Socioeconomic Outcomes of Youths Living in Poverty during the Post-1996 Welfare Reform Era

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Abstract: This paper examines the impact of the 1996 welfare reform on low-income youth's outcomes in young adulthood. In the 1990s, there were major reforms in many of the social and health policies helping low-income families and their children, which became the basis of the current U.S. safety net programs. The most significant policy changes were implemented under the 1996 Personal Responsibility and Work Opportunities Reconciliation Act. (PRWORA). This reform became the basis of the current U.S. safety net policy, emphasizing personal responsibility, the work ethic, and equal opportunity. The PRWORA contributed to a significant reduction in TANF caseloads and an increase in the employment of former welfare recipients, backed by the strong economy in the late 1990s. However, other argued that social safety net programs for low-income families declined after the reform. Using the propensity score matching and two national data sets, the National Longitudinal Surveys of Youth 1979 and 1997, we compared socio-economic outcomes of low-income adolescents who grew up in the pre- and post-PRWORA era. The results showed that if youth grew up in the post welfare reform era, their likelihood of receiving welfare assistance would be significantly lower but their likelihood of living under the federal poverty line or being disconnected youth would be significantly higher. Thus, the results indicate hard times that lowincome youth are facing in their transition to the adulthood as U.S. social-safety net programs have shrunk in late 1990s.

This paper examines the impact of the 1996 welfare reform on low-income youth's outcomes in young adulthood. The major reforms took place in many of the social and health policies targeting low-income families and their children, which became the basis of the current U.S. safety net programs. The most significant policy changes were implemented under the 1996 Personal Responsibility and Work Opportunities Reconciliation Act (PRWORA). Under this law, the Aid to Families with Dependent Children (AFDC), means-tested assistance program, transformed to Temporary Assistance for Needy Families (TANF) with a block grant. At the same time, other major policy changes for low-income families took place. First, the Earned Income Tax Credit

(EITC) was expanded for low-income workers with children in 1993. Second, the minimum wage was increased from \$3.35 to \$5.15 by 1997, and it remained \$5.15 until 2008 when it was finally raised to \$5.85. In that same year, child care subsidy programs were expanded and consolidated into the Child Care and Development Fund (CCDF) block grant. Third, the PRWORA also aimed to reduce the number of non-marital births and to increase ongoing employment training where at least 50% of all recipient families and 90% of two-parent families were required to be working or in job training by 2002. The other relevant policy is public child support collection activities that require non-custodial parents to support their children financially. Under the strong economy in the late 1990s, the PRWORA successfully reduced the TANF caseloads and increased the employment of former welfare recipients (Besharov, 2007). The PRWORA era represented a significant shift in U.S. safety net programs, driven by major changes in AFDC/TANF with the strong emphasis on personal responsibility, the work ethic, and equal opportunity (Armocost, Laracy, & Phillips, 2001). Research shows that the PRWORA significantly reduced the TANF caseload and increased labor market participation of welfare recipients; however, mixed findings on the short-term impact of PRWORA on child and youth wellbeing (Blank, 2002; Grogger & Karoly, 2009; Lindsey & Klein Martin, 2003). Drawing data from seven random-assignment programs, Morris et al., (2005) found that the impact of the program to reduce welfare receipt and increase employment on child outcomes differ by child age. For example, a positive impact was found for young children making transition to middle childhood, while the impact was negative for children making the transition from middle childhood to early adolescence. Since considerable physical and socio-emotional changes take place during early adolescence, such transition may become more challenging for lowincome adolescents when parents became less available due to increased employment (Morris et al., 2005). Further, while increased earning may allow working parent(s) to purchase better child care for young children, changing school for older children and youth may not be as easy for young

children. Residential instability can also contribute to poor youth outcomes (Aaronson, 1998). This paper contributes to the field in the following ways. First, few studies examined the impact of welfare reform on low-income youth's transition to young adulthood. One question is, "How did the post-PRWORA social safety-net policy better support low-income adolescents into young adulthood and help break the cycle of intergenerational poverty?" Second, previous research that examined the impact of the 1996 welfare reform tends to focus on specific programs such as TANF time limits and employment support. However, little research examined whether the US social safety net in the post-welfare era as a whole supported low-income youth's transition to the adulthood. Thus, the aim of this paper is to examine socioeconomic outcomes in young adulthood among youth who grew up before and after the PRWORA periods.

