0.278)
College +				-0.891 † (0.455)	-0.857 † (0.448)	-0.869 † (0.471)
Household Size				0.154 * (0.071)	0.152 * (0.071)	0.152 * (0.070)
Mother Married at Teen's Birth				0.275 (0.233)	0.292 (0.239)	0.301 (0.231)
Mother's Age at Teen's Birth				-0.025 (0.017)	-0.024 (0.017)	-0.025 (0.018)
Mother U.S. Born				-0.188 (0.286)	-0.186 (0.288)	-0.188 (0.284)
Teen Weekly Work Hours				0.019 (0.023)	0.019 (0.023)	0.018 (0.023)
Parental Drug Use				0.391 (0.289)	0.389 (0.285)	0.390 (0.286)
Father Ever Incarcerated				0.114 (0.191)	0.100 (0.193)	0.110 (0.190)
Constant	0.299 (0.219)	-0.269 ** (0.103)	-0.238 * (0.097)	1.057 (1.642)	1.134 (1.731)	1.204 (1.676)

† p<0.1 *p<0.05 **p<0.01 ***p<0.001

Table C3.3
 Logistic Regression Estimation of Any Property Offending - Poverty Analysis

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
	<u>Coef (SE)</u>	<u>Coef (SE)</u>	<u>Coef (SE)</u>	<u>Coef (SE)</u>	<u>Coef (SE)</u>	<u>Coef (SE)</u>
Poverty Category	0.066 (0.066)			0.266 * (0.107)		
Number of Waves in Poverty		-0.096 * (0.044)			-0.188 † (0.104)	
Change in Poverty (Ref=No Change)						
Moved Into Poverty			-0.084 (0.293)			-0.495 (0.326)
Moved Out of Poverty			0.340 (0.298)			-0.141 (0.325)
Race (Ref=White)						
Black				0.741 (0.641)	0.714 (0.631)	0.643 (0.631)
Hispanic				0.259 (0.744)	0.236 (0.751)	0.163 (0.752)
Other Race				1.136 (0.711)	1.134 (0.714)	1.160 (0.733)
Male				0.227 (0.221)	0.263 (0.218)	0.261 (0.219)
PCG is Teen's Parent				-2.272 * (1.050)	-2.252 * (1.021)	-2.332 * (1.060)
Household Adult Employed				-1.307 * (0.514)	-1.271 * (0.515)	-1.218 * (0.512)
PCG Education (Ref=<HS)						
High School				0.648 (0.597)	0.626 (0.627)	0.711 (0.602)
Some College				-0.053 (0.369)	-0.062 (0.387)	0.083 (0.356)
College +				-0.753 (0.536)	-0.715 (0.520)	-0.568 (0.578)
Household Size				0.181 * (0.090)	0.178 † (0.092)	0.164 † (0.088)
Mother Married at Teen's Birth				0.493 † (0.284)	0.486 (0.297)	0.619 * (0.278)
Mother's Age at Teen's Birth				-0.012 (0.020)	-0.010 (0.019)	-0.008 (0.019)
Mother U.S. Born				-0.531 (0.334)	-0.547 (0.335)	-0.516 (0.333)
Teen Weekly Work Hours				0.023 (0.028)	0.025 (0.029)	0.023 (0.029)
Parental Drug Use				0.303 (0.382)	0.322 (0.377)	0.256 (0.371)
Father Ever Incarcerated				-0.054 (0.232)	-0.044 (0.229)	-0.110 (0.236)
Constant	-0.736 ** (0.230)	-0.383 *** (0.108)	-0.541 *** (0.104)	-0.226 (1.690)	0.847 (1.821)	0.568 (1.752)

† p<0.1 *p<0.05 **p<0.01 ***p<0.001

Table C3.4
Logistic Regression Estimation of Any Delinquency - Benefits Analysis

	Model 1	Model 2	Model 3	Model 4
	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)
Any Benefits	0.778 *	-0.146		
	(0.345)	(0.227)		
Any Benefits (excluding UI/WC)			0.854 †	-0.097
			(0.450)	(0.224)
Race (Ref=White)				
Black		0.627 †		0.618 †
		(0.353)		(0.359)
Hispanic		0.044		0.041
		(0.426)		(0.431)
Other Race		1.210 *		1.208 *
		(0.495)		(0.494)
Male		0.462 **		0.460 **
		(0.168)		(0.168)
PCG is Teen's Parent		-1.701		-1.699
		(1.128)		(1.132)
Household Adult Employed		-0.603		-0.594
		(0.362)		(0.363)
PCG Education (Ref=<HS)				
High School		-0.063		-0.062
		(0.387)		(0.387)
Some College		-0.258		-0.256
		(0.266)		(0.265)
College +		-0.587		-0.581
		(0.365)		(0.358)
Household Size		0.109 †		0.106 †
		(0.062)		(0.062)
Mother Married at Teen's Birth		-0.228		-0.222
		(0.216)		(0.216)
Mother's Age at Teen's Birth		-0.007		-0.007
		(0.015)		(0.015)
Mother U.S. Born		-0.153		-0.152
		(0.262)		(0.262)
Teen Weekly Work Hours		0.033		0.032
		(0.020)		(0.020)
Parental Drug Use		0.517 *		0.514 *
		(0.256)		(0.257)
Father Ever Incarcerated		0.069		0.067
		(0.181)		(0.182)
Constant	-0.173	1.560	-0.169	1.535
	(0.279)	(1.488)	0.338	(1.501)

† p<0.1 *p<0.05 **p<0.01 ***p<0.001

Table C3.5
Logistic Regression Estimation of Any Violence - Benefits Analysis

	Model 1	Model 2	Model 3	Model 4
	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)
Any Benefits	1.271 *	0.330		
	(0.484)	(0.260)		
Any Benefits (excluding UI/WC)			1.286 †	0.280
			(0.625)	(0.269)
Race (Ref=White)				
Black		0.983 *		0.991 *
		(0.471)		(0.478)
Hispanic		0.272		0.282
		(0.549)		(0.555)
Other Race		1.004		1.000
		(0.614)		(0.615)
Male		0.439 *		0.441 *
		(0.192)		(0.191)
PCG is Teen's Parent		-1.978 †		-1.974 †
		(1.136)		(1.157)
Household Adult Employed		-0.989 *		-0.985 *
		(0.389)		(0.395)
PCG Education (Ref=<HS)				
High School		0.192		0.195
		(0.447)		(0.450)
Some College		-0.114		-0.109
		(0.279)		(0.279)
College +		-0.783		-0.768
		(0.489)		(0.482)
Household Size		0.144 †		0.146 *
		(0.073)		(0.072)
Mother Married at Teen's Birth		0.328		0.324
		(0.234)		(0.235)
Mother's Age at Teen's Birth		-0.024		-0.022
		(0.017)		(0.017)
Mother U.S. Born		-0.209		-0.212
		(0.290)		(0.288)
Teen Weekly Work Hours		0.017		0.017
		(0.023)		(0.023)
Parental Drug Use		0.396		0.399
		(0.297)		(0.297)
Father Ever Incarcerated		0.075		0.077
		(0.195)		(0.193)
Constant	-1.083 *	0.878	-1.021 †	0.873
	(0.435)	(1.598)	(0.533)	(1.639)

† p<0.1 *p<0.05 **p<0.01 ***p<0.001

Table C3.6
Logistic Regression Estimation of Any Property Offending - Benefits Analysis

	Model 1	Model 2	Model 3	Model 4
	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)
Any Benefits	1.063 (0.630)	0.002 (0.349)		
Any Benefits (excluding UI/WC)			1.121 (0.840)	0.116 (0.357)
Race (Ref=White)				
Black	0.623 (0.627)			0.603 (0.643)
Hispanic	0.131 (0.742)			0.124 (0.755)
Other Race	1.145 (0.741)			1.135 (0.740)
Male	0.250 (0.221)			0.249 (0.221)
PCG is Teen's Parent	-2.288 * (1.060)			-2.284 * (1.076)
Household Adult Employed	-1.150 * (0.453)			-1.116 * (0.458)
PCG Education (Ref=<HS)				
High School	0.745 (0.598)			0.756 (0.605)
Some College	0.102 (0.359)			0.114 (0.362)
College +	-0.511 (0.617)			-0.467 (0.600)
Household Size	0.166 † (0.092)			0.164 † (0.092)
Mother Married at Teen's Birth	0.614 * (0.281)			0.628 * (0.286)
Mother's Age at Teen's Birth	-0.006 (0.019)			-0.005 (0.019)
Mother U.S. Born	-0.511 (0.340)			-0.521 (0.341)
Teen Weekly Work Hours	0.025 (0.030)			0.024 (0.030)
Parental Drug Use	0.264 (0.373)			0.270 (0.381)
Father Ever Incarcerated	-0.147 (0.240)			-0.154 (0.237)
Constant	0.321 (1.620)		-1.356 † (0.717)	0.211 (1.685)

† p<0.1 *p<0.05 **p<0.01 ***p<0.001

Table C3.7
Logistic Regression Estimation of Any Delinquency - Mediation and Moderation Analysis

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)
Poverty Category	0.119 (0.084)			0.159 (0.131)		
Number of Waves in Poverty		-0.078 (0.068)			-0.062 (0.126)	
Change in Poverty (Ref=No Change)						
Moved Into Poverty			-0.110 (0.275)			-0.419 (0.622)
Moved Out of Poverty			-0.046 (0.248)			-0.152 (0.568)
Any Benefits	-0.092 (0.232)	-0.119 (0.232)	-0.134 (0.230)	0.118 (0.535)	-0.097 (0.281)	-0.178 (0.261)
Poverty Category*Any Benefits				-0.059 (0.146)		
Waves in Poverty*Any Benefits					-0.021 (0.132)	
Into Poverty*Any Benefits						0.371 (0.648)
Out of Poverty*Any Benefits						0.138 (0.605)
Race (Ref=White)						
Black	0.677 † (0.354)	0.666 † (0.353)	0.628 † (0.351)	0.682 † (0.354)	0.664 † (0.353)	0.633 † (0.349)
Hispanic	0.084 (0.423)	0.083 (0.427)	0.048 (0.421)	0.092 (0.419)	0.080 (0.426)	0.055 (0.420)
Other Race	1.213 * (0.483)	1.215 * (0.485)	1.211 * (0.493)	1.214 * (0.484)	1.214 * (0.485)	1.221 * (0.496)
Male	0.452 ** (0.168)	0.466 ** (0.167)	0.464 ** (0.167)	0.447 ** (0.167)	0.468 ** (0.167)	0.455 ** (0.163)
PCG is Teen's Parent	-1.649 (1.082)	-1.644 (1.080)	-1.695 (1.113)	-1.653 (1.086)	-1.640 (1.077)	-1.691 (1.117)
Household Adult Employed	-0.649 † (0.364)	-0.638 † (0.362)	-0.613 (0.372)	-0.635 † (0.370)	-0.642 † (0.367)	-0.605 (0.371)
PCG Education (Ref=<HS)						
High School	-0.106 (0.386)	-0.117 (0.399)	-0.068 (0.386)	-0.099 (0.389)	-0.119 (0.399)	-0.061 (0.387)
Some College	-0.329 (0.271)	-0.335 (0.277)	-0.262 (0.266)	-0.331 (0.271)	-0.333 (0.278)	-0.260 (0.265)
College +	-0.700 * (0.344)	-0.680 † (0.346)	-0.600 † (0.360)	-0.710 * (0.350)	-0.674 † (0.352)	-0.599 (0.362)
Household Size	0.114 † (0.062)	0.113 † (0.062)	0.108 † (0.062)	0.113 † (0.062)	0.113 † (0.062)	0.109 † (0.061)
Mother Married at Teen's Birth	-0.271 (0.217)	-0.278 (0.219)	-0.229 (0.217)	-0.268 (0.216)	-0.279 (0.218)	-0.239 (0.218)
Mother's Age at Teen's Birth	-0.010 (0.015)	-0.009 (0.015)	-0.008 (0.015)	-0.010 (0.015)	-0.009 (0.015)	-0.007 (0.015)
Mother U.S. Born	-0.169 (0.261)	-0.172 (0.263)	-0.158 (0.261)	-0.171 (0.261)	-0.170 (0.262)	-0.158 (0.260)
Teen Weekly Work Hours	0.032 (0.019)	0.033 † (0.019)	0.032 (0.020)	0.032 (0.019)	0.033 † (0.019)	0.033 (0.020)
Parental Drug Use	0.520 * (0.255)	0.535 * (0.254)	0.516 * (0.254)	0.520 * (0.255)	0.536 * (0.253)	0.518 * (0.251)
Father Ever Incarcerated	0.111 (0.182)	0.114 (0.182)	0.077 (0.181)	0.113 (0.182)	0.113 (0.183)	0.081 (0.181)
Constant	1.241 (1.436)	1.722 (1.482)	1.599 (1.497)	1.078 (1.568)	1.708 (1.472)	1.596 (1.490)

† p<0.1 *p<0.05 **p<0.01 ***p<0.001

Table C3.8
Logistic Regression Estimation of Any Violence - Mediation and Moderation Analysis

