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WELFARE AND THE CHILDREN OF IMMIGRANTS: TRANSMISSION OF DEPENDENCE OR INVESTMENT IN THE FUTURE?

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Abstract

The public concern that immigrant families might be using a disproportionate share of social benefits and transmitting some form of public dependency to their children, combined with the rising levels of immigrants entering the country, fueled the passage of the Personal Responsibility and Work Opportunity Reconciliation Act in 1996, which limited public assistance to many immigrant families. This paper uses the National Longitudinal Survey of Youth 1997 to explore the association between exposure to welfare and young adult outcomes of high school graduation, college enrollment and labor force participation with a focus on parental nativity status as well as broad country of origin group. Results indicate a persistent negative association between welfare legacy and high school graduation; a negative association that is most pronounced for children of natives. Results also show the largest positive effect of welfare receipt among the most disadvantaged group, the young adult children of immigrants from Mexican and Central American countries. The main finding of this study suggests that the negative impacts of welfare receipt might be lessened and in some cases reversed among the young adults from immigrant families. Such findings challenge the common notion that immigrant families use welfare as a crutch across generations and raise serious concern about U.S. immigration and welfare policies.

Introduction

Since 1992, over ten million immigrants have entered the United States and today, an estimated 23 percent of the population is an immigrant or the child of an immigrant (U.S. Census Bureau 2006). An issue that has been debated by both policy makers and researchers alike concerns not only the immediate cost of immigrants coming into the U.S. but also the future costs of their children. The public concern that immigrant families might be using a disproportionate share of social benefits and transmitting some form of public dependency to their children, combined with the rising levels of immigrants entering the country, fueled the passage of the Personal Responsibility and Work Opportunity Reconciliation Act (PRWORA or Welfare Reform) in 1996. One of the biggest social experiments to be conducted in this country in years, Welfare Reform with its severe immigrant restrictions was intended to reduce the rate of welfare use by immigrants who were already residing in the U.S. and discourage those who might need social assistance from entering. These changes reflect the commonly held notions about the negative effects of welfare on children and families.

This study uses the 1997 National Longitudinal Survey of Youth (NLSY97) to explore the complicated relationship between welfare receipt and intergenerational outcomes among immigrant families. While much scholarly attention has been given to the welfare reciprocity patterns of immigrants, this paper focuses on the impact of welfare receipt on a growing population—the children of immigrants. More specifically, this study focuses on the relationship between the receipt of welfare within immigrant families and two key outcomes among the children of immigrants; educational attainment and labor force participation.

An important question underlying the immigrant-welfare debate is whether the native-born children of immigrants will achieve the economic self-sufficiency necessary for social mobility. By examining the effects of welfare receipt on the educational attainment and labor force participation of the young adult children of immigrants, this paper centers on a population in which welfare restrictions could have a significant potential impact on the nation's social and economic future. Most of the research on the intergenerational effects of welfare receipt has focused almost exclusively on native-born parents and native-born children. By placing the emphasis on immigrant families and exploring the effects of welfare receipt on the outcomes of their children, we may begin to understand a key question underlying the welfare and immigration debate; does welfare serve as a crutch for immigrant families characterized by high levels of poverty and low levels of education or does it serve as a means of investment in their children's future?

Background

Prior research on the intergenerational effect of welfare receipt

There are several explanations—structural and cultural—guiding the research on the intergenerational effect of welfare receipt, all of which assume that children raised in welfare homes are likely to be economically disadvantaged. However, the key difference among these perspectives lies in what is identified as the prime element responsible for any impact on children (Wylie 1999). The structural perspectives suggest that a lack of parental resources (Becker 1981; Becker and Tomes 1986); low levels of parental education, family type and limited English language ability (Barthlomeae, Fox and McKenry 2004; Corcoran 1995), or neighborhood factors (Brooks-Gunn, Duncan and Aber 1997; Duncan, Brooks-Gunn and Klebanov 1994; Jencks and Mayer 1990) and not parental welfare reciprocity *per se* that influences children's subsequent outcomes. The cultural perspective suggests that welfare receipt in and of itself is a key determinant affecting children's outcomes, having a separate effect beyond that of low income. This perspective stems from fears that welfare receipt may have a negative effect on children. It posits the existence of a welfare-culture, whereby welfare receipt among poor families changes the cultural or psychological traits of those families ultimately leading toward lower levels of educational achievement and socioeconomic attainment (Murray 1984). Growing up in a household that receives welfare payments could potentially lower future costs associated with welfare participation by creating a 'welfare culture' within which the stigma associated with welfare use is lessened or removed by later generations (Moffit 1992) or by increasing the amount of information available to the child about the welfare system itself (Rank and Hirshl 1993). Additionally, as welfare parents become less attached to the labor force and more dependent on welfare income, their children may suffer from a lack of information on successful employment, job searching strategies, etc. Subsequently, these children may lack the necessary skills needed for economic independence, putting them at greater risk as adults.

Support for Transmission Theories

Empirical evaluations of the structural and cultural perspectives typically assess whether parental welfare use is correlated with subsequent outcomes among their children while

controlling for the influence of other spurious factors (Bartholomae, Fox and McKenry 2004; Corcoran 1995; Rank and Cheng 1995). There has been mixed support for both the structural and cultural perspectives. For example, parental welfare receipt is positively associated with a child's later welfare receipt, even after controlling for family income and background characteristics (An, Haveman and Wolfe 1993; Antel 1992; Duncan, Hill, and Hoffman 1988; Gottschalk 1992; McLanahan 1985; Pepper 1995; Solon, Corcoran, Gordon and Larsen 1988). Yet, Levine and Zimmerman (1996) find that at least three-quarters of the intergenerational correlation between generations of welfare use can be attributed to the expected intergenerational correlation between income and other family characteristics, providing evidence of a cycle of poverty rather than a cycle of welfare dependence.

Several scholars have investigated whether growing up in a welfare household reduces children's educational attainment (Boggess 1998; Duncan, Yeung 1995; Duncan and Brooks-Gunn 1997; Duncan 1994; Haveman, Wolfe and Spaulding 1991; Ku and Plotnick 2003), finding that children who grow up in households that have received welfare acquire fewer years of schooling and are less likely to graduate from high school compared to children whose parents did not receive welfare, net of family income. That is, after controlling for family income, results suggest that there is an adverse effect of welfare receipt as a source of income. However, the evidence is somewhat mixed, particularly with regard to differences in the age of exposure. Haveman, Wolfe and Spaulding (1991) tested the timing of welfare receipt, finding that the combination of parental welfare use and poverty during early adolescence (12 to 15) was a significant predictor of high school dropout whereas welfare use at earlier periods was not. Ku et al. (2003), using the PSID and sibling fixed effects methods, found similar results, namely that children receiving welfare during late childhood and early adolescence attained lower levels of education. On the other hand, Teachman et al. (1997) found no evidence that welfare receipt, net of family income, family structure and IQ scores, is related to high school graduation, total number of years schooling and college enrollment.