#### Theoretical framework

There are two theories in explaining the status of social safety net programs for low-income families with children in the post-welfare reform era (Aratani et al 2014). One is *the shrinking safety net* thesis claims that after the 1996 reform, with the cut of cash assistance by the federal government, state governments reduced overall assistance in other programs and/or low-income families became less likely to be enrolled in other governmental programs; thus social-safety net support became very limited in the post welfare era. Research shows the decline in AFDC/TANF along with the decline in other means-tested programs such as food stamps and Medicaid participation (Cawley, 2006; Chavkin, 2000; Karoly, 2001; Pati, Romero, & Chavkin, 2002; Ziliak, Gundersen, & Figlio, 2003) Most recently by examining ten social safety-net policies and programs together, Aratani, et al., (2014) found that overall the support for low-income families shrunk along with the declines of AFDC/TANF in the post-welfare reform era (between 1996-2002). With the booming economy in late 1990s, the PRWORA contributed to reduce the welfare caseloads and increase employment

among low-income mothers; however, it did not necessarily reduce child poverty (Bitler & Hoynes, 2010; Bok & Simmons, 2002). Bok and Simmons (2002) discuss the consequences of AFDC/TANF caseload reduction and that low-income families faced more economic hardship such as food insecurity, homelessness, and loss of health insurance coverage during the post-welfare reform era. Further, while limited to the impact of welfare-to-work programs, a review of 8 random assignment studies showed that the programs that aimed to reduce welfare participation and increase mother's employment negatively affected well-being of adolescents aged 12-18 years old. These programs lowered average school performance and increased grade repetition; in particular among adolescents with young siblings (Gennetian et al., 2004). Researchers argued that as maternal employment results in reduced maternal support when a child is making into transitioning to a less attentive school environment (junior high school). Further, maternal employment also may require the youth to take different roles in the household, in particular with a presence of younger children; thus, as a result, it makes more challenging for youth to adjust to the new role and school environment (Morris et al., 2005). Based on this thesis, our first hypothesis is that youths grew up in the post-PRWORA era will have a worse transition to the young adulthood as the social-safety net policies and program have declined while growing up, and low-income youth did not have enough resources and support to make a successful transition to young adulthood.

The second thesis -- helping the poor playing by the rules -- argues that there was increase in some types of assistance that enabled the poor to play by the rules or that low-income families sought other assistance to become economically self-sufficient; therefore, there are more assistance for supporting employment and private responsibility among low-income families during the post-welfare reform period (Reidy 1998; Pati 2002; Schmidt and Sevak 2004; Winick 2004). Hofferth, Stanhope and Harris (2002) for example found a significant increase in AFDC exits between 1993 and 1996 when EITC expanded, and attributed this increase in AFDC exits to the EITC. Research showed that

EITC promote employment among low-income mothers and moving out of poverty (Ajilore, 2008; Ellwood, 2000) and contribute to better cognitive development (Dahl & Lochner, 2012). Further, a study of state-level administrative records concluded that total spending on childcare subsidies increased substantially from 1996 to 2002 (Greenberg et al. 2002). The receipt of childcare subsidies significantly increased mother's probability to engage in labor-market activities (Meyers, Heintze, & Wolf, 2002). Using the Current Population Survey (CPS) 1980-1996, Huang, Garfinkel and Waldfogel (2000) also found that increases in child support enforcement payment were associated with smaller welfare caseloads at the state level. Thus, there are increasing support that promoted employment and private responsibility accompanied along with the decline in welfare support. The helping the poor playing by the rules thesis anchors on the poverty trap theory that there is an intergenerational transmission of welfare dependency and that due to the less stigma attached to welfare receipt, the children of families with welfare receipts are more likely to receive welfare support as an adult (Antel, 1992). Thus, the supporter of this thesis argues that the work support is important to break the intergenerational effect of welfare dependency among low-income families. Thus, based on this play by the rules thesis, it is hypothesized that compared with youths who grew up in the pre-PRWORA era, youths who grew up in the post-PRWORA era have better socioeconomic outcomes and less likely to receive public assistance in the young adulthood as low-income families received better support to play by the rules.