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)
Poverty Category	0.061 (0.099)			0.002 (0.162)		
Number of Waves in Poverty		-0.012 (0.082)			0.112 (0.148)	
Change in Poverty (Ref=No Change)						
Moved Into Poverty			-0.215 (0.298)			-0.307 (0.770)
Moved Out of Poverty			0.086 (0.298)			-0.114 (0.799)
Any Benefits	0.359 (0.266)	0.333 (0.268)	0.356 (0.263)	0.076 (0.623)	0.520 (0.319)	0.336 (0.291)
Poverty Category*Any Benefits				0.080 (0.166)		
Waves in Poverty*Any Benefits					-0.156 (0.146)	
Into Poverty*Any Benefits						0.095 (0.777)
Out of Poverty*Any Benefits						0.233 (0.809)
Race (Ref=White)						
Black	1.004 * (0.476)	0.988 * (0.471)	0.977 * (0.469)	1.000 * (0.474)	0.980 * (0.471)	0.980 * (0.463)
Hispanic	0.288 (0.555)	0.273 (0.559)	0.267 (0.542)	0.279 (0.552)	0.253 (0.560)	0.272 (0.540)
Other Race	1.002 (0.605)	1.007 (0.608)	0.998 (0.608)	1.004 (0.605)	1.007 (0.609)	1.003 (0.610)
Male	0.434 * (0.193)	0.440 * (0.191)	0.447 * (0.190)	0.440 * (0.194)	0.451 * (0.192)	0.445 * (0.186)
PCG is Teen's Parent	-1.953 † (1.116)	-1.963 † (1.116)	-1.972 † (1.119)	-1.942 † (1.102)	-1.957 † (1.103)	-1.970 † (1.123)
Household Adult Employed	-1.013 * (0.400)	-0.993 * (0.399)	-1.020 * (0.401)	-1.026 * (0.402)	-1.024 * (0.402)	-1.021 * (0.397)
PCG Education (Ref=<HS)						
High School	0.174 (0.455)	0.189 (0.474)	0.179 (0.444)	0.165 (0.453)	0.174 (0.468)	0.182 (0.443)
Some College	-0.148 (0.293)	-0.123 (0.302)	-0.122 (0.276)	-0.145 (0.293)	-0.110 (0.302)	-0.122 (0.276)
College +	-0.840 † (0.459)	-0.801 † (0.455)	-0.802 (0.478)	-0.828 † (0.463)	-0.762 (0.458)	-0.807 (0.483)
Household Size	0.146 * (0.073)	0.144 † (0.074)	0.143 † (0.073)	0.147 * (0.073)	0.147 * (0.072)	0.144 † (0.073)
Mother Married at Teen's Birth	0.305 (0.236)	0.322 (0.241)	0.343 (0.234)	0.300 (0.234)	0.310 (0.237)	0.337 (0.233)
Mother's Age at Teen's Birth	-0.025 (0.017)	-0.024 (0.017)	-0.025 (0.018)	-0.025 (0.017)	-0.024 (0.017)	-0.024 (0.018)
Mother U.S. Born	-0.215 (0.290)	-0.211 (0.293)	-0.215 (0.288)	-0.215 (0.289)	-0.204 (0.290)	-0.212 (0.287)
Teen Weekly Work Hours	0.017 (0.023)	0.017 (0.023)	0.016 (0.023)	0.017 (0.023)	0.018 (0.023)	0.016 (0.023)
Parental Drug Use	0.401 (0.297)	0.400 (0.292)	0.397 (0.294)	0.400 (0.296)	0.404 (0.289)	0.395 (0.289)
Father Ever Incarcerated	0.095 (0.193)	0.082 (0.194)	0.087 (0.192)	0.093 (0.194)	0.072 (0.194)	0.092 (0.193)
Constant	0.715 (1.561)	0.894 (1.654)	0.945 (1.603)	0.939 (1.729)	0.785 (1.631)	0.940 (1.598)

† p<0.1 *p<0.05 **p<0.01 ***p<0.001

Table C3.9
Logistic Regression Estimation of Any Property Offending - Mediation and Moderation Analysis

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)
Poverty Category	0.273 * (0.114)			0.134 (0.184)		
Number of Waves in Poverty		-0.188 † (0.109)			0.059 (0.177)	
Change in Poverty (Ref=No Change)						
Moved Into Poverty			-0.500 (0.334)			-0.421 (0.737)
Moved Out of Poverty			-0.145 (0.324)			-0.355 (0.790)
Any Benefits	0.119 (0.358)	0.058 (0.356)	0.055 (0.350)	-0.570 (0.731)	0.437 (0.376)	0.052 (0.374)
Poverty Category*Any Benefits				0.192 (0.186)		
Waves in Poverty*Any Benefits					-0.322 * (0.159)	
Into Poverty*Any Benefits						-0.109 (0.743)
Out of Poverty*Any Benefits						0.239 (0.813)
Race (Ref=White)						
Black	0.716 (0.631)	0.697 (0.620)	0.626 (0.623)	0.711 (0.624)	0.694 (0.613)	0.627 (0.617)
Hispanic	0.239 (0.729)	0.224 (0.734)	0.152 (0.736)	0.221 (0.723)	0.188 (0.737)	0.157 (0.735)
Other Race	1.123 (0.712)	1.124 (0.716)	1.150 (0.735)	1.133 (0.712)	1.132 (0.720)	1.153 (0.739)
Male	0.226 (0.223)	0.263 (0.219)	0.261 (0.220)	0.240 (0.225)	0.288 (0.221)	0.261 (0.217)
PCG is Teen's Parent	-2.251 * (1.023)	-2.235 * (0.999)	-2.314 * (1.038)	-2.244 * (1.014)	-2.251 * (0.993)	-2.303 * (1.044)
Household Adult Employed	-1.273 * (0.471)	-1.249 * (0.469)	-1.198 * (0.471)	-1.309 ** (0.474)	-1.325 ** (0.471)	-1.200 * (0.467)
PCG Education (Ref=<HS)						
High School	0.655 (0.590)	0.629 (0.617)	0.713 (0.595)	0.636 (0.584)	0.602 (0.603)	0.714 (0.593)
Some College	-0.048 (0.365)	-0.059 (0.381)	0.086 (0.352)	-0.039 (0.365)	-0.028 (0.383)	0.086 (0.352)
College +	-0.732 (0.553)	-0.702 (0.541)	-0.556 (0.601)	-0.700 (0.551)	-0.622 (0.534)	-0.559 (0.606)
Household Size	0.178 † (0.092)	0.177 † (0.094)	0.163 † (0.091)	0.179 † (0.091)	0.181 * (0.091)	0.163 † (0.091)
Mother Married at Teen's Birth	0.501 † (0.282)	0.490 † (0.292)	0.622 * (0.278)	0.486 † (0.275)	0.460 † (0.278)	0.619 * (0.274)
Mother's Age at Teen's Birth	-0.012 (0.020)	-0.010 (0.019)	-0.008 (0.019)	-0.012 (0.019)	-0.011 (0.019)	-0.008 (0.019)
Mother U.S. Born	-0.541 (0.340)	-0.550 (0.341)	-0.520 (0.339)	-0.540 (0.336)	-0.540 (0.336)	-0.515 (0.338)
Teen Weekly Work Hours	0.023 (0.028)	0.025 (0.029)	0.023 (0.029)	0.023 (0.028)	0.026 (0.028)	0.023 (0.029)
Parental Drug Use	0.307 (0.383)	0.324 (0.375)	0.258 (0.371)	0.304 (0.379)	0.328 (0.367)	0.255 (0.364)
Father Ever Incarcerated	-0.062 (0.236)	-0.049 (0.229)	-0.115 (0.240)	-0.070 (0.233)	-0.068 (0.224)	-0.109 (0.241)
Constant	-0.336 (1.558)	0.795 (1.702)	0.521 (1.638)	0.228 (1.758)	0.621 (1.691)	0.500 (1.641)

† p<0.1 *p<0.05 **p<0.01 ***p<0.001

Table C3.10
KHB Calculation of Mediation of Poverty-Delinquency Effect

	Poverty Category			Number of Waves in Poverty			Into Poverty			Out of Poverty		
	Confound- ing Ratio	Confound- ing Percent	P of Diff.	Confound- ing Ratio	Confound- ing Percent	P of Diff.	Confound- ing Ratio	Confound- ing Percent	P of Diff.	Confound- ing Ratio	Confound- ing Percent	P of Diff.
Outcome: Any Delinquency	0.995	-0.470	0.967	1.003	0.300	0.962	0.905	-10.520	0.789	1.019	1.870	0.838
Outcome: Any Violence	0.706	-41.600	0.681	0.849	-17.850	0.824	1.370	27.000	0.489	0.957	-4.460	0.775
Outcome: Any Poverty	0.948	-5.460	0.709	0.978	-2.230	0.833	0.921	-8.600	0.719	0.986	-1.460	0.813

All models control for: sex, race, employment, household size, primary caregiver education, relationship between teen and primary caregiver, parents' relationship status at teen's birth, mother U.S. born, mother's age at teen's birth, and probability of attrition.

Table C4.1
Multinomial Logistic Regression Estimation of Change in Strain (Ref=No Strain)

		Model 1			Model 2		
		Same Strain	More Strain	Less Strain	Same Strain	More Strain	Less Strain
		Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)
Any Benefits		0.155 (0.300)	-1.396 * (0.602)	-0.430 (0.501)	0.144 (0.352)	-0.562 (0.446)	-0.510 (0.334)
Strain at Age 9		1.959 *** (0.390)	1.151 ** (0.402)	2.789 *** (0.323)	2.274 *** (0.483)	1.526 ** (0.485)	3.132 *** (0.403)
Poverty Category					0.073 (0.161)	-0.056 (0.157)	-0.161 (0.136)
Race	(Ref=White)						
	Black				-0.003 (0.491)	0.381 (0.618)	0.944 † (0.524)
	Hispanic				-0.622 (0.541)	0.422 (1.047)	1.082 (0.736)
	Other Race				0.323 (0.743)	0.895 (0.885)	0.912 (0.712)
Male					-0.250 (0.295)	-0.226 (0.233)	0.085 (0.249)
PCG is Teen's Parent					0.518 (0.514)	1.614 (1.633)	0.750 (0.862)
Household Adult Employed					0.150 (0.486)	-1.323 (1.100)	-0.686 (0.812)
PCG Education	(Ref=<HS)						
	High School				-0.619 (0.464)	-1.762 * (0.800)	-1.143 * (0.514)
	Some College				-0.303 (0.443)	0.113 (0.552)	-0.114 (0.426)
	College +				-0.752 (0.542)	-0.935 (0.728)	-1.142 † (0.649)
Household Size					-0.210 * (0.091)	-0.056 (0.205)	-0.152 (0.147)
Mother Married at Teen's Birth					-0.281 (0.368)	0.147 (0.358)	-0.021 (0.349)
Mother's Age at Teen's Birth					-0.041 (0.027)	-0.023 (0.024)	-0.045 † (0.026)
Mother U.S. Born					-0.347 (0.464)	-0.356 (0.610)	0.824 † (0.472)
Teen Weekly Work Hours					0.048 † (0.026)	0.015 (0.052)	0.009 (0.037)
Parental Drug Use					0.347 (0.458)	0.044 (0.397)	0.064 (0.341)
Father Ever Incarcerated					-0.380 (0.259)	0.032 (0.255)	0.143 (0.253)
Constant		-2.346 *** (0.287)	-0.249 (0.210)	-2.173 *** (0.268)	-0.210 (1.483)	-0.151 (2.369)	-1.192 (1.701)

† p<0.1 *p<0.05 **p<0.01 ***p<0.001

Table C4.2
Multinomial Logistic Regression Estimation of Change in Virtual Supervision (Ref=No Change)

		Model 1		Model 2	
		More Supervision	Less Supervision	More Supervision	Less Supervision
		Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)
Any Benefits		0.212 (0.592)	0.543 (0.454)	0.071 (0.520)	0.144 (0.392)
Supervision at Age 9		-2.607 *** (0.436)	0.284 (0.431)	-2.786 *** (0.487)	0.243 (0.423)
Poverty Category				-0.019 (0.129)	-0.138 (0.116)
Race	(Ref=White)				
	Black			-0.085 (0.438)	0.133 (0.391)
	Hispanic			-0.167 (0.478)	-0.143 (0.548)
	Other Race			0.039 (0.636)	0.716 (0.554)
Male				0.216 (0.279)	0.399 (0.258)
PCG is Teen's Parent				-0.392 (0.885)	-0.792 (0.586)
Household Adult Employed				0.045 (0.477)	0.014 (0.486)
PCG Education	(Ref=<HS)				
	High School			0.350 (0.581)	0.304 (0.414)
	Some College			0.102 (0.403)	0.064 (0.341)
	College +			0.152 (0.493)	0.409 (0.434)
Household Size				0.049 (0.124)	0.128 (0.085)
Mother Married at Teen's Birth				0.151 (0.355)	-0.098 (0.357)
Mother's Age at Teen's Birth				0.014 (0.029)	0.016 (0.022)
Mother U.S. Born				-0.057 (0.430)	-0.022 (0.424)
Teen Weekly Work Hours				0.008 (0.032)	-0.017 (0.025)
Parental Drug Use				0.010 (0.455)	0.103 (0.329)
Father Ever Incarcerated				0.128 (0.260)	0.454 (0.267) †
Constant		5.749 *** (0.818)	-2.803 † (1.521)	5.804 ** (1.736)	-2.875 (1.945)

† p<0.1 *p<0.05 **p<0.01 ***p<0.001

Table C4.3
Multinomial Logistic Regression Estimation of Change in Intimacy of Communication (Ref=No Change)

	Model 1				Model 2			
	More Communication		Less Communication		More Communication		Less Communication	
	Coef	(SE)	Coef	(SE)	Coef	(SE)	Coef	(SE)
Any Benefits	-1.122	**	0.525	**	-0.861	**	0.602	**
	(0.320)		(0.191)		(0.304)		(0.231)	
Communication at Age 9	-1.522	***	0.308		-1.681	***	0.393	
	(0.388)		(0.268)		(0.431)		(0.285)	
Poverty Category					-0.068		-0.102	
					(0.115)		(0.083)	
Race (Ref=White)								
Black					0.237		0.055	
					(0.439)		(0.286)	
Hispanic					0.157		-0.055	
					(0.555)		(0.319)	
Other Race					0.750		0.163	
					(0.578)		(0.457)	
Male					-0.030		-0.284	
					(0.208)		(0.193)	
PCG is Teen's Parent					0.571		-0.790	†
					(0.945)		(0.448)	
Household Adult Employed					-0.498		0.033	
					(0.635)		(0.327)	
PCG Education (Ref=<HS)								
High School					0.039		0.105	
					(0.493)		(0.333)	
Some College					0.178		-0.244	
					(0.444)		(0.314)	
College +					-0.251		0.209	
					(0.509)		(0.371)	
Household Size					-0.009		0.021	
					(0.124)		(0.057)	
Mother Married at Teen's Birth					-0.155		-0.145	
					(0.277)		(0.270)	
Mother's Age at Teen's Birth					0.007		0.014	
					(0.020)		(0.018)	
Mother U.S. Born					-0.292		-0.693	*
					(0.460)		(0.315)	
Teen Weekly Work Hours					0.003		-0.040	*
					(0.026)		(0.018)	
Parental Drug Use					-0.109		-0.004	
					(0.345)		(0.218)	
Father Ever Incarcerated					-0.318		-0.168	
					(0.233)		(0.216)	
Constant	6.705	***	-1.459		7.145	***	-0.303	
	(1.455)		(1.053)		(1.955)		(1.357)	