Prior research on the effect of parental welfare receipt on child's later labor force participation and earnings is also mixed. Several studies found a small negative effect of parental welfare receipt on (mostly son's) later labor force participation but the impact was not always significant, varied in size, and different studies had varying effects with respect to race and ethnicity. Early research suggested that parental welfare receipt, net of total family income, has no effect on the labor force participation and wage rate of young men (Hill and Duncan 1987). However, later research by Corcoran, Gordon, Larsen, and Solon (1992) using the Panel Study of Income Dynamics (PSID), examined the impact of both family and community welfare receipt on young men's earnings, finding a strong negative association. Peters and Mullis (1997) examined the role of welfare as a source of family income on the subsequent labor force participation of both young men and women using the NLSY79. After controlling for the possible endogeneity of family welfare receipt, the authors found that parental welfare receipt was negatively associated with subsequent labor market experience.

Welfare and Immigrants

Limited research has attempted to ascertain the effect of immigrant family welfare receipt on later generations, most specifically on the likelihood of welfare receipt in later generations. For example, Butcher and Hu (1999) addressed the question of intergenerational correlation in welfare receipt among the foreign born by using 1970 Census data on the immigrant generation (the first generation) combined with second generation data taken from the Current Population Survey (1994–1996). Given that the data used in their analysis were cross sectional, Butcher and Hu were unable to link parents with children. Instead, they utilized a group-estimation procedure similar to Borjas' (1999) ethnic effects models,

estimating county of origin group-level measures of mean food stamps receipt for the first and second generations. Results indicated that while there was a positive and significant correlation between welfare receipt of the first and second generations, once education levels of the second generation are controlled, the relationship disappears, suggesting that the intergenerational transmission of the effects of welfare operate through the transmission of group skill levels.

While the previous research has shown that there may be an intergenerational correlation concerning welfare receipt, the causal links have not been firmly established (Moffitt 1992), nor has the role of nativity status (or for that matter, the role of citizenship) been sufficiently explained. For example, we do not know what the effect of limiting welfare access or welfare amounts for the parent's generation has on the child's later outcomes, particularly among the children of immigrants. There may be a causal link between generations, but the observed correlation may be due to the simple fact that children of immigrants and their parents face similar circumstances and limitations. From the perspective of the 1996 immigrant restrictions in welfare laws, which limited access to a wide range of public benefits based on nativity status, removing welfare access from the immigrant parents could potentially influence the outcomes of the second generation in harmful ways.

Much of the literature on the children of immigrants consistently points to the possibility that family income, parental education, and even the social networks of the immigrants' community, are strong determinants of the success of the children of immigrants. For example, like children born to natives, the children coming from immigrant families with more economic resources are more likely to receive better grades in school (Kao 2004; Kao and Tienda 1995; Portes and MacLeod 1999), to remain enrolled in high school (Hirschman 2001) and to have higher overall educational attainment and earnings (Card, Di Nardo and Estes 2001). Yet, there is evidence that Hispanic immigrants (the largest immigrant group to the U.S.) and their descendants do not converge to native levels of education and earnings as quickly as non-Hispanic immigrants and their descendants. It could be that welfare may play a role in the subsequent attainments of the children of immigrants in ways not predicted by the welfare or structural models.

Contributions to Research

This study uses the 1997 National Longitudinal Survey of Youth (NLSY97) to explore how much parent-generation welfare use is correlated with second-generation young adult outcomes (high school graduation and college enrollment) as well as the adult children's transition to the labor force and to examine how this relationship varies by nativity status of the parents. While most of the children of immigrants do go on to achieve higher levels of education than their parents (Chiswick and DebBurman 2003), the role that welfare receipt plays in this transition is not known. Empirical studies on the effects of welfare receipt on children find, for the most part, a negative correlation between parents' receipt and children's educational outcomes (Boggess 1998; Brooks-Gunn, Guo, and Furstenburg 1993; Duncan 1994; Duncan and Yeung 1995; Haveman and Wolfe 1994; Haveman, Wolfe, and Spaulding 1991; Hill and Duncan 1987; Ku and Plotnick 2003; McLanahan 1985; Peters and Mullis 1997; Teachman, Paasch, Day and Carver 1997). Yet research in this area has been limited by a lack of attention to immigrant families and an inability to establish causal links. The role that parental welfare receipt plays in children's future educational outcomes is likely different for immigrant families than it is for native families. This represents a serious gap in the literature on immigrant families because a majority of the children of immigrants are citizens and are eligible for social benefits, social benefits that may play an important role in their development.

How might the welfare frameworks—cultural and structural—predict outcomes for the children of immigrants? In other words, would welfare affect all children the same regardless of the nativity status of their parents? Alternatively, could welfare receipt have a differential effect even among the children of immigrants? To answer these questions, a comparison is made between the children of immigrants and the children of natives, as well as an estimate of any differences between welfare recipients and non-recipients among just the children of immigrants. Welfare culture models suggest an additional negative effect of welfare receipt above and beyond that of income. That is, the negative relationship between welfare and children's outcomes remains even after parental income levels are controlled. Cultural models emphasize values, attitudes and behaviors that persist among concentrated areas of poverty (Bane and Elwood 1994). According to this model, children of immigrants and the children of natives with a legacy of welfare will have lower outcomes net of family income. While support for this hypothesis has been limited, this idea that children may become dependent on welfare as adults because of a shift in values, and more specifically, that immigrant children would assimilate into welfare was a key focus of the immigrant restrictions in PWRORA. Some scholars and policy makers felt that welfare was acting as a magnet, pulling welfare-prone immigrants to the U.S. and that their children would become the same; welfare dependent, low skilled and under educated.

These ideas stemmed from the fact that there is wide variation across country of origin on a number of family characteristics (i.e. mother's education, poverty, linguistic isolation, and growing up in a single parent family). For example, two-thirds of Mexican-origin immigrant mothers, and over half of Central American-origin mothers have less than a high school education, compared with less than 10 percent of European or Chinese mothers, and 18 percent of Caribbean mothers (Hernandez 2004). Research has also examined the combined levels of risk factors such as low maternal education, poverty, linguistic isolation, and single-parent families among the children of immigrants (Hernandez 2004), finding higher rates of risk factors for children whose parents are from immigrant groups with low education levels (i.e. Mexico and Central America) compared with children whose parents are from immigrant groups with high education levels (i.e. India, Canada) and medium education levels (i.e. China, Caribbean). For example, roughly 61 percent of children from low education groups have at least two out of four risk factors, compared with 26 percent for those from medium education groups, and 12 percent from high education groups.