† p<0.1 *p<0.05 **p<0.01 ***p<0.001

Table C4.4
Logistic Regression Estimation of Any Delinquency

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7
	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)
Any Benefits	0.778 * (0.345)	-0.106 (0.263)	-0.457 (0.282)	0.495 * (0.223)	-0.068 (0.229)	0.389 (0.239)	-0.186 (0.234)
Change in Strain (Ref=No Strain)							
Same Strain		-1.445 † (0.771)	-1.280 * (0.605)				
More Strain		1.310 ** (0.432)	0.957 ** (0.352)				
Less Strain		0.794 * (0.381)	0.379 (0.323)				
Change in Virtual Supervision							
More Supervision				-0.093 (0.298)	-0.049 (0.276)		
Less Supervision				2.060 *** (0.318)	1.276 *** (0.247)		
Change in Intimacy of Communication							
More Communication						0.225 (0.472)	0.088 (0.308)
Less Communication						1.232 ** (0.353)	0.818 ** (0.230)
Poverty Category			0.031 (0.079)		0.112 (0.089)		0.092 (0.093)
Race (Ref=White)							
Black			0.359 (0.394)		0.571 (0.348)		0.571 (0.377)
Hispanic			-0.100 (0.360)		0.099 (0.386)		0.137 (0.419)
Other Race			0.508 (0.465)		0.929 * (0.461)		1.102 * (0.454)
Male			0.475 ** (0.162)		0.429 * (0.173)		0.515 ** (0.172)
PCG is Teen's Parent			-0.332 (0.555)		-1.124 (0.977)		-1.120 (1.086)
Household Adult Employed			-0.261 (0.331)		-0.472 (0.355)		-0.509 (0.384)
PCG Education (Ref=<HS)							
High School			-0.768 * (0.351)		-0.190 (0.364)		-0.175 (0.346)
Some College			-0.122 (0.282)		-0.330 (0.269)		-0.271 (0.270)
College +			-0.691 † (0.349)		-0.639 * (0.323)		-0.611 † (0.327)
Household Size			0.059 (0.103)		0.092 (0.063)		0.103 † (0.061)
Mother Married at Teen's Birth			-0.454 * (0.221)		-0.332 (0.221)		-0.320 (0.218)
Mother's Age at Teen's Birth			-0.012 (0.016)		-0.014 (0.016)		-0.012 (0.015)
Mother U.S. Born			-0.224 (0.309)		-0.155 (0.262)		-0.053 (0.268)
Teen Weekly Work Hours			0.019 (0.026)		0.031 (0.018)		0.033 † (0.019)
Parental Drug Use			0.601 * (0.252)		0.543 * (0.259)		0.551 * (0.270)
Father Ever Incarcerated			0.145 (0.187)		0.105 (0.185)		0.182 (0.185)
Constant	-0.173 (0.279)	-0.240 (0.190)	0.745 (1.062)	-0.555 † (0.280)	0.697 (1.290)	-0.755 † (0.430)	0.365 (1.403)

† p<0.1 *p<0.05 **p<0.01 ***p<0.001

Table C4.5
Logistic Regression Estimation of Any Violence

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7
	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)
Any Benefits	1.271 * (0.484)	0.263 (0.338)	-0.108 (0.346)	1.099 ** (0.328)	0.405 (0.266)	0.908 ** (0.312)	0.276 (0.264)
Change in Strain							
Same Strain		-2.956 ** (1.047)	-2.157 * (0.919)				
More Strain		1.196 * (0.462)	0.787 * (0.357)				
Less Strain		1.091 * (0.414)	0.625 † (0.362)				
Change in Virtual Supervision							
More Supervision				-0.150 (0.416)	-0.098 (0.358)		
Less Supervision				2.245 *** (0.397)	1.306 *** (0.270)		
Change in Intimacy of Communication							
More Communication						0.503 (0.695)	0.292 (0.403)
Less Communication						1.501 ** (0.489)	0.884 ** (0.278)
Poverty Category			-0.048 (0.086)		0.051 (0.105)		0.026 (0.111)
Race (Ref=White)							
Black			0.494 (0.486)		0.890 † (0.475)		0.891 † (0.499)
Hispanic			-0.016 (0.446)		0.323 (0.510)		0.329 (0.547)
Other Race			-0.062 (0.594)		0.657 (0.603)		0.818 (0.578)
Male			0.460 ** (0.175)		0.407 * (0.199)		0.494 * (0.197)
PCG is Teen's Parent			-0.559 (0.556)		-1.488 (1.009)		-1.465 (1.139)
Household Adult Employed			-0.568 (0.361)		-0.851 * (0.397)		-0.872 * (0.427)
PCG Education (Ref=<HS)							
High School			-0.617 (0.404)		0.104 (0.425)		0.105 (0.412)
Some College			0.090 (0.288)		-0.136 (0.282)		-0.082 (0.296)
College +			-0.745 † (0.391)		-0.743 † (0.406)		-0.699 † (0.405)
Household Size			0.087 (0.123)		0.123 (0.076)		0.138 † (0.072)
Mother Married at Teen's Birth			0.058 (0.247)		0.259 (0.239)		0.268 (0.237)
Mother's Age at Teen's Birth			-0.026 (0.017)		-0.031 † (0.018)		-0.028 (0.018)
Mother U.S. Born			-0.274 (0.370)		-0.189 (0.295)		-0.083 (0.307)
Teen Weekly Work Hours			-0.001 (0.031)		0.015 (0.021)		0.018 (0.022)
Parental Drug Use			0.497 † (0.298)		0.441 (0.302)		0.429 (0.311)
Father Ever Incarcerated			0.160 (0.197)		0.088 (0.198)		0.159 (0.197)
Constant	-1.083 * (0.435)	-1.300 *** (0.275)	0.361 (1.218)	-1.724 ** (0.480)	0.244 (1.389)	-2.041 ** (0.713)	-0.180 (1.560)

† p<0.1 *p<0.05 **p<0.01 ***p<0.001

Table C4.6
Logistic Regression Estimation of Any Property Offending

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7
	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)
Any Benefits	1.063 (0.630)	-0.313 (0.428)	-0.402 (0.435)	0.680 (0.443)	0.150 (0.353)	0.387 (0.421)	0.015 (0.362)
Change in Strain							
Same Strain		-5.655 ** (1.492)	-4.220 * (1.655)				
More Strain		1.035 † (0.563)	0.664 (0.446)				
Less Strain		0.837 (0.592)	0.481 (0.487)				
Change in Virtual Supervision							
More Supervision				-0.219 (0.600)	-0.074 (0.445)		
Less Supervision				2.376 *** (0.530)	1.070 ** (0.309)		
Change in Intimacy of Communication							
More Communication						0.901 (1.113)	0.441 (0.549)
Less Communication						2.039 * (0.809)	0.989 ** (0.352)
Poverty Category			0.084 (0.108)		0.262 * (0.119)		0.232 † (0.130)
Race (Ref=White)							
Black			0.069 (0.622)		0.577 (0.635)		0.558 (0.679)
Hispanic			-0.115 (0.552)		0.270 (0.676)		0.276 (0.725)
Other Race			-0.080 (0.794)		0.817 (0.726)		0.895 (0.692)
Male			0.276 (0.212)		0.195 (0.233)		0.272 (0.223)
PCG is Teen's Parent			-0.865 (0.518)		-1.936 † (0.944)		-1.816 (1.099)
Household Adult Employed			-0.635 (0.404)		-1.116 * (0.474)		-1.090 * (0.509)
PCG Education (Ref=<HS)							
High School			-0.278 (0.519)		0.616 (0.547)		0.575 (0.539)
Some College			0.240 (0.337)		-0.013 (0.351)		0.027 (0.365)
College +			-0.618 (0.491)		-0.620 (0.505)		-0.540 (0.497)
Household Size			0.097 (0.152)		0.160 † (0.094)		0.165 † (0.091)
Mother Married at Teen's Birth			0.211 (0.297)		0.463 (0.298)		0.465 (0.298)
Mother's Age at Teen's Birth			-0.015 (0.020)		-0.016 (0.021)		-0.016 (0.021)
Mother U.S. Born			-0.569 (0.449)		-0.525 (0.345)		-0.422 (0.357)
Teen Weekly Work Hours			-0.001 (0.040)		0.021 (0.026)		0.023 (0.027)
Parental Drug Use			0.422 (0.370)		0.323 (0.378)		0.335 (0.395)
Father Ever Incarcerated			0.065 (0.248)		-0.065 (0.252)		0.020 (0.251)
Constant	-1.342 * (0.557)	-1.621 *** (0.332)	-0.295 (1.341)	-2.071 ** (0.626)	-0.688 (1.409)	-2.772 * (1.098)	-1.214 (1.611)

† p<0.1 *p<0.05 **p<0.01 ***p<0.001

City Replicate Weights

Table CR3.1
 Logistic Regression Estimation of Any Delinquency - Poverty Analysis

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)
Poverty Category	-0.068 (0.070)			0.120 (0.100)		
Number of Waves in Poverty		0.056 (0.294)			-0.124 (0.094)	
Change in Poverty (Ref=No Change)						
Moved Into Poverty			0.301 (0.174)			0.069 (0.163)
Moved Out of Poverty			0.425 (0.273)			0.149 (0.309)
Race (Ref=White)						
Black				0.159 (0.268)	0.181 (0.254)	0.071 (0.277)
Hispanic				-0.044 (0.307)	-0.024 (0.298)	-0.102 (0.320)
Other Race				0.003 (0.450)	0.003 (0.466)	-0.056 (0.464)
Male				0.326 (0.187)	0.337 (0.190)	0.327 (0.199)
PCG is Teen's Parent				-1.979 * (0.754)	-1.909 * (0.727)	-1.934 * (0.767)
Household Adult Employed				-0.340 (0.271)	-0.352 (0.262)	-0.262 (0.259)
PCG Education (Ref=<HS)						
High School				-0.662 * (0.223)	-0.697 * (0.237)	-0.637 * (0.248)
Some College				-0.456 * (0.164)	-0.511 * (0.178)	-0.389 * (0.147)
College +				-0.614 † (0.331)	-0.637 (0.366)	-0.473 (0.296)
Household Size				0.242 ** (0.055)	0.243 ** (0.057)	0.235 ** (0.057)
Mother Married at Teen's Birth				-0.365 (0.225)	-0.396 † (0.207)	-0.318 (0.233)
Mother's Age at Teen's Birth				-0.003 (0.021)	-0.003 (0.022)	0.000 (0.020)
Mother U.S. Born				-0.487 * (0.213)	-0.504 * (0.213)	-0.473 † (0.219)
Teen Weekly Work Hours				0.018 (0.017)	0.018 (0.017)	0.017 (0.016)
Parental Drug Use				0.108 (0.211)	0.129 (0.215)	0.108 (0.208)
Father Ever Incarcerated				0.115 (0.204)	0.147 (0.217)	0.068 (0.190)
Constant	0.603 * (0.231)	0.294 * (0.102)	0.279 ** (0.084)	1.761 * (0.768)	2.317 * (1.004)	1.939 * (0.847)

† p<0.1 *p<0.05 **p<0.01 ***p<0.001

Table CR3.2
 Logistic Regression Estimation of Any Violence - Poverty Analysis

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)
Poverty Category	-0.118 † (0.055)			0.064 (0.100)		
Number of Waves in Poverty		0.088 † (0.046)			-0.077 (0.077)	
Change in Poverty (Ref=No Change)						
Moved Into Poverty			0.426 (0.240)			0.164 (0.274)
Moved Out of Poverty			0.658 (0.374)			0.377 (0.399)
Race (Ref=White)						
Black				0.234 (0.224)	0.255 (0.193)	0.179 (0.223)
Hispanic				0.070 (0.291)	0.087 (0.283)	0.035 (0.305)
Other Race				-0.632 (0.522)	-0.628 (0.526)	-0.646 (0.506)
Male				0.263 (0.180)	0.271 (0.181)	0.265 (0.188)
PCG is Teen's Parent				-2.547 ** (0.767)	-2.505 ** (0.735)	-2.495 ** (0.759)
Household Adult Employed				-0.687 (0.389)	-0.699 † (0.351)	-0.642 (0.351)
PCG Education (Ref=<HS)						
High School				-0.620 * (0.203)	-0.643 * (0.213)	-0.601 * (0.225)
Some College				-0.331 (0.210)	-0.370 (0.212)	-0.290 (0.197)
College +				-0.639 † (0.339)	-0.667 (0.384)	-0.545 (0.311)
Household Size				0.313 *** (0.056)	0.314 *** (0.052)	0.312 *** (0.050)
Mother Married at Teen's Birth				0.011 (0.264)	-0.010 (0.251)	0.051 (0.247)
Mother's Age at Teen's Birth				-0.008 (0.014)	-0.008 (0.015)	-0.004 (0.014)
Mother U.S. Born				-0.579 ** (0.120)	-0.591 ** (0.123)	-0.548 ** (0.126)
Teen Weekly Work Hours				0.005 (0.019)	0.006 (0.018)	0.004 (0.017)
Parental Drug Use				-0.136 (0.384)	-0.123 (0.391)	-0.129 (0.381)
Father Ever Incarcerated				0.121 (0.203)	0.145 (0.206)	0.083 (0.192)
Constant	0.252 (0.186)	-0.269 * (0.102)	-0.288 * (0.125)	1.903 † (1.000)	2.221 † (1.052)	1.825 † (0.867)

† p<0.1 *p<0.05 **p<0.01 ***p<0.001

Table CR3.3
 Logistic Regression Estimation of Any Property Offending - Poverty Analysis

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)
Poverty Category	0.090 (0.054)			0.236 * (0.087)		
Number of Waves in Poverty		-0.096 (0.059)			-0.243 * (0.092)	
Change in Poverty (Ref=No Change)						
Moved Into Poverty			0.052 (0.237)			-0.139 (0.294)
Moved Out of Poverty			0.475 (0.322)			0.315 (0.309)
Race (Ref=White)						
Black				-0.137 (0.297)	-0.099 (0.250)	-0.305 (0.291)
Hispanic				0.001 (0.350)	0.031 (0.345)	-0.107 (0.341)
Other Race				-0.831 * (0.345)	-0.856 * (0.364)	-0.932 * (0.344)
Male				0.105 (0.234)	0.137 (0.234)	0.114 (0.240)
PCG is Teen's Parent				-2.770 *** (0.495)	-2.664 *** (0.493)	-2.678 *** (0.518)
Household Adult Employed				-0.627 (0.448)	-0.648 (0.444)	-0.510 (0.408)
PCG Education (Ref=<HS)						
High School				-0.438 (0.298)	-0.497 (0.296)	-0.403 (0.325)
Some College				-0.305 (0.175)	-0.405 (0.224)	-0.189 (0.158)
College +				-0.529 (0.333)	-0.577 (0.384)	-0.287 (0.296)
Household Size				0.374 ** (0.072)	0.376 *** (0.062)	0.357 *** (0.066)
Mother Married at Teen's Birth				0.062 (0.234)	0.016 (0.225)	0.161 (0.216)
Mother's Age at Teen's Birth				0.008 (0.023)	0.007 (0.024)	0.013 (0.022)
Mother U.S. Born				-0.855 ** (0.224)	-0.891 ** (0.238)	-0.832 ** (0.241)
Teen Weekly Work Hours				0.005 (0.020)	0.006 (0.020)	0.004 (0.019)
Parental Drug Use				-0.385 (0.452)	-0.349 (0.454)	-0.393 (0.433)
Father Ever Incarcerated				-0.015 (0.150)	0.052 (0.136)	-0.085 (0.155)
Constant	-0.818 ** (0.169)	-0.383 * (0.122)	-0.581 ** (0.114)	0.707 (1.299)	1.808 (1.426)	1.189 (1.205)

† p<0.1 *p<0.05 **p<0.01 ***p<0.001

Table CR3.4

Logistic Regression Estimation of Any Delinquency - Benefits Analysis

		Model 1	Model 2	Model 3	Model 4
		Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)
Any Benefits		0.218 (0.134)	-0.049 (0.174)		-0.176 (0.148)
Any Benefits (excluding UI/WC)				0.158 (0.157)	
Race	(Ref=White)				
	Black		0.082 (0.280)		0.104 (0.277)
	Hispanic		-0.096 (0.323)		-0.083 (0.322)
	Other Race		-0.067 (0.466)		-0.062 (0.466)
Male			0.327 (0.198)		0.329 (0.201)
PCG is Teen's Parent			-1.950 * (0.761)		-1.938 * (0.760)
Household Adult Employed			-0.278 (0.265)		-0.319 (0.281)
PCG Education	(Ref=<HS)				
	High School		-0.643 * (0.235)		-0.657 * (0.229)
	Some College		-0.394 * (0.145)		-0.408 * (0.145)
	College +		-0.493 (0.292)		-0.533 † (0.279)
Household Size			0.236 ** (0.057)		0.238 ** (0.057)
Mother Married at Teen's Birth			-0.334 (0.231)		-0.360 (0.213)
Mother's Age at Teen's Birth			-0.001 (0.021)		-0.001 (0.021)
Mother U.S. Born			-0.484 * (0.208)		-0.471 † (0.210)
Teen Weekly Work Hours			0.018 (0.017)		0.019 (0.016)
Parental Drug Use			0.101 (0.207)		0.099 (0.208)
Father Ever Incarcerated			0.080 (0.183)		0.088 (0.185)
Constant		0.241 † (0.111)	2.065 * (0.886)	0.294 * (0.121)	2.163 * (0.839)

† p<0.1 *p<0.05 **p<0.01 ***p<0.001

Table CR3.5

Logistic Regression Estimation of Any Violence - Benefits Analysis

	Model 1	Model 2	Model 3	Model 4
	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)
Any Benefits	0.491 *	0.300		
	(0.174)	(0.189)		
Any Benefits (excluding UI/WC)			0.334	0.056
			(0.182)	(0.202)
Race (Ref=White)				
Black		0.146		0.179
		(0.223)		(0.214)
Hispanic		0.010		0.034
		(0.297)		(0.303)
Other Race		-0.667		-0.672
		(0.529)		(0.527)
Male		0.261		0.263
		(0.179)		(0.182)
PCG is Teen's Parent		-2.558 *		-2.539 *
		(0.784)		(0.778)
Household Adult Employed		-0.590		-0.634
		(0.349)		(0.364)
PCG Education (Ref=<HS)				
High School		-0.594 *		-0.604 *
		(0.227)		(0.215)
Some College		-0.294		-0.294
		(0.190)		(0.189)
College +		-0.518		-0.555
		(0.324)		(0.310)
Household Size		0.304 ***		0.308 ***
		(0.050)		(0.051)
Mother Married at Teen's Birth		0.084		0.042
		(0.250)		(0.236)
Mother's Age at Teen's Birth		-0.007		-0.006
		(0.015)		(0.015)
Mother U.S. Born		-0.596 **		-0.586 **
		(0.136)		(0.124)
Teen Weekly Work Hours		0.004		0.005
		(0.019)		(0.019)
Parental Drug Use		-0.126		-0.138
		(0.397)		(0.381)
Father Ever Incarcerated		0.080		0.097
		(0.200)		(0.204)
Constant	-0.445 *	1.865 †	-0.311 †	2.016 †
	(0.169)	(0.993)	(0.154)	(0.977)

† p<0.1 *p<0.05 **p<0.01 ***p<0.001

Table CR3.6

Logistic Regression Estimation of Any Property Offending - Benefits Analysis

		Model 1	Model 2	Model 3	Model 4
		Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)
Any Benefits		0.058 (0.195)	0.052 (0.210)		
Any Benefits (excluding UI/WC)				-0.114 (0.215)	-0.159 (0.207)
Race	(Ref=White)				
	Black		-0.313 (0.301)		-0.280 (0.292)
	Hispanic		-0.116 (0.339)		-0.092 (0.334)
	Other Race		-0.964 * (0.355)		-0.964 * (0.355)
Male			0.108 (0.242)		0.109 (0.244)
PCG is Teen's Parent			-2.685 ** (0.527)		-2.676 ** (0.531)
Household Adult Employed			-0.489 (0.395)		-0.541 (0.384)
PCG Education	(Ref=<HS)				
	High School		-0.388 (0.320)		-0.404 (0.311)
	Some College		-0.179 (0.150)		-0.189 (0.157)
	College +		-0.269 (0.306)		-0.324 (0.318)
Household Size			0.354 *** (0.065)		0.358 *** (0.065)
Mother Married at Teen's Birth			0.149 (0.209)		0.109 (0.189)
Mother's Age at Teen's Birth			0.012 (0.022)		0.011 (0.022)
Mother U.S. Born			-0.852 ** (0.240)		-0.836 ** (0.234)
Teen Weekly Work Hours			0.005 (0.020)		0.006 (0.019)
Parental Drug Use			-0.390 (0.435)		-0.399 (0.426)
Father Ever Incarcerated			-0.088 (0.142)		-0.073 (0.145)
Constant		-0.549 * (0.181)	1.221 (1.206)		1.366 (1.205)

† p<0.1 *p<0.05 **p<0.01 ***p<0.001

Table CR3.7
Logistic Regression Estimation of Any Delinquency - Mediation and Moderation Analysis

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)
Poverty Category	0.121 (0.100)			0.078 (0.213)		
Number of Waves in Poverty		-0.124 (0.095)			-0.048 (0.205)	
Change in Poverty (Ref=No Change)						
Moved Into Poverty			0.077 (0.170)			0.513 (0.323)
Moved Out of Poverty			0.147 (0.309)			0.838 (0.538)
Any Benefits	0.007 (0.178)	-0.009 (0.184)	-0.051 (0.182)	-0.228 (0.896)	0.097 (0.263)	0.120 (0.241)
Poverty Category*Any Benefits				0.065 (0.232)		
Waves in Poverty*Any Benefits					-0.100 (0.197)	
Into Poverty*Any Benefits						-0.590 (0.510)
Out of Poverty*Any Benefits						-1.065 † (0.490)
Race (Ref=White)						
Black	0.159 (0.276)	0.182 (0.265)	0.078 (0.286)	0.156 (0.272)	0.168 (0.251)	0.104 (0.281)
Hispanic	-0.045 (0.310)	-0.024 (0.304)	-0.097 (0.327)	-0.052 (0.310)	-0.042 (0.285)	-0.095 (0.322)
Other Race	0.003 (0.442)	0.003 (0.461)	-0.057 (0.460)	0.002 (0.446)	-0.005 (0.454)	-0.070 (0.452)
Male	0.326 (0.187)	0.337 (0.191)	0.327 (0.201)	0.329 (0.184)	0.344 † (0.183)	0.352 (0.193)
PCG is Teen's Parent	-1.979 * (0.752)	-1.908 * (0.726)	-1.932 * (0.763)	-1.957 * (0.752)	-1.895 * (0.743)	-1.916 * (0.761)
Household Adult Employed	-0.338 (0.271)	-0.353 (0.266)	-0.273 (0.257)	-0.356 (0.249)	-0.375 (0.264)	-0.286 (0.230)
PCG Education (Ref=<HS)						
High School	-0.661 * (0.220)	-0.697 * (0.232)	-0.640 * (0.242)	-0.665 * (0.231)	-0.705 * (0.242)	-0.636 * (0.240)
Some College	-0.456 * (0.165)	-0.510 * (0.178)	-0.390 * (0.148)	-0.452 * (0.163)	-0.502 * (0.187)	-0.376 * (0.161)
College +	-0.613 † (0.333)	-0.638 (0.368)	-0.482 (0.299)	-0.600 † (0.314)	-0.610 (0.379)	-0.451 (0.311)
Household Size	0.242 ** (0.055)	0.243 ** (0.057)	0.236 ** (0.057)	0.243 ** (0.055)	0.244 ** (0.057)	0.235 ** (0.057)
Mother Married at Teen's Birth	-0.364 (0.233)	-0.397 † (0.214)	-0.328 (0.238)	-0.366 (0.234)	-0.406 † (0.207)	-0.317 (0.231)
Mother's Age at Teen's Birth	-0.003 (0.021)	-0.003 (0.022)	0.000 (0.020)	-0.003 (0.021)	-0.004 (0.022)	0.000 (0.020)
Mother U.S. Born	-0.487 * (0.212)	-0.504 * (0.212)	-0.471 † (0.219)	-0.482 * (0.203)	-0.492 * (0.208)	-0.457 † (0.222)
Teen Weekly Work Hours	0.018 (0.017)	0.018 (0.017)	0.017 (0.016)	0.018 (0.017)	0.019 (0.017)	0.016 (0.016)
Parental Drug Use	0.109 (0.214)	0.128 (0.217)	0.106 (0.210)	0.111 (0.213)	0.136 (0.203)	0.123 (0.211)
Father Ever Incarcerated	0.114 (0.200)	0.147 (0.213)	0.071 † (0.184)	0.115 (0.202)	0.142 (0.219)	0.061 (0.184)
Constant	1.755 † (0.812)	2.323 † (1.027)	1.972 † (0.887)	1.918 (1.191)	2.271 † (1.054)	1.848 † (0.883)

† p<0.1 *p<0.05 **p<0.01 ***p<0.001

Table CR3.8
Logistic Regression Estimation of Any Violence - Mediation and Moderation Analysis

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)
Poverty Category	0.089 (0.101)			-0.020 (0.176)		
Number of Waves in Poverty		-0.090 (0.079)			0.055 (0.168)	
Change in Poverty (Ref=No Change)						
Moved Into Poverty			0.119 (0.277)			0.989 * (2.800)
Moved Out of Poverty			0.393 (0.413)			1.194 (1.630)
Any Benefits	0.343 (0.187)	0.331 (0.192)	0.305 (0.200)	-0.240 (0.827)	0.534 * (0.200)	0.577 † (2.210)
Poverty Category*Any Benefits				0.162 (0.205)		
Waves in Poverty*Any Benefits					-0.188 (0.164)	
Into Poverty*Any Benefits						-1.147 † (-2.120)
Out of Poverty*Any Benefits						-1.251 † (-1.850)
Race (Ref=White)						
Black	0.204 (0.229)	0.220 (0.202)	0.137 (0.231)	0.197 (0.224)	0.192 (0.196)	0.180 (0.820)
Hispanic	0.049 (0.286)	0.063 (0.283)	0.006 (0.304)	0.033 (0.285)	0.029 (0.271)	0.012 (0.040)
Other Race	-0.613 (0.518)	-0.617 (0.530)	-0.638 (0.507)	-0.617 (0.524)	-0.633 (0.525)	-0.656 (-1.290)
Male	0.260 (0.170)	0.269 (0.173)	0.263 (0.180)	0.268 (0.166)	0.281 (0.168)	0.303 (1.840)
PCG is Teen's Parent	-2.581 * (0.798)	-2.525 ** (0.764)	-2.521 * (0.780)	-2.525 ** (0.761)	-2.499 * (0.767)	-2.508 * (-3.230)
Household Adult Employed	-0.633 (0.375)	-0.642 † (0.341)	-0.584 (0.335)	-0.673 † (0.355)	-0.679 † (0.336)	-0.623 † (-2.080)
PCG Education (Ref=<HS)						
High School	-0.608 * (0.215)	-0.633 * (0.223)	-0.588 * (0.235)	-0.614 * (0.215)	-0.641 * (0.223)	-0.579 * (-2.510)
Some College	-0.340 (0.207)	-0.378 (0.209)	-0.289 (0.196)	-0.332 (0.204)	-0.358 (0.216)	-0.273 (-1.260)
College +	-0.606 (0.354)	-0.625 (0.397)	-0.496 (0.325)	-0.575 (0.338)	-0.573 (0.401)	-0.463 (-1.390)
Household Size	0.309 *** (0.055)	0.310 *** (0.051)	0.307 *** (0.049)	0.311 *** (0.055)	0.312 *** (0.051)	0.306 *** (6.590)
Mother Married at Teen's Birth	0.064 (0.270)	0.041 (0.256)	0.107 (0.256)	0.057 (0.275)	0.023 (0.257)	0.132 (0.540)
Mother's Age at Teen's Birth	-0.008 (0.015)	-0.008 (0.016)	-0.004 (0.015)	-0.009 (0.015)	-0.009 (0.016)	-0.005 (-0.370)
Mother U.S. Born	-0.597 ** (0.129)	-0.610 ** (0.135)	-0.564 ** (0.136)	-0.588 ** (0.134)	-0.590 ** (0.152)	-0.539 ** (-3.640)
Teen Weekly Work Hours	0.004 (0.019)	0.004 (0.019)	0.003 (0.018)	0.004 (0.019)	0.005 (0.019)	0.000 (0.030)
Parental Drug Use	-0.119 (0.407)	-0.104 (0.411)	-0.115 (0.400)	-0.117 (0.404)	-0.094 (0.403)	-0.096 (-0.240)
Father Ever Incarcerated	0.104 (0.205)	0.128 (0.210)	0.063 (0.190)	0.107 (0.209)	0.121 (0.214)	0.051 (0.270)
Constant	1.628 (1.098)	2.041 † (1.111)	1.644 (0.938)	2.034 (1.269)	1.926 (1.131)	1.447 (1.650)

† p<0.1 *p<0.05 **p<0.01 ***p<0.001

Table CR3.9
Logistic Regression Estimation of Any Property Offending - Mediation and Moderation Analysis