The effect of welfare on the children of immigrants might vary across immigrants groups; there could be a decline in outcomes for those children who assimilate into the underclass or an improvement in outcomes for those children who assimilate toward the middle class. Segmented assimilation theory suggests that across generation, some group's exhibit declines in outcomes such as education or socioeconomic status, while others show improvements. Groups that are highly urbanized or have darker skin color, such as the children of Caribbean immigrants, are likely to follow a downward mobility pattern (Waters 1994). In contrast, other children who come from immigrant families with more resources follow a path of upward mobility; either adopting the values of the mainstream middle class or retaining immigrant values and solidarity while achieving economic security. This type of strategy has been documented among the Vietnamese (Zhou and Bankston 1994), the Punjab Indians (Gibson 1988) as well as the Koreans and Chinese (Zhou 2001). Given these ideas, it could be that the outcomes of the children of immigrants might vary across differences in group characteristics.

Under the structural framework, the relationship between a parent's welfare use and children's subsequent outcomes vanishes after income, parental and neighborhood characteristics are controlled. That is, the connection between parent's welfare use and children's subsequent attainments is the result of parents' lower economic background,

education, etc. However, it is unclear how these factors might influence the children of immigrants. Some scholars suggest that all immigrants (both authorized and unauthorized) are positively self-selected from their country of origin on characteristics like self-efficacy, ambition, and work ethic (Chiswick 1978; Portes and Rumbaut 1996; Feliciano 2005). Therefore, the structural models might not operate in the same manner among immigrant families as among native families even though immigrant parents are more likely than native parents to have high levels of poverty, lack a high school degree, and live in neighborhoods with few resources.

Research has shown that while immigrants may use welfare at higher rates than natives may when they are new arrivals, ten years later they have lower rates of welfare use than do natives (Bean and Van Hook 2006). It could be that immigrant families pool income from multiple sources to maximize income, and minimize risk. For example, they might assemble income from extended family, as well as from formal and informal sources of income (Fuligni and Yoshikawa 2002; Tienda and Raijman 2000) thus increasing their ability to invest in the attainments of their children. Based on these ideas, we might find children of immigrants fare better than the children of natives, regardless of parental income, neighborhood characteristics, and parental human capital; welfare might actually function as settlement assistance among immigrant families. It could be that the children of immigrants will have better outcomes than the children of natives, net of parental welfare history and structural characteristics.

Some have argued that the differential outcomes experienced by the children of immigrants stems from the distinctive familial strategies that different country of origin groups have developed to help their children develop human capital (Mollenkopf, Waters, Holdaway, Kasinitz 2004). While this may be the case, the purpose of this paper is to try to understand the possible effect that welfare receipt may have on the children of immigrants. This provides the groundwork to examine later in detail strategies of coping with the immigrant experience.

Data

The NLSY97 is a longitudinal study conducted by the United States Bureau of Labor Statistics that follows a nationally representative sample of approximately nine thousand children. I use ten rounds of data beginning in 1997. The initial interview was conducted when the youths were between 12 to 16 years of age as of December 31, 1996. In the first round, both the youth and the youth's parents received hour-long personal interviews. The surveys collected considerable retrospective and contemporaneous information on educational attainment, work history and parental program participation. In addition, an extensive two-part questionnaire was administered that gathered demographic information on members of the youth's household and on his or her immediate family members living elsewhere. Given that the NLSY97 is designed to document the transition from school to work and into adulthood, it collects detailed information about youths' labor market behavior and educational experiences over time (Center for Human Resource Research, 1993).

Analytic Sample

In the NLSY97, the children of immigrants are defined as children having at least one foreign-born parent (or stepparent) residing in the household in the first year of the survey. The children of natives are all native born to native-born parents. A final restriction placed on the analytic sample concerns the age of assessment for the key dependent variables: high school graduation, college enrollment and labor force participation. Much of the prior research on the educational attainment of young adults has focused on the total number of

years schooling achieved by a specific age (e.g., Sandefeur, McLanahan, and Wojtkiewicz 1993), usually age 19. In the present analysis, outcome measures are also assessed with respect to age but the measure is more refined; educational attainment is measured during the last month of the 19th year. The sample is therefore restricted to those youth respondents who have complete information on educational attainment and enrollment status up to and including the last month of their 19th year. There are 1,410 children who are identified as the children of at least one immigrant parent (56 % have two immigrant parents) and 6,247 children of natives.

Dependent Variables

Youth Respondent Educational Attainment/Labor Force Participation—A key dependent variable is educational attainment measured during the last month of the 19th year. High school graduation is measured as either graduating with a diploma or a GED by the last month of the 19th year. Most of the youth respondents who do graduate from high school do so with a diploma, not a GED. For example, among the youth respondent's who graduated from high school by age 19, just 5.5 percent did so by obtaining a GED. A second dependent variable in the analysis is college enrollment that is, ever enrolling in college by the last month of their 19th year.

In order to capture the simultaneity of schooling and employment decisions, a third dependent variable measures college enrollment and labor force participation during a 12 month time period which begins the month after high school graduation and ends eleven months later. For those individuals with no high school degree, and therefore no date of graduation, the 'start date' begins the month after their last month of high school enrollment and ends eleven months later. Status is measured by four mutually exclusive categories; enrolled in college full or part time, full or part time employed (no college enrollment), minimal activity (no college enrollment, minimal or no employment), and parenthood, a condition that prior research has found to negatively affect educational attainment (Haveman and Wolfe 1995; Klepinger, Lundberg and Plotnick 1995). Parenthood is identified here as having a child prior to the end of the 12-month period. These measures were created using event history files, which detail monthly educational enrollment status, weekly labor force participation, and fertility behavior.

To be considered enrolled in college the youth respondent must be enrolled for at least 6 months during the 12 month time period. Among those enrolled in college, a clear majority (79%) have experienced at minimum 6 months of enrollment. Nearly 47-percent of the weighted analytic sample had ever been enrolled in college prior to the last month of their 19th year. For those not enrolled in college for at least six or more months, labor force participation was measured. For those who were engaged in the labor force, the total number of hours worked during the 52-week time period was obtained and the total hours worked was divided into terciles. Based on the distribution of total hours worked, those who had worked over 441 hours (the top two-thirds) during the 52-week period are categorized as "working." The number of hours worked averaged over a 50-week work year yields roughly a 30-hour work week for the top third, and an average of 15 hours a week for the middle third. Those youth respondents who reported working between zero and 441 hours are categorized as "inactive."¹

Key Independent Variables

Parental Welfare Legacy and Nativity Status—In round one of the NLSY parent survey, retrospective data were collected on the parent's employment, marriage histories,

¹A majority (59%) of this category had zero working hours.

and history of participation in government programs for low-income households (e.g., AFDC, ADC, or TANF; SSI, food stamps). A series of questions recorded the number of years during the previous five years that a responding parent participated in various government programs targeting low income households, and whether the parent had ever received government assistance (AFDC, Medicaid, Food Stamps, and SSI) from the time that their sample youth was born to the present. Prior research has shown that exposure to welfare during adolescence has the strongest negative effect on children's achievement so I incorporate a set of dummy variables to capture the influence of the timing of receipt. More specifically, a set of dummy variables including a measure of recent welfare use equal to one if the parent reported using welfare programs in the five years before the start of the survey; a measure of past welfare use set equal to one if the parent had used welfare programs since the child's birth but not in recent years; and a measure indicating no prior welfare use. Due to the question wording, the 'recent' category is not limited to just recent use, but could include families that were using welfare in the past as well. The 'past' category is limited to families that only used welfare in the past but not in recent years.