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)
Poverty Category	0.249 * (0.090)			0.020 (0.190)		
Number of Waves in Poverty		-0.248 * (0.100)			0.028 (0.186)	
Change in Poverty (Ref=No Change)						
Moved Into Poverty			-0.152 (0.295)			0.830 † (0.419)
Moved Out of Poverty			0.320 (0.318)			1.190 (0.665)
Any Benefits	0.168 (0.226)	0.131 (0.239)	0.084 (0.222)	-1.084 (0.885)	0.511 * (0.193)	0.394 (0.314)
Poverty Category*Any Benefits				0.344 (0.207)		
Waves in Poverty*Any Benefits					-0.366 † (0.179)	
Into Poverty*Any Benefits						-1.317 † (0.711)
Out of Poverty*Any Benefits						-1.390 † (0.624)
Race (Ref=White)						
Black	-0.152 (0.307)	-0.113 (0.261)	-0.317 (0.304)	-0.162 (0.295)	-0.160 (0.247)	-0.275 (0.283)
Hispanic	-0.012 (0.349)	0.020 (0.345)	-0.115 (0.342)	-0.040 (0.349)	-0.043 (0.335)	-0.113 (0.336)
Other Race	-0.821 * (0.338)	-0.852 * (0.361)	-0.928 * (0.341)	-0.833 * (0.336)	-0.881 * (0.344)	-0.952 * (0.330)
Male	0.104 (0.230)	0.137 (0.231)	0.114 (0.238)	0.119 (0.222)	0.164 (0.224)	0.159 (0.226)
PCG is Teen's Parent	-2.783 *** (0.489)	-2.668 *** (0.490)	-2.683 ** (0.509)	-2.711 *** (0.468)	-2.654 *** (0.495)	-2.682 *** (0.505)
Household Adult Employed	-0.604 (0.430)	-0.627 (0.428)	-0.495 (0.390)	-0.686 (0.412)	-0.700 (0.414)	-0.531 (0.363)
PCG Education (Ref=<HS)						
High School	-0.432 (0.307)	-0.492 (0.300)	-0.400 (0.330)	-0.446 (0.299)	-0.504 (0.285)	-0.386 (0.314)
Some College	-0.309 (0.175)	-0.407 (0.226)	-0.189 (0.158)	-0.293 (0.178)	-0.368 (0.229)	-0.170 (0.161)
College +	-0.511 (0.346)	-0.559 (0.393)	-0.273 (0.316)	-0.445 (0.335)	-0.458 (0.406)	-0.235 (0.336)
Household Size	0.371 ** (0.072)	0.374 *** (0.062)	0.355 *** (0.067)	0.376 ** (0.072)	0.378 *** (0.066)	0.354 *** (0.064)
Mother Married at Teen's Birth	0.088 (0.237)	0.036 (0.222)	0.176 (0.220)	0.074 (0.238)	0.002 (0.216)	0.206 (0.217)
Mother's Age at Teen's Birth	0.008 (0.024)	0.007 (0.024)	0.013 (0.022)	0.006 (0.023)	0.006 (0.023)	0.012 (0.021)
Mother U.S. Born	-0.863 ** (0.226)	-0.898 ** (0.244)	-0.836 ** (0.244)	-0.846 ** (0.219)	-0.869 ** (0.257)	-0.813 * (0.259)
Teen Weekly Work Hours	0.004 (0.020)	0.005 (0.020)	0.004 (0.019)	0.005 (0.020)	0.006 (0.021)	0.002 (0.019)
Parental Drug Use	-0.376 (0.470)	-0.340 (0.468)	-0.389 (0.445)	-0.376 (0.458)	-0.332 (0.454)	-0.358 (0.438)
Father Ever Incarcerated	-0.025 (0.146)	0.044 (0.131)	-0.092 (0.151)	-0.017 (0.151)	0.035 (0.151)	-0.101 (0.162)
Constant	0.574 (1.332)	1.738 (1.435)	1.140 (1.215)	1.476 (1.564)	1.565 (1.433)	0.931 (1.136)

† p<0.1 **p<0.05 ***p<0.01 ****p<0.001

Table CR4.1
Multinomial Logistic Regression Estimation of Change in Strain (Ref=No Strain)

	Model 1			Model 2		
	Same Strain	More Strain	Less Strain	Same Strain	More Strain	Less Strain
	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)
Any Benefits	0.426 (0.529)	0.042 (0.178)	0.497 (0.301)	0.275 (0.633)	-0.079 (0.318)	-0.192 (0.378)
Strain at Age 9	1.639 ** (0.428)	0.683 † (0.326)	2.497 *** (0.326)	1.853 ** (0.494)	0.816 * (0.268)	2.697 *** (0.372)
Poverty Category				0.158 (0.112)	0.073 (0.133)	0.044 (0.065)
Race (Ref=White)						
Black				0.123 (0.791)	0.028 (0.399)	0.664 (0.387)
Hispanic				-0.741 (0.572)	-1.231 * (0.484)	0.072 (0.623)
Other Race				-0.064 (0.699)	-1.301 * (0.437)	-0.418 (0.537)
Male				-0.339 (0.387)	-0.167 (0.279)	0.030 (0.272)
PCG is Teen's Parent				0.481 (0.662)	0.170 (0.849)	0.513 (0.614)
Household Adult Employed				-0.066 (0.551)	-2.402 ** (0.586)	-1.322 * (0.528)
PCG Education (Ref=<HS)						
High School				-0.407 (0.535)	-0.117 (0.340)	-0.394 (0.272)
Some College				-0.594 † (0.267)	0.492 (0.451)	-0.266 (0.250)
College +				-1.028 (0.636)	0.397 (0.506)	-0.802 (0.547)
Household Size				-0.209 (0.150)	0.227 * (0.073)	-0.017 (0.096)
Mother Married at Teen's Birth				-0.101 (0.474)	0.014 (0.456)	-0.046 (0.443)
Mother's Age at Teen's Birth				-0.046 (0.033)	-0.019 (0.022)	-0.050 † (0.026)
Mother U.S. Born				-0.243 (0.411)	-1.586 *** (0.242)	0.359 (0.449)
Teen Weekly Work Hours				0.050 (0.032)	0.044 (0.028)	0.017 (0.031)
Parental Drug Use				-0.015 (0.449)	-0.409 (0.293)	-0.363 (0.356)
Father Ever Incarcerated				-0.358 (0.307)	-0.021 (0.259)	0.243 (0.252)
Constant	-2.387 *** (0.290)	-0.448 * (0.194)	-2.594 *** (0.230)	-0.035 (1.450)	1.802 (1.289)	-0.577 (1.392)

† p<0.1 *p<0.05 **p<0.01 ***p<0.001

Table CR4.2

Multinomial Logistic Regression Estimation of Change in Virtual Supervision (Ref=No Change)

		Model 1		Model 2	
		More Supervision	Less Supervision	More Supervision	Less Supervision
		Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)
Any Benefits		-0.105 (0.143)	-0.041 (0.334)	-0.311 (0.229)	-0.154 (0.502)
Supervision at Age 9		-2.477 *** (0.237)	-0.573 * (0.243)	-2.643 *** (0.232)	-0.666 * (0.284)
Poverty Category				-0.104 (0.123)	-0.143 (0.153)
Race	(Ref=White)				
	Black			0.015 (0.364)	0.038 (0.523)
	Hispanic			-0.204 (0.336)	-0.225 (0.383)
	Other Race			-0.081 (0.666)	0.261 (0.662)
Male				0.366 † (0.176)	0.258 (0.253)
PCG is Teen's Parent				-0.037 (0.726)	-1.325 † (0.656)
Household Adult Employed				-0.896 † (0.429)	-0.348 (0.493)
PCG Education	(Ref=<HS)				
	High School			0.575 (0.436)	0.336 (0.419)
	Some College			0.184 (0.410)	-0.032 (0.492)
	College +			0.212 (0.342)	0.045 (0.520)
Household Size				0.177 † (0.093)	0.102 (0.095)
Mother Married at Teen's Birth				0.053 (0.395)	0.332 (0.426)
Mother's Age at Teen's Birth				0.025 (0.034)	0.020 (0.028)
Mother U.S. Born				-0.254 (0.408)	-0.358 (0.317)
Teen Weekly Work Hours				0.006 (0.012)	0.005 (0.018)
Parental Drug Use				-0.006 (0.434)	-0.111 (0.219)
Father Ever Incarcerated				0.035 (0.526)	0.233 (0.255)
Constant		5.992 *** (0.590)	0.338 (0.798)	5.877 ** (1.118)	1.480 (1.835)

† p<0.1 *p<0.05 **p<0.01 ***p<0.001

Table CR4.3

Multinomial Logistic Regression Estimation of Change in Intimacy of Communication (Ref=No Change)

	Model 1				Model 2			
	More Communication		Less Communication		More Communication		Less Communication	
	Coef	(SE)	Coef	(SE)	Coef	(SE)	Coef	(SE)
Any Benefits	-0.412		0.575	†	-0.471		0.612	†
	(0.233)		(0.281)		(0.349)		(0.282)	
Communication at Age 9	-1.181	*	0.271		-1.419	**	0.271	
	(0.383)		(0.356)		(0.408)		(0.387)	
Poverty Category					0.000		-0.127	†
					(0.069)		(0.065)	
Race (Ref=White)								
Black					0.114		0.187	
					(0.345)		(0.499)	
Hispanic					-0.789		0.073	
					(0.431)		(0.329)	
Other Race					-0.268		0.369	
					(0.458)		(0.480)	
Male					-0.048		-0.254	†
					(0.289)		(0.120)	
PCG is Teen's Parent					0.110		-0.684	†
					(0.445)		(0.321)	
Household Adult Employed					-0.856	†	0.328	
					(0.427)		(0.390)	
PCG Education (Ref=<HS)								
High School					0.797	*	0.198	
					(0.325)		(0.475)	
Some College					0.494		-0.062	
					(0.356)		(0.283)	
College +					0.588		0.326	
					(0.635)		(0.673)	
Household Size					0.152	*	-0.019	
					(0.059)		(0.058)	
Mother Married at Teen's Birth					-0.293		-0.091	
					(0.464)		(0.428)	
Mother's Age at Teen's Birth					0.003		0.011	
					(0.025)		(0.027)	
Mother U.S. Born					-1.262	***	-0.590	
					(0.232)		(0.430)	
Teen Weekly Work Hours					0.013		-0.036	
					(0.016)		(0.015)	
Parental Drug Use					-0.442		0.025	
					(0.407)		(0.286)	
Father Ever Incarcerated					-0.266		-0.146	
					(0.236)		(0.238)	
Constant	5.386	**	-1.358		6.939	**	-0.256	
	(1.457)		(1.423)		(1.712)		(2.425)	

† p<0.1 *p<0.05 **p<0.01 ***p<0.001

Table CR4.4
Logistic Regression Estimation of Any Delinquency

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7
	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)
Any Benefits	0.218 (0.134)	-0.260 † (0.141)	-0.609 * (0.222)	0.253 † (0.136)	0.010 (0.199)	0.144 (0.124)	-0.094 (0.166)
Change in Strain (Ref=No Strain)							
Same Strain		-0.705 (0.487)	-0.845 (0.581)				
More Strain		0.982 * (0.310)	0.640 † (0.313)				
Less Strain		1.096 *** (0.181)	0.637 * (0.218)				
Change in Virtual Supervision							
More Supervision				-0.649 *** (0.118)	-0.571 ** (0.151)		
Less Supervision				1.371 ** (0.281)	1.330 ** (0.317)		
Change in Intimacy of Communication							
More Communication						-0.477 * (0.161)	-0.455 * (0.143)
Less Communication						0.649 * (0.251)	0.566 * (0.237)
Poverty Category			0.060 (0.097)		0.118 (0.105)		0.118 (0.115)
Race (Ref=White)							
Black			0.443 † (0.240)		0.107 (0.300)		0.118 (0.288)
Hispanic			-0.356 (0.430)		-0.015 (0.300)		0.011 (0.334)
Other Race			-0.283 (0.437)		-0.120 (0.414)		0.138 (0.430)
Male			0.411 † (0.202)		0.336 † (0.177)		0.382 † (0.173)
PCG is Teen's Parent			-0.251 (0.441)		-1.645 * (0.691)		-1.680 † (0.754)
Household Adult Employed			-0.452 † (0.215)		-0.225 (0.269)		-0.322 (0.321)
PCG Education (Ref=<HS)							
High School			-0.497 (0.294)		-0.712 * (0.250)		-0.638 * (0.209)
Some College			0.100 (0.102)		-0.438 † (0.196)		-0.441 * (0.179)
College +			-0.454 (0.252)		-0.628 (0.345)		-0.692 † (0.357)
Household Size			0.206 ** (0.053)		0.218 ** (0.063)		0.225 ** (0.059)
Mother Married at Teen's Birth			-0.477 * (0.187)		-0.460 † (0.210)		-0.362 (0.221)
Mother's Age at Teen's Birth			-0.003 (0.025)		-0.004 (0.023)		-0.001 (0.021)
Mother U.S. Born			-0.683 * (0.262)		-0.441 † (0.201)		-0.359 † (0.188)
Teen Weekly Work Hours			0.048 * (0.018)		0.013 (0.017)		0.017 (0.018)
Parental Drug Use			0.443 * (0.180)		0.166 (0.212)		0.107 (0.210)
Father Ever Incarcerated			0.095 (0.222)		0.103 (0.204)		0.182 (0.193)
Constant	0.241 † (0.111)	0.074 (0.101)	0.328 (0.938)	0.100 (0.132)	1.410 † (0.705)	0.109 (0.177)	1.260 (0.849)

† p<0.1 *p<0.05 **p<0.01 ***p<0.001

Table CR4.5
Logistic Regression Estimation of Any Violence

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7
	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)
Any Benefits	0.491 * (0.174)	-0.067 (0.146)	-0.402 (0.226)	0.574 ** (0.167)	0.382 (0.223)	0.432 * (0.165)	0.252 (0.183)
Change in Strain							
Same Strain		-1.454 * (0.554)	-1.172 * (0.447)				
More Strain		0.987 ** (0.247)	0.579 * (0.255)				
Less Strain		1.494 *** (0.195)	0.953 ** (0.204)				
Change in Virtual Supervision							
More Supervision				-0.913 *** (0.147)	-0.787 ** (0.154)		
Less Supervision				1.306 ** (0.336)	1.299 ** (0.359)		
Change in Intimacy of Communication							
More Communication						-0.605 * (0.202)	-0.510 * (0.160)
Less Communication						0.631 * (0.231)	0.547 * (0.233)
Poverty Category			0.003 (0.091)		0.089 (0.103)		0.086 (0.111)
Race (Ref=White)							
Black			0.496 * (0.182)		0.165 (0.251)		0.174 (0.242)
Hispanic			-0.437 (0.468)		0.110 (0.280)		0.111 (0.299)
Other Race			-1.316 * (0.556)		-0.775 (0.505)		-0.482 (0.517)
Male			0.379 (0.214)		0.265 (0.171)		0.311 (0.173)
PCG is Teen's Parent			-0.536 (0.445)		-2.225 * (0.684)		-2.285 * (0.784)
Household Adult Employed			-0.780 * (0.307)		-0.552 (0.402)		-0.620 (0.427)
PCG Education (Ref=<HS)							
High School			-0.390 (0.331)		-0.624 * (0.256)		-0.575 † (0.193)
Some College			0.292 ** (0.083)		-0.290 (0.248)		-0.323 (0.224)
College +			-0.530 (0.311)		-0.610 (0.389)		-0.698 † (0.369)
Household Size			0.268 ** (0.059)		0.290 ** (0.059)		0.294 ** (0.057)
Mother Married at Teen's Birth			-0.036 (0.204)		-0.009 (0.265)		0.081 (0.264)
Mother's Age at Teen's Birth			-0.012 (0.015)		-0.009 (0.018)		-0.007 (0.015)
Mother U.S. Born			-0.883 * (0.274)		-0.546 ** (0.143)		-0.473 ** (0.135)
Teen Weekly Work Hours			0.043 ** (0.013)		-0.003 (0.018)		0.002 (0.018)
Parental Drug Use			0.319 (0.295)		-0.077 (0.354)		-0.114 (0.389)
Father Ever Incarcerated			0.075 (0.152)		0.115 (0.185)		0.176 (0.197)
Constant	-0.445 * (0.169)	-0.733 *** (0.133)	0.081 (1.024)	-0.612 ** (0.158)	1.191 (0.921)	-0.586 ** (0.165)	1.124 (1.111)

† p<0.1 *p<0.05 **p<0.01 ***p<0.001

Table CR4.6
Logistic Regression Estimation of Any Property Offending

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7
	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)
Any Benefits	0.058 (0.195)	-0.628 ** (0.185)	-0.759 * (0.297)	0.101 (0.182)	0.206 (0.245)	-0.043 (0.197)	0.050 (0.235)
Change in Strain							
Same Strain		-3.103 ** (0.769)	-1.964 ** (0.404)				
More Strain		0.866 * (0.376)	0.473 (0.326)				
Less Strain		1.479 *** (0.160)	1.018 ** (0.221)				
Change in Virtual Supervision							
More Supervision				-1.183 *** (0.180)	-1.005 ** (0.202)		
Less Supervision				1.061 ** (0.236)	1.101 ** (0.230)		
Change in Intimacy of Communication							
More Communication						-0.850 * (0.286)	-0.715 * (0.286)
Less Communication						0.638 * (0.209)	0.562 * (0.215)
Poverty Category			0.157 † (0.078)		0.260 * (0.087)		0.249 * (0.108)
Race (Ref=White)							
Black			0.173 (0.136)		-0.217 (0.321)		-0.206 (0.319)
Hispanic			-0.784 (0.559)		0.050 (0.371)		0.057 (0.373)
Other Race			-1.874 * (0.694)		-0.978 * (0.347)		-0.678 † (0.339)
Male			0.196 (0.253)		0.085 (0.240)		0.157 (0.231)
PCG is Teen's Parent			-0.814 (0.649)		-2.479 *** (0.430)		-2.540 ** (0.547)
Household Adult Employed			-0.874 * (0.313)		-0.512 (0.459)		-0.587 (0.492)
PCG Education (Ref=<HS)							
High School			-0.189 (0.470)		-0.354 (0.250)		-0.381 (0.297)
Some College			0.447 (0.278)		-0.203 (0.216)		-0.295 (0.193)
College +			-0.448 (0.390)		-0.456 (0.366)		-0.627 (0.387)
Household Size			0.317 ** (0.066)		0.361 ** (0.075)		0.357 ** (0.078)
Mother Married at Teen's Birth			0.059 (0.164)		0.018 (0.251)		0.113 (0.237)
Mother's Age at Teen's Birth			0.001 (0.021)		0.009 (0.027)		0.011 (0.023)
Mother U.S. Born			-1.400 ** (0.395)		-0.850 ** (0.225)		-0.740 ** (0.214)
Teen Weekly Work Hours			0.060 * (0.019)		-0.003 (0.018)		0.002 (0.020)
Parental Drug Use			0.275 (0.443)		-0.328 (0.445)		-0.362 (0.460)
Father Ever Incarcerated			-0.064 (0.294)		0.002 (0.159)		0.058 (0.148)
Constant	-0.549 * (0.181)	-0.891 *** (0.147)	-0.507 (1.308)	-0.650 ** (0.155)	0.066 (1.256)	-0.661 ** (0.173)	0.093 (1.466)

† p<0.1 *p<0.05 **p<0.01 ***p<0.001

National Replicate Weights

Table NR3.1
Logistic Regression Estimation of Any Delinquency - Poverty Analysis

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)
Poverty Category	0.007 (0.069)			0.241 * (0.091)		
Number of Waves in Poverty		0.092 (0.068)			-0.085 (0.090)	
Change in Poverty (Ref=No Change)						
Moved Into Poverty			-0.075 (0.235)			-0.413 (0.254)
Moved Out of Poverty			0.269 (0.271)			-0.286 (0.308)
Race (Ref=White)						
Black				0.645 * (0.260)	0.547 * (0.260)	0.472 (0.289)
Hispanic				0.165 (0.321)	0.124 (0.328)	0.070 (0.340)
Other Race				-0.358 (0.481)	-0.447 (0.491)	-0.456 (0.476)
Male				0.368 * (0.177)	0.362 † (0.187)	0.381 † (0.187)
PCG is Teen's Parent				-2.236 ** (0.787)	-2.188 * (0.804)	-2.247 * (0.820)
Household Adult Employed				-0.730 * (0.336)	-0.624 † (0.341)	-0.636 † (0.328)
PCG Education (Ref=<HS)						
High School				-0.655 † (0.339)	-0.671 † (0.340)	-0.652 † (0.331)
Some College				-0.412 (0.302)	-0.363 (0.302)	-0.310 (0.296)
College +				-0.435 (0.298)	-0.279 (0.292)	-0.235 (0.326)
Household Size				0.204 ** (0.060)	0.187 ** (0.062)	0.190 ** (0.059)
Mother Married at Teen's Birth				-0.383 (0.300)	-0.355 (0.300)	-0.371 (0.269)
Mother's Age at Teen's Birth				-0.013 (0.019)	-0.013 (0.020)	-0.012 (0.020)
Mother U.S. Born				-0.526 (0.375)	-0.539 (0.364)	-0.550 (0.385)
Teen Weekly Work Hours				0.029 (0.021)	0.029 (0.021)	0.030 (0.021)
Parental Drug Use				-0.178 (0.244)	-0.195 (0.252)	-0.198 (0.246)
Father Ever Incarcerated				-0.003 (0.181)	-0.087 (0.175)	-0.135 (0.177)
Constant	0.114 (0.239)	0.019 (0.123)	0.119 (0.107)	2.064 (1.221)	2.957 * (1.245)	2.988 * (1.284)

† p<0.1 *p<0.05 **p<0.01 ***p<0.001

Table NR3.2
Logistic Regression Estimation of Any Violence - Poverty Analysis

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)
Poverty Category	-0.102 (0.071)			0.171 (0.112)		
Number of Waves in Poverty		0.160 * (0.067)			-0.061 (0.110)	
Change in Poverty (Ref=No Change)						
Moved Into Poverty			0.169 (0.256)			-0.202 (0.297)
Moved Out of Poverty			0.591 * (0.263)			-0.038 (0.301)
Race (Ref=White)						
Black				0.862 ** (0.309)	0.787 * (0.298)	0.723 * (0.330)
Hispanic				0.242 (0.375)	0.206 (0.374)	0.164 (0.381)
Other Race				-0.666 (0.487)	-0.740 (0.504)	-0.742 (0.495)
Male				0.303 (0.210)	0.301 (0.213)	0.310 (0.215)
PCG is Teen's Parent				-2.841 ** (0.858)	-2.809 ** (0.882)	-2.837 ** (0.887)
Household Adult Employed				-1.058 ** (0.356)	-0.987 * (0.369)	-0.981 ** (0.350)
PCG Education (Ref=<HS)						
High School				-0.574 (0.339)	-0.588 (0.348)	-0.568 † (0.333)
Some College				-0.325 (0.327)	-0.290 (0.329)	-0.248 (0.323)
College +				-0.722 * (0.332)	-0.614 † (0.350)	-0.562 (0.349)
Household Size				0.260 *** (0.058)	0.249 *** (0.059)	0.249 *** (0.057)
Mother Married at Teen's Birth				-0.127 (0.272)	-0.108 (0.275)	-0.103 (0.257)
Mother's Age at Teen's Birth				-0.019 (0.020)	-0.019 (0.021)	-0.018 (0.021)
Mother U.S. Born				-0.618 † (0.339)	-0.636 † (0.334)	-0.622 † (0.345)
Teen Weekly Work Hours				0.025 (0.016)	0.025 (0.016)	0.025 (0.016)
Parental Drug Use				-0.359 (0.304)	-0.371 (0.301)	-0.376 (0.304)
Father Ever Incarcerated				-0.125 (0.224)	-0.179 (0.220)	-0.219 (0.198)
Constant	0.017 (0.234)	-0.545 *** (0.126)	-0.427 *** (0.092)	2.514 † (1.357)	3.172 * (1.329)	3.096 * (1.351)

† p<0.1 *p<0.05 **p<0.01 ***p<0.001

Table NR3.3
 Logistic Regression Estimation of Any Property Offending - Poverty Analysis

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
	<u>Coef (SE)</u>	<u>Coef (SE)</u>	<u>Coef (SE)</u>	<u>Coef (SE)</u>	<u>Coef (SE)</u>	<u>Coef (SE)</u>
Poverty Category	-0.027 (0.078)			0.210 (0.132)		
Number of Waves in Poverty		0.070 (0.067)			-0.154 (0.146)	
Change in Poverty (Ref=No Change)						
Moved Into Poverty			-0.131 (0.230)			-0.484 † (0.282)
Moved Out of Poverty			0.405 (0.295)			-0.170 (0.341)
Race (Ref=White)						
Black				0.786 * (0.319)	0.776 * (0.299)	0.623 † (0.338)
Hispanic				0.207 (0.379)	0.206 (0.382)	0.115 (0.407)
Other Race				-1.036 † (0.557)	-1.112 † (0.575)	-1.112 † (0.558)
Male				0.021 (0.238)	0.017 (0.245)	0.039 (0.245)
PCG is Teen's Parent				-2.944 *** (0.722)	-2.884 *** (0.727)	-2.930 *** (0.740)
Household Adult Employed				-0.934 * (0.375)	-0.895 * (0.387)	-0.864 * (0.360)
PCG Education (Ref=<HS)						
High School				-0.413 (0.441)	-0.472 (0.485)	-0.425 (0.429)
Some College				-0.180 (0.358)	-0.202 (0.390)	-0.099 (0.336)
College +				-0.527 (0.349)	-0.494 (0.372)	-0.365 (0.317)
Household Size				0.352 *** (0.065)	0.340 *** (0.066)	0.340 *** (0.060)
Mother Married at Teen's Birth				0.108 (0.322)	0.112 (0.335)	0.120 (0.282)
Mother's Age at Teen's Birth				0.004 (0.020)	0.001 (0.021)	0.005 (0.021)
Mother U.S. Born				-1.049 ** (0.362)	-1.111 ** (0.363)	-1.076 ** (0.376)
Teen Weekly Work Hours				0.036 † (0.018)	0.037 † (0.019)	0.037 † (0.019)
Parental Drug Use				-0.596 * (0.242)	-0.593 * (0.241)	-0.610 * (0.241)
Father Ever Incarcerated				-0.017 (0.231)	-0.016 (0.249)	-0.129 (0.212)
Constant	-0.584 * (0.286)	-0.768 *** (0.113)	-0.705 *** (0.118)	1.076 (0.996)	2.108 † (1.058)	1.896 † (1.008)

† p<0.1 *p<0.05 **p<0.01 ***p<0.001

Table NR3.4

Logistic Regression Estimation of Any Delinquency - Benefits Analysis

		Model 1	Model 2	Model 3	Model 4
		Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)
Any Benefits		0.333 † (0.180)	-0.007 (0.275)		
Any Benefits (excluding UI/WC)				0.298 † (0.159)	-0.241 (0.203)
Race	(Ref=White)				
	Black		0.454 (0.294)		0.507 † (0.277)
	Hispanic		0.064 (0.333)		0.092 (0.329)
	Other Race		-0.467 (0.490)		-0.455 (0.483)
Male			0.369 † (0.184)		0.378 * (0.180)
PCG is Teen's Parent			-2.219 * (0.825)		-2.228 * (0.817)
Household Adult Employed			-0.577 † (0.337)		-0.655 † (0.332)
PCG Education	(Ref=<HS)				
	High School		-0.629 † (0.332)		-0.625 † (0.325)
	Some College		-0.286 (0.295)		-0.288 (0.295)
	College +		-0.178 (0.329)		-0.223 (0.321)
Household Size			0.185 ** (0.060)		0.193 ** (0.059)
Mother Married at Teen's Birth			-0.333 (0.297)		-0.380 (0.297)
Mother's Age at Teen's Birth			-0.011 (0.019)		-0.012 (0.019)
Mother U.S. Born			-0.501 (0.367)		-0.501 (0.367)
Teen Weekly Work Hours			0.029 (0.021)		0.030 (0.021)
Parental Drug Use			-0.209 (0.259)		-0.186 (0.257)
Father Ever Incarcerated			-0.153 (0.182)		-0.124 (0.171)
Constant		-0.051 (0.122)	2.740 * (1.304)	0.004 (0.108)	2.898 * (1.269)

† p<0.1 *p<0.05 **p<0.01 ***p<0.001

Table NR3.5

Logistic Regression Estimation of Any Violence - Benefits Analysis

		Model 1	Model 2	Model 3	Model 4
		Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)
Any Benefits		0.812 *** (0.173)	0.520 † (0.280)		0.016 (0.218)
Any Benefits (excluding UI/WC)				0.620 *** (0.146)	
Race	(Ref=White)				
	Black		0.616 † (0.346)		0.714 * (0.321)
	Hispanic		0.106 (0.373)		0.159 (0.376)
	Other Race		-0.815 (0.535)		-0.760 (0.505)
Male			0.290 (0.218)		0.305 (0.212)
PCG is Teen's Parent			-2.829 ** (0.894)		-2.834 ** (0.888)
Household Adult Employed			-0.838 * (0.355)		-0.949 * (0.361)
PCG Education	(Ref=<HS)				
	High School		-0.583 (0.364)		-0.561 (0.339)
	Some College		-0.247 (0.328)		-0.237 (0.322)
	College +		-0.450 (0.353)		-0.536 (0.350)
Household Size			0.236 *** (0.060)		0.247 *** (0.056)
Mother Married at Teen's Birth			0.019 (0.293)		-0.089 (0.280)
Mother's Age at Teen's Birth			-0.021 (0.020)		-0.018 (0.020)
Mother U.S. Born			-0.622 † (0.328)		-0.609 † (0.339)
Teen Weekly Work Hours			0.023 (0.016)		0.025 (0.016)
Parental Drug Use			-0.421 (0.305)		-0.384 (0.301)
Father Ever Incarcerated			-0.288 (0.204)		-0.230 (0.190)
Constant		-0.808 *** (0.118)	2.750 † (1.406)	-0.621 *** (0.103)	3.011 * (1.365)

† p<0.1 *p<0.05 **p<0.01 ***p<0.001

Table NR3.6

Logistic Regression Estimation of Any Property Offending - Benefits Analysis

		Model 1	Model 2	Model 3	Model 4
		Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)
Any Benefits		0.427 ** (0.135)	0.186 (0.249)		
Any Benefits (excluding UI/WC)				0.314 * (0.133)	-0.179 (0.233)
Race	(Ref=White)				
	Black		0.564 (0.370)		0.648 † (0.339)
	Hispanic		0.078 (0.418)		0.126 (0.407)
	Other Race		-1.169 † (0.598)		-1.146 † (0.573)
Male			0.022 (0.245)		0.036 (0.240)
PCG is Teen's Parent			-2.903 ** (0.757)		-2.932 *** (0.750)
Household Adult Employed			-0.770 * (0.344)		-0.860 * (0.360)
PCG Education	(Ref=<HS)				
	High School		-0.412 (0.456)		-0.400 (0.436)
	Some College		-0.077 (0.344)		-0.071 (0.339)
	College +		-0.278 (0.324)		-0.343 (0.329)
Household Size			0.331 *** (0.062)		0.341 *** (0.059)
Mother Married at Teen's Birth			0.193 (0.309)		0.121 (0.303)
Mother's Age at Teen's Birth			0.004 (0.021)		0.005 (0.021)
Mother U.S. Born			-1.041 ** (0.362)		-1.036 ** (0.365)
Teen Weekly Work Hours			0.036 † (0.019)		0.038 † (0.019)
Parental Drug Use			-0.633 * (0.238)		-0.604 * (0.239)
Father Ever Incarcerated			-0.163 (0.214)		-0.125 (0.217)
Constant		-0.926 *** (0.114)	1.593 (1.004)	-0.822 *** (0.110)	1.814 † (1.015)