Two measures of parental nativity status are used in the analysis. First, a measure which compares children with at least one immigrant parent to children with no immigrant parents (1=youth respondent from immigrant family, 0=youth respondent from native family); and a measure of broad country of origin status with children of Mexican/Central American immigrants, children of immigrants from other areas, and children of natives.

Control Variables

Parental Income and Education Levels—In order to evaluate whether family income has a net effect independent of welfare receipt on the outcomes of children, the analysis includes family income as a key independent variable in multivariate models. The NLSY97 contains a measure of total family income as reported by the parents or household head, for each year the youth respondent is in the survey. In this analysis, a base year measure of parental income is taken from the 1997 parent survey. To account for the relationship of family income to family size, the analysis includes an income to poverty ratio. In addition, parental education is measured based as the maximum number of years attained by the residential parents.

Individual and Family Characteristics—The race/ethnicity of the youth respondent is included in the multivariate models. A set of variables for birth-year cohort is also included in the multivariate models to control for any possible secular trend in educational attainments. The structure of the youth respondent's family at age 12 measured as living with a two parent family or not. Prior research has shown that children from two parent homes have higher educational outcomes than children from other family forms (Downey 1995; Haveman and Wolfe 1994; Haveman and Wolfe 1995, Haveman, Wolfe and Spaulding 1991; Teachman 1987). In addition, the models include an indicator of a language other than English being spoken in the home because research has shown that children coming from homes with a non-English speaking parent have in some cases lower educational outcomes (Behrman 2004; Feliciano 2001).

County and State-level Characteristics—County-and state-level characteristics are obtained from the restricted use Geocode CD made available by the NLSY97. These include local area unemployment rates for the youth respondent residence in 1997, as well as the county poverty rate. Also included are state-level welfare characteristic, level of AFDC and Food Stamps guarantee for a family of three averaged over the years 1991 through 1996. To measure the availability of post-secondary education opportunity, also included are state

level rates of college enrollment for recent high school completers averaged over 1996–2002. Dummy variables for region of the country are also included in the models.

Univariate and Bivariate Results

Appendix Table A presents a descriptive portrait of all variables used in the multivariate analyses across the two groups of interest: young adult children of immigrants and children of natives. The results suggest that while the children of immigrants and the children of natives have similar levels of high school graduation, the former group has higher levels of college enrollment among high school graduates than do the latter (.68 compared to .60). There are other unadjusted differences between the two groups. The children of immigrants are less likely to come from families with a welfare legacy. Just under half the children of immigrants identify as Hispanic compared to 7 percent of the children of natives. Likewise, seventeen percent of the children of natives in the sample are non-Hispanic black compared to just 8 percent of the children of immigrants. The children of immigrants tend to come from families with higher levels of poverty and lower levels of parental education than do the children of natives. They are also more likely to live in a home where a language other than English is spoken, are more likely to live with both biological parents, and less likely to live with a single mother. The children of immigrants are more likely to be concentrated in western states and to reside in an urban county. In addition, the children of immigrants tend to reside in counties that have high levels of unemployment. Further, the young adults from immigrant families are more likely to come from states with higher average levels of AFDC guarantees. Finally, among the children of immigrants, over a third (35 percent), have at least one parent who originated from Mexico or other Central American countries. The remaining 65 percent are from other areas such as European, African, Caribbean and Asian countries.

Table 1 presents the level of educational attainment for the children of immigrants and the children of natives by parental welfare legacy in order to answer two questions: Do children with a welfare legacy have lower levels of educational attainment than children without a history and does the association between educational attainment and parental welfare history vary by nativity group? Results indicate lower levels of educational attainment for young adults with a parental welfare legacy compared to those who have never experienced welfare, regardless of parental nativity. Among natives, levels of educational attainment significantly decline with recency of welfare receipt reflecting prior research which found that exposure to welfare during adolescence has the strongest negative effect on educational attainment (Haveman et. al. 1991). Among the children of immigrants, those with no parental welfare history have greater levels of high school graduation and college enrollment than those with either past or recent history, but, there are no significant differences in educational attainment with respect to the timing of parental welfare receipt (e.g., past versus recent). It appears that the real difference with respect to the children of immigrants is *ever* having received welfare.

Are there differences between parental nativity groups? The last columns of Table 1 present unadjusted differences between the two groups. First, children from immigrant families with no exposure to welfare exhibit lower levels of high school graduation than do children from native families. Yet, this association appears to flip when the focus is on recent welfare exposure. That is, children from immigrant families who have received welfare more recently have greater levels of high school graduation than do similar natives. At all levels of welfare exposure the children of immigrant's exhibit higher levels of college enrollment than do the children of natives, although the difference between the two groups for past use (as defined here, having received welfare since the child's birth but not within five years of the start of the survey) does not reach significance.

But could this difference be due to a differential relationship between welfare legacy and the country of origin group of the parents? That is, could the effect of welfare on the children of immigrants vary across immigrant groups? Unfortunately, there are not enough cases to divide the sample into distinct country of origin groups. However, the children of immigrant sample can be divided into two groups; the first composed of the children of immigrants with at least one parent from either Mexico or Central America; the second composed of the remainder of the children of immigrants whose parents originated from Asian, European, and African countries. In the present sample, the young adults from Mexican/Central American (M/CA) families are more likely to have had past exposure to welfare as their counterparts from non-Mexican/Central American (non-M/CA) families (21% compared to 17%) but they are more likely to have experienced recent welfare use (30% compared to 15%).

Mean levels of educational attainment by parental welfare and nativity status are shown in Figure 1. First, among youth with no welfare exposure, children of Mex/CA immigrants exhibit the lowest rates of educational attainment while the children of other immigrant groups exhibit the highest. This supports prior research which found that often children from immigrant families are concentrate at both ends of the educational attainment spectrum (Chiswick et. al. 2003). The story changes if we consider parental welfare history. Among youth with more recent welfare exposure, both groups of the children of immigrants have higher educational attainment than do the children of natives. Among youth with welfare use only earlier in their life, results indicate that Mex/CA youth continue to exhibit lower levels of high school graduation than the children of natives.

A second comparison may be made within each nativity group. Again, the downward sloping educational attainment gradient by parental welfare history is clear for the children of natives. Among the children of Mex/CA, however, the gradient is relatively flat with no mean differences in attainment with respect to parental welfare history; while among children of other immigrants, a measurable difference exists between those who have a history with welfare receipt and those who do not. This difference in the relationship between welfare legacy and educational outcomes could be occurring because of a lack of controls on other contemporaneous family or neighborhood information occurring at the same time as the welfare receipt. Therefore, the following section details findings from the multivariate models.