† p<0.1 **p<0.05 ***p<0.01 ****p<0.001

Table NR3.7
Logistic Regression Estimation of Any Delinquency - Mediation and Moderation Analysis

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)
Poverty Category	0.246 * (0.096)			0.253 (0.164)		
Number of Waves in Poverty		-0.085 (0.094)			0.048 (0.220)	
Change in Poverty (Ref=No Change)						
Moved Into Poverty			-0.417 (0.256)			-0.168 (0.756)
Moved Out of Poverty			-0.286 (0.310)			0.407 (0.512)
Any Benefits	0.082 (0.288)	0.010 (0.288)	0.029 (0.281)	0.124 (0.712)	0.196 (0.369)	0.174 (0.341)
Poverty Category*Any Benefits				-0.012 (0.201)		
Waves in Poverty*Any Benefits					-0.183 (0.226)	
Into Poverty*Any Benefits						-0.359 (0.822)
Out of Poverty*Any Benefits						-0.984 † (0.517)
Race (Ref=White)						
Black	0.632 * (0.259)	0.545 * (0.251)	0.466 (0.290)	0.632 * (0.261)	0.521 * (0.234)	0.466 (0.286)
Hispanic	0.158 (0.315)	0.123 (0.322)	0.067 (0.334)	0.159 (0.313)	0.082 (0.298)	0.040 (0.332)
Other Race	-0.365 (0.486)	-0.448 (0.493)	-0.459 (0.479)	-0.365 (0.491)	-0.469 (0.480)	-0.488 (0.477)
Male	0.365 † (0.179)	0.362 † (0.189)	0.380 † (0.189)	0.364 † (0.181)	0.374 † (0.191)	0.394 * (0.188)
PCG is Teen's Parent	-2.232 ** (0.787)	-2.187 * (0.807)	-2.245 * (0.822)	-2.231 ** (0.789)	-2.183 * (0.792)	-2.237 * (0.820)
Household Adult Employed	-0.711 * (0.343)	-0.621 † (0.349)	-0.629 † (0.343)	-0.708 * (0.337)	-0.651 † (0.341)	-0.631 † (0.340)
PCG Education (Ref=<HS)						
High School	-0.658 † (0.345)	-0.671 † (0.344)	-0.654 † (0.331)	-0.657 † (0.345)	-0.676 † (0.347)	-0.608 † (0.331)
Some College	-0.415 (0.301)	-0.363 (0.301)	-0.311 (0.294)	-0.416 (0.302)	-0.343 (0.306)	-0.289 (0.293)
College +	-0.425 (0.306)	-0.277 (0.299)	-0.231 (0.340)	-0.427 (0.308)	-0.228 (0.319)	-0.189 (0.347)
Household Size	0.202 ** (0.060)	0.187 ** (0.061)	0.189 ** (0.059)	0.202 ** (0.060)	0.192 ** (0.062)	0.186 ** (0.060)
Mother Married at Teen's Birth	-0.366 (0.310)	-0.353 (0.308)	-0.365 (0.285)	-0.366 (0.312)	-0.366 (0.312)	-0.352 (0.284)
Mother's Age at Teen's Birth	-0.014 (0.019)	-0.014 (0.020)	-0.013 (0.019)	-0.014 (0.019)	-0.014 (0.020)	-0.014 (0.019)
Mother U.S. Born	-0.527 (0.375)	-0.539 (0.367)	-0.550 (0.386)	-0.528 (0.381)	-0.493 (0.378)	-0.534 (0.383)
Teen Weekly Work Hours	0.029 (0.021)	0.029 (0.021)	0.030 (0.021)	0.029 (0.021)	0.030 (0.020)	0.029 (0.021)
Parental Drug Use	-0.182 (0.246)	-0.195 (0.255)	-0.200 (0.249)	-0.183 (0.244)	-0.177 (0.262)	-0.179 (0.240)
Father Ever Incarcerated	-0.010 (0.183)	-0.088 (0.173)	-0.138 (0.180)	-0.011 (0.181)	-0.088 (0.167)	-0.134 (0.184)
Constant	2.003 (1.321)	2.951 * (1.298)	2.973 * (1.350)	1.968 (1.385)	2.839 * (1.357)	2.886 * (1.351)

† p<0.1 *p<0.05 **p<0.01 ***p<0.001

Table NR3.8
Logistic Regression Estimation of Any Violence - Mediation and Moderation Analysis

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)
Poverty Category	0.207 † (0.118)			0.059 (0.190)		
Number of Waves in Poverty		-0.076 (0.117)			0.201 (0.248)	
Change in Poverty (Ref=No Change)						
Moved Into Poverty			-0.287 (0.303)			0.416 (0.637)
Moved Out of Poverty			-0.026 (0.326)			1.267 * (0.516)
Any Benefits	0.606 † (0.298)	0.537 † (0.297)	0.551 † (0.290)	-0.201 (0.815)	0.937 ** (0.319)	0.883 * (0.346)
Poverty Category*Any Benefits				0.221 (0.207)		
Waves in Poverty*Any Benefits					-0.372 (0.233)	
Into Poverty*Any Benefits						-0.961 (0.672)
Out of Poverty*Any Benefits						-1.864 ** (0.579)
Race (Ref=White)						
Black	0.776 * (0.320)	0.700 * (0.304)	0.618 † (0.347)	0.769 * (0.320)	0.648 * (0.291)	0.628 † (0.342)
Hispanic	0.195 (0.369)	0.160 (0.369)	0.105 (0.377)	0.180 (0.364)	0.077 (0.353)	0.055 (0.376)
Other Race	-0.708 (0.519)	-0.793 (0.535)	-0.791 (0.525)	-0.704 (0.524)	-0.849 (0.511)	-0.855 (0.522)
Male	0.285 (0.216)	0.285 (0.220)	0.296 (0.221)	0.290 (0.216)	0.310 (0.221)	0.334 (0.219)
PCG is Teen's Parent	-2.836 ** (0.860)	-2.797 ** (0.881)	-2.830 ** (0.890)	-2.841 ** (0.851)	-2.779 ** (0.857)	-2.822 ** (0.884)
Household Adult Employed	-0.946 * (0.358)	-0.876 * (0.370)	-0.869 * (0.354)	-0.999 ** (0.357)	-0.931 * (0.362)	-0.882 * (0.345)
PCG Education (Ref=<HS)						
High School	-0.601 (0.373)	-0.618 (0.383)	-0.592 (0.357)	-0.620 † (0.362)	-0.624 † (0.367)	-0.499 (0.347)
Some College	-0.352 (0.335)	-0.312 (0.339)	-0.263 (0.328)	-0.348 (0.337)	-0.273 (0.338)	-0.227 (0.321)
College +	-0.656 † (0.332)	-0.540 (0.347)	-0.475 (0.354)	-0.624 † (0.336)	-0.442 (0.376)	-0.403 (0.365)
Household Size	0.250 *** (0.061)	0.237 ** (0.062)	0.238 *** (0.060)	0.251 *** (0.060)	0.249 *** (0.061)	0.233 ** (0.061)
Mother Married at Teen's Birth	-0.008 (0.299)	0.002 (0.302)	0.013 (0.290)	-0.015 (0.297)	-0.023 (0.299)	0.036 (0.296)
Mother's Age at Teen's Birth	-0.022 (0.020)	-0.023 (0.020)	-0.021 (0.021)	-0.024 (0.020)	-0.024 (0.022)	-0.023 (0.021)
Mother U.S. Born	-0.636 † (0.325)	-0.655 † (0.324)	-0.642 † (0.333)	-0.631 † (0.325)	-0.569 † (0.333)	-0.608 † (0.327)
Teen Weekly Work Hours	0.023 (0.016)	0.024 (0.017)	0.023 (0.017)	0.025 (0.016)	0.026 (0.016)	0.022 (0.017)
Parental Drug Use	-0.399 (0.303)	-0.407 (0.300)	-0.416 (0.302)	-0.386 (0.302)	-0.379 (0.308)	-0.375 (0.289)
Father Ever Incarcerated	-0.171 (0.236)	-0.229 (0.228)	-0.277 (0.205)	-0.156 (0.228)	-0.224 (0.206)	-0.277 (0.212)
Constant	2.085 (1.460)	2.927 * (1.391)	2.828 † (1.434)	2.750 † (1.576)	2.646 † (1.472)	2.620 † (1.432)

† p<0.1 *p<0.05 **p<0.01 ***p<0.001

Table NR3.9
 Logistic Regression Estimation of Any Property Offending - Mediation and Moderation Analysis

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)
Poverty Category	0.227 (0.140)			0.074 (0.231)		
Number of Waves in Poverty		-0.159 (0.151)			0.195 † (0.286)	
Change in Poverty (Ref=No Change)						
Moved Into Poverty			-0.523 † (0.289)			0.293 (0.725)
Moved Out of Poverty			-0.162 (0.348)			1.154 * (0.552)
Any Benefits	0.278 (0.273)	0.217 (0.268)	0.240 (0.263)	-0.550 (0.857)	0.743 * (0.292)	0.598 † (0.340)
Poverty Category*Any Benefits				0.227 (0.209)		
Waves in Poverty*Any Benefits					-0.487 † (0.246)	
Into Poverty*Any Benefits						-1.109 (0.744)
Out of Poverty*Any Benefits						-1.940 ** (0.639)
Race (Ref=White)						
Black	0.742 * (0.339)	0.736 * (0.309)	0.573 (0.366)	0.732 * (0.347)	0.667 * (0.302)	0.581 (0.357)
Hispanic	0.183 (0.389)	0.184 (0.389)	0.087 (0.419)	0.167 (0.390)	0.066 (0.367)	0.031 (0.432)
Other Race	-1.052 † (0.580)	-1.131 † (0.597)	-1.130 † (0.581)	-1.052 † (0.583)	-1.226 * (0.554)	-1.220 † (0.602)
Male	0.010 (0.243)	0.008 (0.251)	0.032 (0.250)	0.016 (0.244)	0.044 (0.256)	0.062 (0.251)
PCG is Teen's Parent	-2.929 *** (0.721)	-2.868 *** (0.726)	-2.915 *** (0.741)	-2.940 *** (0.731)	-2.880 *** (0.720)	-2.944 *** (0.705)
Household Adult Employed	-0.886 * (0.362)	-0.852 * (0.372)	-0.818 * (0.350)	-0.941 * (0.358)	-0.945 * (0.369)	-0.824 * (0.347)
PCG Education (Ref=<HS)						
High School	-0.423 (0.462)	-0.482 (0.506)	-0.434 (0.444)	-0.441 (0.450)	-0.468 (0.487)	-0.323 (0.444)
Some College	-0.193 (0.366)	-0.211 (0.398)	-0.107 (0.339)	-0.186 (0.368)	-0.151 (0.401)	-0.069 (0.339)
College +	-0.495 (0.350)	-0.462 (0.367)	-0.327 (0.322)	-0.462 (0.349)	-0.329 (0.393)	-0.248 (0.333)
Household Size	0.347 *** (0.067)	0.335 *** (0.067)	0.335 *** (0.061)	0.348 *** (0.066)	0.351 *** (0.064)	0.329 *** (0.062)
Mother Married at Teen's Birth	0.160 (0.328)	0.155 (0.339)	0.170 (0.297)	0.150 (0.324)	0.115 (0.341)	0.191 (0.297)
Mother's Age at Teen's Birth	0.003 (0.020)	0.000 (0.021)	0.004 (0.021)	0.001 (0.021)	-0.002 (0.023)	0.002 (0.021)
Mother U.S. Born	-1.057 ** (0.360)	-1.118 ** (0.365)	-1.084 ** (0.376)	-1.050 ** (0.358)	-1.027 ** (0.369)	-1.056 ** (0.376)
Teen Weekly Work Hours	0.035 † (0.018)	0.036 † (0.019)	0.036 † (0.019)	0.037 † (0.018)	0.039 * (0.018)	0.035 † (0.019)
Parental Drug Use	-0.612 * (0.236)	-0.607 * (0.235)	-0.626 * (0.234)	-0.601 * (0.234)	-0.584 * (0.243)	-0.584 * (0.227)
Father Ever Incarcerated	-0.034 (0.231)	-0.034 (0.244)	-0.151 (0.209)	-0.018 (0.220)	-0.027 (0.212)	-0.153 (0.217)
Constant	0.870 (1.043)	1.999 † (1.048)	1.770 † (1.028)	1.560 (1.291)	1.709 (1.178)	1.579 (0.993)

† p<0.1 *p<0.05 **p<0.01 ***p<0.001

Table NR4.1
Multinomial Logistic Regression Estimation of Change in Strain (Ref=No Strain)

		Model 1			Model 2		
		Same Strain	More Strain	Less Strain	Same Strain	More Strain	Less Strain
		Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)
Any Benefits		1.228 * (0.454)	0.480 † (0.252)	0.504 (0.305)	0.739 (0.532)	0.413 (0.308)	-0.261 (0.357)
Strain at Age 9		2.278 *** (0.387)	0.504 (0.439)	2.892 *** (0.308)	2.352 *** (0.413)	0.659 (0.450)	3.093 *** (0.367)
Poverty Category					-0.045 (0.137)	0.092 (0.132)	0.002 (0.165)
Race	(Ref=White)						
	Black				0.022 (0.370)	0.775 * (0.315)	1.068 * (0.485)
	Hispanic				-1.066 * (0.479)	-1.240 ** (0.368)	-0.055 (0.380)
	Other Race				0.829 (0.707)	-0.749 (0.495)	-0.599 (0.553)
Male					-0.497 (0.317)	-0.355 (0.293)	-0.228 (0.318)
PCG is Teen's Parent					1.112 (0.701)	0.314 (0.646)	0.440 (0.774)
Household Adult Employed					-0.277 (0.711)	-2.577 *** (0.518)	-1.173 † (0.589)
PCG Education	(Ref=<HS)						
	High School				-0.807 * (0.324)	0.099 (0.520)	-0.133 (0.487)
	Some College				-0.632 (0.472)	0.619 (0.504)	0.170 (0.463)
	College +				-1.163 * (0.505)	0.535 (0.481)	-0.640 (0.555)
Household Size					-0.149 (0.106)	0.331 *** (0.077)	0.085 (0.082)
Mother Married at Teen's Birth					-0.138 (0.434)	0.080 (0.286)	-0.097 (0.422)
Mother's Age at Teen's Birth					-0.065 † (0.032)	-0.041 (0.027)	-0.057 * (0.024)
Mother U.S. Born					-0.527 (0.581)	-1.582 *** (0.396)	0.460 (0.493)
Teen Weekly Work Hours					0.013 (0.030)	0.021 (0.020)	-0.019 (0.029)
Parental Drug Use					0.746 (0.455)	-0.634 (0.455)	-0.294 (0.445)
Father Ever Incarcerated					0.092 (0.313)	-0.211 (0.231)	0.031 (0.256)
Constant		-3.320 *** (0.349)	-0.844 *** (0.146)	-2.776 *** (0.343)	0.164 (1.584)	1.246 (1.212)	-1.002 (1.488)