Analytic Plan

Prior research exploring the relationship between parental welfare use and children's outcomes have utilized a variety of techniques to address the likely endogeneity of welfare receipt including sibling or individual fixed effects models (Currie and Cole 1993; Ku and Plotnick 2003; Levine and Zimmerman 2005), instrumental variable techniques (Levine, et al. 2005; Peters and Mullis 1997), while others (Rank and Cheng 1995; Bartholomae, et al. 2004) have assessed the influence of parental welfare legacy on outcome measures among adults by using standard linear or non-linear probability models. Sibling and individual fixed effects are inappropriate for the present analysis because there are insufficient cases for sibling fixed effects methods and there are not repeated measures of the outcome events. Initial analyses were conducted using two stage probit least squares (2SPLS), a form of instrumental variable (IV) regression to address the potential endogeneity of parental welfare history.

In 2SPLS, the first stage refers to the estimation of a model in which the potentially endogenous variable (parental welfare receipt) is regressed on a set of instruments and a full set of exogenous variables. The predicted values from the equation are then used in the second stage in place of the endogenous variable (Greene 2000). However, little research

has justified a large number of potential instruments that are thought to affect educational attainment only through welfare participation. Nonetheless, as in prior research (Peters et al. 1995) the present analysis tested the use of parameters of state welfare systems (average AFDC and Food Stamps benefits for a family of three); local labor market conditions (measured by the county unemployment rates); and post secondary educational opportunities (average rates of college enrollment for recent high school completers averaged over 1996–2002) as instruments in a first-stage probit model that estimated the probability that the NLSY97 respondents have a history of welfare receipt. The predicted values obtained from this model were then used as exogenous independent variables, along with a set of other individual and family characteristics, in the second-stage model, to estimate the effect of parental welfare receipt on young adult outcomes. For IV regressions to work, each instrument must be sufficiently correlated with the endogenous regressors but uncorrelated with the error term (Stata manual). However, tests of instrument validity and exogeneity indicated that IV is not the optimal technique and the single equation method is more appropriate.² Therefore, the multivariate analyses shown are based on binary logistic regression (for the educational outcomes) and multinomial logistic regression (for the combined outcomes of college, work, inactivity and parenthood) using actual measures of welfare legacy rather than the predicted measures. The models presented in the following sections regress the educational and labor force outcomes on a full set of characteristics discussed in the preceding sections. It is important to note that this will limit the ability to suggest causality.

Multivariate Results

The models presented in the following sections regress the educational and labor force outcomes on a full set of characteristics discussed in the preceding sections. Table 2 presents the results from a series of logistic regression models;

$$\text{logit} [\Theta(\mathbf{y})] = \left[\frac{\Theta(\mathbf{y})}{1 - \Theta(\mathbf{y})} \right] = \alpha + \beta_1 \mathbf{N} + \beta_2 \mathbf{WP} + \beta_3 \mathbf{WR} + \beta_4 \mathbf{WPN} + \beta_5 \mathbf{WRN} + \beta_6 \mathbf{Z}$$

where $\mathbf{y}$ represents a dichotomous indicator of the educational outcome, θ is the probability of $\mathbf{y}$ being 1; $\mathbf{N}$ represents a dichotomous indicator of parental nativity status, $\mathbf{WP}$ and $\mathbf{WR}$ are indicators of welfare history (either past or recent exposure); $\mathbf{WPN}$ and $\mathbf{WRN}$ are the cross products of parental nativity status and welfare history; and $\mathbf{Z}$ represents a vector of control variables.

Given that the primary interest here is on the effects of parental welfare legacy and nativity status, the only model coefficients (and associated odds ratios) that are presented in Tables 2 are those for the main effects of welfare legacy (β_2 and β_3) and parental nativity status (β_1) along with the corresponding interaction coefficients (β_4 and β_5).

The Effect of Parental Welfare Legacy on Educational Attainment

Table 2 presents the results for several models which describe the relationship between parental nativity status and parental welfare history. As expected based on the bivariate results, those respondents with a history of welfare use have significantly lower odds of graduating from high school than do young adults with no welfare history, and net of welfare history, the children of immigrants have higher odds of graduating from high school

²More specifically, chi-square statistic of the Amemiya-Lee-Newey test indicated that the instruments were not valid. Further, the Wald test of the exogeneity of the instrumented variables and the Smith Blundell test of exogeneity failed to reach significance.

(Model 1). To assess whether the impact of prior welfare receipt on educational attainment may be different for the children of immigrants net of the set of full characteristics, Model 2 includes the interaction of welfare history by parental nativity status. For natives, the impact of timing is salient – past welfare receipt significantly effects a 43% reduction in the odds of high school graduation, and a 58% reduction in the odds for more recent welfare receipt. For the children of immigrants, the impact of welfare receipt is centered on those whose families have received welfare more recently in their life. The interaction term including recent welfare receipt is significant indicating that the negative impact of welfare exposure during adolescence on the odds of high school graduation is lessened for the children of immigrants ($e^{-.990+.610}=.68$), compared to the impact on the children of natives ($e^{(-.990)}=.37$). Thus, having more recent exposure to welfare lowers the odds of high school graduation by 63% for children of natives, but by only 32% for children of immigrants.

Turning to college enrollment, results from the main effects model (Model 3) show that net of individual, family and neighborhood characteristics, young adults with a welfare history have lower odds of attending college after graduating from high school than young adults without a welfare history. Further, being the child of an immigrant is associated with higher odds of attending college than being the child of natives net of other characteristics. Adding the interaction between welfare history and parental nativity status (Model 4), indicates that the odds of college enrollment for the children of immigrants with a recent welfare legacy rises to ($e^{(.764-.891)}=.88$), compared to the children from native families ($e^{(-.891)}=.41$). Thus, welfare exposure reduces the odds of college enrollment by 59% for children of natives, but by only 12% for children of immigrants.

As in the bivariate results, I examine whether this effect could be due to a differential relationship between welfare legacy and the country of origin group of the parents. Table 3 presents the results in which the above analyses are repeated with one substitution—the dichotomous indicator of parental nativity status (N) is replaced by a set of dummy variables representing the two country of origin groups, along with corresponding welfare legacy interaction terms. Again, the groups compared in this analysis are 1) young adult children of immigrants from Mexico/Central American countries; 2) young adult children of immigrants from other areas; and 3) young adult children of natives. These models help to understand whether the effect of welfare on the children of immigrants might vary across immigrants groups.

Once family, neighborhood and state characteristics are controlled for, the odds of high school graduation do vary by parent's country of origin (Model 1). The children of immigrants from countries other than Mexico/Central America have higher odds than children of natives, holding the effect of welfare receipt constant. However, results from the interaction model (Model 2) indicate that the effect of welfare on high school graduation does vary by the country of origin group of the parents. While the set of 'origin group $\times$ welfare legacy' interaction terms is a significant addition to the main effects model, the only significant term appears in the case of young adults with Mexican/Central American parents and a recent welfare history. Here, the significant interaction coefficient represents the additional effect of recent welfare receipt, net of all controls, on the log odds of high school graduation by age 19 for the children of Mexican or Central American immigrants ($e^{(1.014 - 1.003)}=1.01$), compared with the effect for the children of natives ($e^{(-1.003)}=.37$). These findings suggest that more recent welfare exposure has a small net positive association with high school graduation for the children of Mexican/Central American immigrants but recent welfare exposure reduces the odds that the children of natives complete high school by 63 percent. The coefficient for the interaction of non-Mexican/Central American origin with recent welfare is negative and marginally significant,

suggesting that welfare may act the in the same way among native-born families as it does in non-Mexican/Central American families.

The pattern of results is similar for college enrollment as that of high school graduation (Models 3 and 4). Net of controls and welfare history there are statistically significant differences between the odds of college enrollment for M/CA youth and native youth (Model 3). Holding the effect of welfare receipt constant, suggests that the odds of college enrollment are about twice as large for youth from Mex/CA families as they are for youth from native families. In addition, switching the reference category (e.g., from native to M/CA) suggests that there is no statistically significant difference on the odds of college enrollment for M/CA and non-M/CA youth net of welfare receipt. To examine the varying influence of welfare legacy, Model 4 includes a set of interaction terms for the children of immigrant nativity groups and parental welfare legacy. The interaction terms for Mex/CA youth and welfare receipt are both significant, with recent welfare receipt having the largest net increase in the odds of college enrollment.

While the above models controlled for the number of immigrant parents a youth might possess, they do not fully explore the impact of having two immigrant parents rather than just one. Therefore, I specified several models (not shown) substituting a set of dummy variables indicating the number of immigrant parents for the single indicator (N). The results followed the same patterns as those in Table 2. Subsequent testing revealed no significant differences in outcomes between youth with one or two immigrant parents, while both groups were different from children of natives.

The Effect of Parental Welfare Legacy on Labor Force Participation

To explore the simultaneity of schooling and employment decisions, multinomial logistic regression is used to assess the effects of welfare legacy on the respondent's post high school activity. Given that a key concern among many is that welfare exposure might lead to an incorporation into a welfare culture, characterized by a lack of employment or engagement in education, a focus is also placed on inactivity, defined here as not being enrolled in school and minimal or no labor force engagement. Becoming a parent could also be a valid outcome that might prohibit an individual from entering the labor force or enrolling in college, therefore I attempted to estimate models with four potential mutually exclusive outcomes (college enrollment, labor force participation, inactivity and becoming a parent). However, these models were unstable due to insufficient cell sizes in the parenthood category. Subsequently I estimate the following 3 category models separately by gender. The multinomial logistic regression model is appropriate for modeling categorical dependent variables with more than two possible outcomes (DeMaris 1992, 2004) with θ_C and θ_W representing the probability of being in college or working compared to the being inactive (θ_I);

$$\log \frac{\theta_C}{\theta_I} = \beta_0^1 + \beta_1^1 N + \beta_2^1 WP + \beta_3^1 WR + \beta_4^1 WRN + \beta_5^1 WPN + \beta_6^1 Z$$

$$\log \frac{\theta_W}{\theta_I} = \beta_0^2 + \beta_1^2 N + \beta_2^2 WP + \beta_3^2 WR + \beta_4^2 WRN + \beta_5^2 WPN + \beta_6^2 Z$$

where N represents parental nativity status, WP and WR represent past and recent welfare history, WRN and WPN are the interactions of nativity status and welfare history, and Z is a vector of control variables. Roughly, 40 percent of the sample reported being enrolled at least six months of the 12-month period; another 40 percent reported working under the current definition; the remaining 20 percent reported minimal or no work activity. Appendix

Table 1 shows a similar distribution of activity between the children of natives and the children of immigrants.

For each category of the dependent variable, I present two models. The first model includes all family, individual and neighborhood controls along with the main effects of parental welfare legacy and nativity status. The second adds the interaction of welfare legacy and parental nativity status. Table 4 report coefficients and standard errors for young men and young women, respectively. In Model 1, parental nativity status is not significantly related to the odds of any particular activity, net of parental welfare receipt among young men or among young women. Again there is clear evidence that a parental welfare legacy is associated with lower odds of college attendance versus other activities. An important point to note is that young men with a welfare history do not have higher odds of being inactive than working compared to those with no welfare history. Young women, however do have a slightly higher odds of not working compared to working.

The second set of models (Model 2) in Table 4 includes the cross products of welfare exposure and parental nativity status. Key here is that having an immigrant parent lessens the negative impact of a parental welfare legacy. Among young male children of immigrants, parental welfare receipt (either past or recent) effects only a 21 to 25% reduction in the odds of attending college versus being inactive. For children of natives, comparable reductions are much steeper at 58 and 67 percent. A similar pattern holds for young women—being the child of an immigrant offers a seemingly protective effect against recent welfare exposure.

Discussion

The immediate costs of immigrants and the future costs of their children is a topic that has taken center stage in a debate between policy makers and the American public. Indeed, many public forums are currently focusing on the impact that immigrants have on the economy and culture of the United States. A key feature of the debate is the role that public assistance might play among immigrant families. There is a long history of public policy and sociological scholarship linking welfare use to immigration policy. On the one hand, the availability of public benefits to immigrants can be seen as a magnet, drawing ‘lower quality’ immigrants to the United States (Borjas 1995; Borjas and Hilton 1996; Brimelow 1995). Those who would normally not come to the U.S. are negatively selected and migrate to the U.S. due to the availability of a public benefits safety net, and those who would be likely to return home (i.e. the ‘failed’ migrants) are more likely to remain in the U.S. if they can rely on welfare. On the other hand, the availability of public benefits for immigrants could be seen as settlement assistance to relieve poverty and ease the transition and adaptation into U.S. society.

With respect to immigration policy, the question really becomes, is welfare receipt negative or is a positive? Does welfare serve as a roadblock to the successful incorporation of immigrants and their children or does it serve as a means of easing the way toward a successful transition into American society? This interaction between welfare and immigration has served as an impetus to modify both existing U.S. immigration policies and domestic welfare policies. Indeed, with the 1996 Personal Responsibility and Work Opportunity Reconciliation Act (PWRORA or Welfare Reform), U.S. welfare policy underwent significant revision, particularly with regard to recent arrivals. For instance, immigrants entering the country legally after the date of enactment are barred from receiving benefits for five years, and immigrants entering the country illegally are barred from all services. The driving motivation for this legislation was the fearful prospect of welfare receipt continuing across immigrant generations.

In this paper, I found a persistent negative association between parental welfare legacy and high school graduation among the children of immigrants and the children of natives with the effect most pronounced among the latter. The welfare culture hypothesis predicts that young adults with a welfare history will display less attachment to the labor force and have lower educational attainments than young adults with no family history of welfare. This was only partially supported here, evidenced by a persistent negative association between a parental welfare legacy and educational attainment even after household income is controlled. However, youth with a welfare legacy are no more likely to be inactive during the year after high school than they are to work. Moreover, there is no evidence to suggest that the children of immigrants, those either with a welfare history or without, are more likely to choose inactivity over work. Thus, this finding is inconsistent with the expectations of the theories of a welfare culture, as well as the outcomes suggested by the immigrant restrictions of U.S. immigrant-welfare policy.