† p<0.1 *p<0.05 **p<0.01 ***p<0.001

Table NR4.2

Multinomial Logistic Regression Estimation of Change in Virtual Supervision (Ref=No Change)

		Model 1		Model 2	
		More Supervision	Less Supervision	More Supervision	Less Supervision
		Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)
Any Benefits		-0.298 (0.257)	-0.330 (0.286)	-0.469 (0.339)	-0.438 (0.318)
Supervision at Age 9		-2.445 *** (0.229)	-0.368 (0.333)	-2.602 *** (0.249)	-0.541 (0.332)
Poverty Category				0.005 (0.106)	-0.179 (0.136)
Race	(Ref=White)				
	Black			0.625 † (0.308)	0.189 (0.404)
	Hispanic			-0.144 (0.387)	0.016 (0.477)
	Other Race			0.376 (0.437)	0.078 (0.734)
Male				0.239 (0.257)	0.330 (0.241)
PCG is Teen's Parent				-0.642 (0.842)	-0.968 (0.607)
Household Adult Employed				-1.020 * (0.403)	-0.309 (0.289)
PCG Education	(Ref=<HS)				
	High School			0.619 (0.520)	0.292 (0.647)
	Some College			-0.058 (0.441)	-0.005 (0.511)
	College +			0.177 (0.516)	0.495 (0.453)
Household Size				0.137 (0.085)	0.235 * (0.091)
Mother Married at Teen's Birth				-0.044 (0.197)	0.079 (0.290)
Mother's Age at Teen's Birth				0.019 (0.033)	0.058 * (0.021)
Mother U.S. Born				-0.387 (0.368)	-0.517 (0.362)
Teen Weekly Work Hours				-0.016 (0.029)	0.006 (0.025)
Parental Drug Use				-0.513 † (0.287)	-0.257 (0.346)
Father Ever Incarcerated				-0.170 (0.264)	0.077 (0.404)
Constant		5.877 *** (0.614)	-0.194 (0.954)	6.649 *** (1.410)	-0.751 (1.810)

† p<0.1 *p<0.05 **p<0.01 ***p<0.001

Table NR4.3

Multinomial Logistic Regression Estimation of Change in Intimacy of Communication (Ref=No Change)

	Model 1				Model 2			
	More Communication		Less Communication		More Communication		Less Communication	
	Coef	(SE)	Coef	(SE)	Coef	(SE)	Coef	(SE)
Any Benefits	-0.167		0.867	**	-0.184		0.706	†
	(0.267)		(0.313)		(0.340)		(0.401)	
Communication at Age 9	-1.099	***	-0.034		-1.473	***	-0.003	
	(0.228)		(0.214)		(0.288)		(0.283)	
Poverty Category					0.193		0.024	
					(0.134)		(0.145)	
Race (Ref=White)								
Black					0.602		0.236	
					(0.359)		(0.432)	
Hispanic					-0.205		0.084	
					(0.420)		(0.368)	
Other Race					-0.156		0.261	
					(0.646)		(0.689)	
Male					-0.375		-0.560	
					(0.264)		(0.348)	
PCG is Teen's Parent					-0.091		-1.310	*
					(0.474)		(0.534)	
Household Adult Employed					-1.059	**	0.307	
					(0.335)		(0.318)	
PCG Education (Ref=<HS)								
High School					0.501		-0.009	
					(0.319)		(0.430)	
Some College					0.520	†	-0.256	
					(0.279)		(0.315)	
College +					0.364		-0.667	
					(0.342)		(0.505)	
Household Size					0.148	*	-0.064	
					(0.068)		(0.080)	
Mother Married at Teen's Birth					-0.422		-0.134	
					(0.290)		(0.425)	
Mother's Age at Teen's Birth					0.001		-0.013	
					(0.028)		(0.028)	
Mother U.S. Born					-1.076	**	-0.145	
					(0.294)		(0.356)	
Teen Weekly Work Hours					-0.001		-0.029	
					(0.021)		(0.021)	
Parental Drug Use					-0.338		0.249	
					(0.338)		(0.422)	
Father Ever Incarcerated					-0.588	†	-0.335	
					(0.313)		(0.302)	
Constant	4.786	***	-0.610		6.724	**	1.772	
	(0.861)		(0.861)		(1.940)		(1.734)	

† p<0.1 *p<0.05 **p<0.01 ***p<0.001

Table NR4.4
Logistic Regression Estimation of Any Delinquency

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7
	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)
Any Benefits	0.333 † (0.180)	-0.099 (0.218)	-0.417 (0.290)	0.348 † (0.181)	0.114 (0.275)	0.235 (0.181)	0.019 (0.302)
Change in Strain (Ref=No Strain)							
Same Strain		-1.139 * (0.504)	-0.754 (0.497)				
More Strain		0.655 † (0.332)	0.313 (0.335)				
Less Strain		0.633 * (0.250)	0.093 (0.277)				
Change in Virtual Supervision							
More Supervision				-0.463 * (0.180)	-0.253 (0.191)		
Less Supervision				1.510 ** (0.456)	1.482 ** (0.448)		
Change in Intimacy of Communication							
More Communication						-0.568 * (0.227)	-0.403 (0.285)
Less Communication						0.676 *** (0.172)	0.624 ** (0.212)
Poverty Category			0.224 ** (0.081)		0.269 ** (0.088)		0.239 * (0.101)
Race (Ref=White)							
Black			0.920 ** (0.266)		0.539 * (0.245)		0.517 † (0.273)
Hispanic			0.021 (0.334)		0.170 (0.327)		0.187 (0.322)
Other Race			-0.848 * (0.359)		-0.411 (0.471)		-0.300 (0.500)
Male			0.448 * (0.180)		0.322 † (0.169)		0.423 * (0.173)
PCG is Teen's Parent			-0.735 (0.533)		-2.025 * (0.768)		-1.803 * (0.746)
Household Adult Employed			-0.629 † (0.325)		-0.573 (0.346)		-0.615 † (0.358)
PCG Education (Ref=<HS)							
High School			-0.718 † (0.357)		-0.747 * (0.347)		-0.668 † (0.327)
Some College			-0.133 (0.349)		-0.422 (0.318)		-0.370 (0.303)
College +			-0.461 (0.398)		-0.526 (0.312)		-0.387 (0.314)
Household Size			0.161 ** (0.052)		0.156 * (0.065)		0.185 ** (0.065)
Mother Married at Teen's Birth			-0.450 (0.319)		-0.381 (0.316)		-0.388 (0.335)
Mother's Age at Teen's Birth			-0.013 (0.020)		-0.026 (0.018)		-0.012 (0.019)
Mother U.S. Born			-0.714 * (0.339)		-0.483 (0.364)		-0.443 (0.411)
Teen Weekly Work Hours			0.043 (0.026)		0.022 (0.020)		0.027 (0.020)
Parental Drug Use			0.151 (0.320)		-0.122 (0.262)		-0.204 (0.261)
Father Ever Incarcerated			0.068 (0.178)		0.030 (0.195)		0.046 (0.200)
Constant	-0.051 (0.122)	-0.052 (0.145)	0.797 (1.352)	-0.252 † (0.135)	1.995 (1.396)	-0.132 (0.164)	1.354 (1.386)

† p<0.1 *p<0.05 **p<0.01 ***p<0.001

Table NR4.5
Logistic Regression Estimation of Any Violence

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7
	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)
Any Benefits	0.812 *** (0.173)	0.234 (0.224)	-0.038 (0.300)	0.867 *** (0.183)	0.646 * (0.285)	0.739 *** (0.165)	0.545 † (0.295)
Change in Strain							
Same Strain		-1.667 * (0.765)	-0.820 (0.566)				
More Strain		0.826 * (0.309)	0.424 (0.307)				
Less Strain		1.022 ** (0.233)	0.353 (0.247)				
Change in Virtual Supervision							
More Supervision				-0.676 ** (0.214)	-0.398 † (0.199)		
Less Supervision				1.241 *** (0.291)	1.233 *** (0.280)		
Change in Intimacy of Communication							
More Communication						-0.541 * (0.248)	-0.291 (0.288)
Less Communication						0.765 ** (0.214)	0.681 * (0.258)
Poverty Category			0.142 (0.093)		0.226 † (0.112)		0.200 (0.121)
Race (Ref=White)							
Black			0.979 ** (0.296)		0.701 * (0.312)		0.667 † (0.339)
Hispanic			-0.109 (0.403)		0.214 (0.384)		0.226 (0.381)
Other Race			-2.055 *** (0.512)		-0.754 (0.504)		-0.648 (0.534)
Male			0.405 † (0.231)		0.241 (0.207)		0.343 (0.216)
PCG is Teen's Parent			-1.026 (0.688)		-2.635 ** (0.844)		-2.423 ** (0.820)
Household Adult Employed			-0.782 * (0.339)		-0.833 * (0.350)		-0.860 * (0.362)
PCG Education (Ref=<HS)							
High School			-0.639 (0.412)		-0.649 † (0.382)		-0.594 † (0.340)
Some College			0.029 (0.391)		-0.339 (0.343)		-0.305 (0.329)
College +			-0.703 † (0.415)		-0.753 * (0.322)		-0.630 † (0.351)
Household Size			0.181 ** (0.049)		0.208 ** (0.064)		0.237 ** (0.064)
Mother Married at Teen's Birth			-0.123 (0.310)		-0.016 (0.291)		-0.018 (0.327)
Mother's Age at Teen's Birth			-0.023 (0.022)		-0.032 † (0.019)		-0.021 (0.019)
Mother U.S. Born			-0.899 ** (0.298)		-0.599 † (0.318)		-0.534 (0.373)
Teen Weekly Work Hours			0.044 * (0.021)		0.015 (0.016)		0.021 (0.017)
Parental Drug Use			-0.029 (0.354)		-0.344 (0.309)		-0.405 (0.314)
Father Ever Incarcerated			-0.083 (0.219)		-0.129 (0.241)		-0.117 (0.252)
Constant	-0.808 *** 0.118	-0.867 ** (0.143)	0.812 (1.559)	-0.996 *** 0.140	2.052 1.553	-0.979 *** 0.146	1.364 1.518

† p<0.1 *p<0.05 **p<0.01 ***p<0.001

Table NR4.6
Logistic Regression Estimation of Any Property Offending

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7
	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)	Coef (SE)
Any Benefits	0.427 ** (0.135)	-0.305 (0.205)	-0.609 * (0.246)	0.453 ** (0.137)	0.294 (0.262)	0.335 ** (0.118)	0.197 (0.261)
Change in Strain							
Same Strain		-3.310 ** (1.064)	-1.647 * (0.613)	-0.938 *** (0.233)	-0.633 * (0.271)		
More Strain		0.906 ** (0.311)	0.454 (0.345)	1.212 *** (0.279)	1.149 *** (0.279)		
Less Strain		1.180 *** (0.280)	0.450 (0.352)				
Change in Virtual Supervision							
More Supervision						-1.156 *** (0.237)	-0.959 ** (0.300)
Less Supervision						0.674 ** (0.227)	0.551 † (0.292)
Change in Intimacy of Communication							
More Communication							
Less Communication							
Poverty Category			0.125 (0.111)		0.246 † (0.138)		0.216 (0.150)
Race (Ref=White)							
Black			1.048 ** (0.350)		0.666 † (0.340)		0.602 (0.360)
Hispanic			-0.200 (0.394)		0.198 (0.401)		0.218 (0.388)
Other Race			-3.265 ** (0.939)		-1.110 † (0.564)		-0.976 (0.599)
Male			0.112 (0.302)		-0.058 (0.232)		0.080 (0.240)
PCG is Teen's Parent			-1.064 † (0.574)		-2.691 *** (0.683)		-2.439 ** (0.702)
Household Adult Employed			-0.788 * (0.385)		-0.776 * (0.349)		-0.799 * (0.369)
PCG Education (Ref=<HS)							
High School			-0.404 (0.579)		-0.428 (0.472)		-0.345 (0.435)
Some College			0.335 (0.481)		-0.147 (0.374)		-0.088 (0.361)
College +			-0.462 (0.447)		-0.561 (0.355)		-0.464 (0.393)
Household Size			0.258 *** (0.048)		0.306 *** (0.068)		0.331 *** (0.068)
Mother Married at Teen's Birth			0.030 (0.394)		0.149 (0.336)		0.136 (0.356)
Mother's Age at Teen's Birth			0.003 (0.023)		-0.007 (0.020)		0.006 (0.021)
Mother U.S. Born			-1.453 *** (0.311)		-1.064 ** (0.344)		-1.009 * (0.416)
Teen Weekly Work Hours			0.061 ** (0.020)		0.027 (0.018)		0.032 (0.021)
Parental Drug Use			-0.138 (0.292)		-0.549 * (0.239)		-0.593 * (0.244)
Father Ever Incarcerated			0.115 (0.270)		0.014 (0.255)		0.045 (0.262)
Constant	-0.926 *** (0.114)	-1.087 *** (0.165)	-0.250 (1.210)	-1.090 *** (0.151)	0.842 (1.070)	-0.990 *** (0.188)	0.218 (1.123)

† p<0.1 *p<0.05 **p<0.01 ***p<0.001

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- 2015 M.A., Criminology, The Pennsylvania State University
- 2013 B.A., Sociology and Anthropology, Denison University

PUBLICATIONS

- Graif, Corina, Alina Lungeanu, and **Alyssa M. Yetter**. 2017. "Neighborhood Isolation in Chicago: Violent Crime Effects on Structural Isolation and Homophily in Inter-Neighborhood Commuting Networks, 2002-2013." *Social Networks* 51:40-59.
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- Tripp, Simon, Martin Grueber, Dylan Yetter, Joseph Simkins, and **Alyssa Yetter**. 2017. "Quantitative and Qualitative Review of NIFA Capacity Funding." Prepared for the National Institute of Food and Agriculture. Columbus, OH: TEconomy Partners.

TEACHING EXPERIENCE

- Instructor, Women and the Criminal Justice System (2018)
- Lab Instructor, Statistical Models for Nonexperimental Research (2018)
- Instructor, Introduction to Criminal Justice (2017)
- Instructor, Criminology (2016)
- Instructor, Sociology of Deviance (2015)
- Section Instructor, Research Methods in Criminal Justice (2013-2014, 2017-2018)