It is important to note that a true test of the welfare culture hypothesis requires information on welfare use as adults. In the current analytic sample, which is still too young to fully assess the transmission of welfare dependency, levels of welfare use were too low for analysis. In addition, a key component of the welfare culture argument is that there is a shift in values and attitudes associated with welfare receipt (Bane and Elwood 1994), an aspect that has not been tested here due to limitations in the data.

There is some evidence that among the children of immigrants the effect of welfare on subsequent outcomes varies by immigrant ethnic group. This was supported by results showing the largest effect of welfare receipt among the most disadvantaged group, the young adult children of immigrants from Mexican and Central American countries. Nevertheless, why would welfare be more salient among this group than others? The answer may lie within the segmented assimilation paradigm.

A key tenet of segmented assimilation theory is that the context of reception matters. That is, immigrants and their children may be confronted by barriers, such as racial discrimination or segregation, which might limit their successful socio-economic incorporation. Segmented assimilation also theorizes that the concentration of poverty amid immigrant inner city neighborhoods combined with a lack of labor market opportunities due to economic restructuring might be particularly severe among the most disadvantaged groups, such as Mexicans and Central Americans (Portes and Zhou 1993; Portes and Rumbaut 2001; Portes, Fernandez-Kelly and Haller 2005). In other words, children who come from immigrant families with fewer resources measured by parental income and education might follow a path of declining attainments, whereas other children who come from immigrant families with more resources might follow a path of upward achievement.

While previous research has positioned welfare receipt as a potential barrier to the children of immigrants (i.e. a 'welfare trap' limiting the prospects for their children), under segmented assimilation theory, welfare can be thought of as a tool to counteract some of the risks associated with settlement, and possibly as a way for immigrant families to continue to invest in their children's future. Taken from this perspective, the finding that the largest benefits are felt among the most impoverished immigrant groups are particularly compelling.

In sum, the results presented here support the idea that the negative impacts of welfare receipt might be lessened and in some cases reversed among the young adults from immigrant families. A possible explanation for this difference concerns the positive self-selection of migrants. That is, it could be that the immigrants who choose to come to the U.S. are positively self-selected on characteristics such as ambition, self-motivation and a

heightened willingness to invest in their children (Fuligni and Yoshikawa 2003; Gibson and Bhachu 1991; Suarez-Orozco and Suarez-Orozco 1995; Zhou and Bankston 1998). Given that it is more difficult for immigrants to qualify for welfare than natives (even in the pre-reform era), those immigrants who do manage to get welfare may be especially persistent and thus even more positively selected. These parents could possess a level of skill and confidence to move through the welfare system in order to maximize their outcomes in ways not predicted by the traditional welfare and structural models. More detailed data, which examines not only behaviors and outcomes but also motivations and knowledge of governmental assistance programs is needed to fully explore this possibility.

It is important to note some of the key limitations to this study. First, the analyses are moderate tests of the intergenerational effects of welfare exposure. Given the nature of the data, this work cannot establish a true causal relationship between a welfare legacy and subsequent attainments among youth from immigrant families, only an empirical relationship. Future research might be able to address the precise mechanisms, (i.e. whether it involves a family ‘welfare strategy’), through which immigrant parents invest in the human capital development of their children.

Second, these data do not capture whole-childhood information. While the current research does utilize a general measure of welfare receipt along with a more recent measure, which roughly covers the youth respondents late childhood and adolescence, a more complete measure of welfare might help to establish causal links. While earlier data sets such as the NLSY79 do have a more complete picture of welfare use and outcomes, these data do not capture immigrant families from more recent waves of immigration to the U.S. However, as the NLSY97 youth sample ages, future research will be able to focus on the role that welfare might play in life transitions.

A final limitation involves the composition of the children of immigrant’s sample. As described earlier, the NLSY97 consists of a Black and Hispanic oversample. However, results here indicate that the children of Asians are underrepresented in these data. This is unfortunate given that other research has shown that there are clear differences in outcomes between Asian and Hispanic groups (Fuligni 1997; Kao 2004; Kao and Thompson 2003; Kao and Tienda 1995). This does not mean that the NLSY97 is not suitable for research on the children of immigrants, but rather the focus might be better placed on just children from Hispanic immigrant families. In particular, it would be of interest to examine not only the patterns of educational progress among Hispanic generations, but also how family and labor commitments interact with educational progress. Future research should examine the relationship between educational aspirations and eventual attainment using these longitudinal data.

Educational attainment is critically important to the social mobility of the children of immigrants (Rumbaut 2005). As the NLSY97 sample population ages, completes their education, and becomes fully engaged in the labor force, further analyses might be able to determine whether and how the children of immigrants confront the barriers posed by a restructured labor market. While this paper focuses on welfare exposure prior to the implementation of severe immigrant welfare restrictions, the results provide important evidence on the role that welfare may play in the settlement of immigrant families. The results of this paper suggest that the PWRORA restrictions which limited access to assistance for immigrant families may impede the social mobility of their children; a majority of whom are US citizens. The findings here further suggest that the availability of public assistance to these families, particularly to those from Mexico/Central American countries might actually have a positive effect on the integration of their children.

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Figure 1.
Educational attainment by parental nativity, country of origin, and welfare legacy. Mean $\pm$ 1 SEM

Table 1
Educational attainment by welfare legacy, children of immigrants and children of natives. Weighted means (standard errors).

	Children of Immigrants			Children of Natives			Difference within the Children of Immigrants			Difference between Children of Immigrants and Children of Natives		
	Welfare legacy			Welfare legacy			Welfare legacy			Welfare legacy		
	None	Past Use	Recent Use	None	Past Use	Recent Use	None-Past	None-Recent	Past-Recent	None	Past Use	Recent Use
High School Graduation	0.902 (.010)	0.777 (.028)	0.747 (.024)	0.931 (.005)	0.836 (.01)	0.681 (.013)	0.125*** (.030)	0.155*** (.026)	0.030 (.037)	-0.029** (.011)	-0.059# (.030)	0.066* (.027)
College Enrollment	0.755 (.017)	0.562 (.040)	0.525 (.036)	0.714 (.009)	0.493 (.015)	0.367 (.016)	0.193*** (.044)	0.230*** (.040)	0.037 (.054)	0.041* (.020)	0.069 (.043)	0.158*** (.039)

Note: Difference in means assessed by t-tests.

p<.10,
* p<.05,
** p<.01,
*** p<.001

Within group differences for the Children of Natives are all significant at the .05 level.

Table 2
Logistic regression results, youth educational attainment by parental welfare history and nativity.

	High School Graduation				College Enrollment			
	Model 1		Model 2		Model 3		Model 4	
	B	e ^B	B	e ^B	B	e ^B	B	e ^B
Parental Welfare History								
Past	−0.557 (.09)	.573***	−0.564 (.103)	.569***	−0.567*** (.071)	−0.612 (.076)		.542***
Recent	−0.859 (.089)	.423***	−0.990 (.101)	.371***	−0.742*** (.08)	−0.891 (.088)		.41***
Parental Nativity								
Child of Immigrant	0.298 (.149)	1.347*	0.068 (.183)	1.071	0.427** (.129)	0.173 (.144)		1.189
Parental Welfare History × Parental Nativity Interactions								
Past exposure * Child of Immigrant			−0.110 (.223)	.896		0.229 (.206)		1.257
Recent exposure * Child of immigrant			0.610 (.201)	1.841***		0.764 (.198)		2.147***

Note:
*** p<.001,
** p<.01,
* p<.05,
p<.10

N= 7,586 Models 1 and 2; N=6,256 for Models 3 and 4. Reference category are children of natives. Models include full set of neighborhood, family and state characteristics (see text). Robust standard errors in parentheses.

Table 3

Logistic regression results, youth educational attainment by parental welfare history, nativity, and country of origin.

	High School Graduation				College Enrollment			
	Model 1		Model 2		Model 3		Model 4	
	B	e ^B	B	e ^B	B	e ^B	B	e ^B
Welfare History								
Past	-0.559 (.09)	.572***	-0.570 (.103)	.566***	-0.565*** (.071)	.568***	-0.611 (.076)	.543***
Recent	-0.862 (.089)	.422***	-1.003 (.101)	.367***	-0.740 (.08)	.477***	-0.892 (.088)	.410***
Parental Nativity								
Child of Mex/CA	0.229 (.19)	1.257	-0.240 (.237)	.786	0.622 (.182)	1.862**	0.103 (.217)	1.11
Child of Non-Mex/CA	0.348 (.169)	1.416*	0.537 (.252)	1.712*	0.349 (.136)	1.417*	0.299 (.161)	1.35 [#]
Interactions								
Past exposure * Mex/CA			0.157 (.279)	1.17			0.674 (.294)	1.96*
Recent exposure * Mex/CA			1.014 (.245)	2.76***			1.118 (.254)	3.06***
Past exposure * non-Mex/CA			-0.625 (.335)	.535 [#]			-0.194 (.267)	.824
Recent exposure * non-Mex/CA			-0.176 (.312)	.838			0.304 (.281)	1.355

Note:

*** p<.001,

** p<.01,

* p<.05,

[#] p<.10

N= 7,586 Models 1 and 2; N=6,256 for Models 3 and 4. Reference category are children of natives. Models include full set of neighborhood, family and state characteristics (see text). Robust standard errors in parentheses.

Table 4

Selected coefficients (and robust standard errors) from multinomial logistic regression analysis of parental nativity status and welfare history on combined outcomes of college, school and inactivity by gender.

	Male				Female			
	Model 1		Model 2		Model 1		Model 2	
	College vs Inactivity	Working vs Inactivity	College vs Working	Working vs Inactivity	College vs Inactivity	College vs Working	Working vs Inactivity	College vs Working
Parental Welfare history								
past	−0.756 *** (.123)	0.064 (.111)	−0.820 *** (.103)	0.103 (.122)	−0.961 *** (.113)	−0.474 *** (.127)	0.124 (.130)	−0.598 *** (.103)
Recent	−0.955 *** (.135)	−0.156 (.113)	−0.799 *** (.121)	−0.177 (.124)	−0.940 *** (.133)	−1.147 *** (.126)	−0.318 * (.124)	−0.829 *** (.115)
Parental Nativity Status								
Child of Immigrant	0.321 (.206)	0.085 (.183)	0.236 (.182)	0.100 (.222)	−0.081 (.197)	0.283 (.228)	0.080 (.219)	0.202 (.180)
Interactions								
Past × Child of Immigrant								
			0.577 # (.324)	−0.277 (.296)	0.854 ** (.281)			−0.389 (.348)
Recent × Child of Immigrant			0.881 *** (.327)	0.162 (.271)	0.720 * (.287)			0.783 ** (.299)
N	3,848		3,848		3,646			3,646

Note:

*** p<.001,

** p<.01,

* p<.10

Reference category are children of natives. Models include full set of neighborhood, family and state characteristics (see text). Robust standard errors in parentheses.

Appendix Table A

Means and standard errors of dependent and independent variables by parental nativity status.

	Children of Immigrants (N=1,410)	Children of Natives (N=6,247)
<i>Dependent Variables</i>		
Educational attainment by age 19 ^A		
High School Graduate	.849 (.010)	.854 (.005)
College Enrollment	.682 (.015)	.602 (.007)
Combined Education, Labor force participation ^B		
Enrolled in college	.465 (.015)	.431 (.007)
Working, minimal or no college	.347 (.014)	.371 (.007)
No work, no college	.147 (.010)	.143 (.005)
Had a birth, no working, or college	.040 (.005)	.055 (.003)
<i>Independent Variables</i>		
Any Parental Welfare Use	.388 (.014)	.456 (.007)
Only past use	.185 (.012)	.234 (.006)
Recent use	.203 (.011)	.222 (.005)
Two immigrant parents	.499 (.015)	--
At least one parent from Mexico/Central America	.353 (.013)	--
<i>Youth and Household Characteristics</i>		
Male	.531 (.015)	.518 (.007)
Years Parents Education	12.86 (.114)	13.81 (.036)
Two parent home at age 12	.749 (.013)	.669 (.006)
Income to poverty ratio	5.00 (.054)	5.32 (.020)
Non english language spoken in home	.687 (.015)	.057 (.003)
Average number of residential moves	1.55 (.031)	1.53 (.016)
Hispanic	.495 (.015)	.076 (.003)
White	.285 (.015)	.738 (.005)
Black	.076 (.007)	.164 (.004)
Asian	.088 (.010)	.003 (.001)
Other	.047 (.007)	.011 (.002)
<i>Neighborhood Characteristics</i>		
Rural	.055 (.008)	.231 (.006)
Suburb	.607 (.015)	.514 (.007)
City	.338 (.015)	.256 (.006)
Average County Unemployment Rate (1997–1999)	6.48 (.071)	5.95 (.028)
<i>State characteristics</i>		
Northeast	.196 (.012)	.176 (.005)
Northcentral	.162 (.012)	.294 (.006)
South	.250 (.013)	.351 (.006)
West	.386 (.015)	.177 (.005)
Average \$ State AFDC Benefit (1990–1996)	464 (5.66)	391 (1.99)

	Children of Immigrants (N=1,410)	Children of Natives (N=6,247)
Average \$ State Food Stamps Benefit (:1990–1996)	289 (1.33)	310 (.397)
Average % high school completers transition to college (1996–2002)	56.0 (.184)	57.5 (.071)

^A Measured at last month of 19th year

^B Among those who graduated from high school

^C Measured as distinct categories (see text for details).