### Data

We employ two national data sets: the National Longitudinal Survey of Youth 1979 data and the National Longitudinal Survey of Youth 1997 data. The NLSY97 consists of a nationally representative sample of approximately 9,000 youths, who were 12 to 16 years old in 1996. Round 1 of the survey took place in 1997. In the first round, both the eligible youth and one of that youth's parents participated in hour-long personal interviews. Also gathered was socio-demographic

information on members of the youths' household and on his/her immediate family members living elsewhere. Youths are interviewed on an annual basis. The NLSY97 is designed to document the transition from school to work and into adulthood. It contains extensive information about youths' labor market behavior and educational experiences over time. Educational data include youths' schooling history, performance on standardized tests, course of study, the timing and types of degrees, and a detailed account of progression through post-secondary schooling. The NLSY97 also contains detailed information on youths' relationships with parents, contact with absent parents, marital and fertility histories, dating, training, participation in government assistance programs, employment, criminal behavior, and alcohol and drug use.

NLSY79 is a nationally representative sample of men and women who were 14 to 21 years of age in 1978 (N=12,686). The U.S. Department of Labor collects the data. The NLSY79 includes an oversample of African-Americans and Hispanics/Latinos as well as low-income respondents. Since 1979, the NLSY79 has collected longitudinal data of the sample cohort annually until 1994 and biannually from 1994 to the present. It has a large sample size of youth and contains information on educational and socio-economic outcomes into adulthood along with rich data on family characteristics from NLSY79 data. The sample we examined is youth living in poverty whose family income was under 100 percent of the federal poverty line. We compared two generations of low-income youth (1) born between 1962 and 1964 when the U.S. safety net program expanded drastically (NLSY79 sample) and socioeconomic outcomes at age 23 (in 1985-1987) (2) those born between 1981 and 1983 when the safety net program was drastically reduced during their adolescence (NLSY97 sample) and their outcomes at age 23 (in 2004-2006).

#### Methodology

In this paper, we will use logistic regression as well as propensity score matching to examine the impact of growing up in the post welfare reform era on socioeconomic outcomes of youth. With

logistic regression, we will simply control for youth and family characteristics that are known to affect socioeconomic outcomes of youth. In addition, we will also use propensity score matching since it is possible that low-income youth who grew up in the post-welfare reform era significantly different from those who grew up in the pre-welfare reform era. Especially, when making causal inference, a random assignment of the treatment (in this case, spending the adolescence in the post welfare reform era) is the gold standard; however, conducting randomized experimental studies are not always possible, and especially the case in this study. Yet, in non-experimental setting such as observational studies, researchers often encounter difficulties in making a causal inference. This is because dependent variables (or outcomes) are generally affected by many variables other than those under investigation, and the ability to create an environment with no confounding variables is lacking (Rosenbaum, 1984).

The propensity score matching estimation was developed to address such causal effects in observational studies. The goal of PSM is "to replicate a randomized experiment, at least with respect to the measured confounders, by making the treatment and comparison groups look as if they could have been randomly assigned to the groups, in the sense of having similar distributions of the confounders" (Stuart, et al., 2009: 720). In this study, treatment groups will be youth whose spent their adolescence after the 1996 welfare reform (NLSY97 sample), and the control group will be youth who spent their adolescence before the welfare reform (NLSY79 sample). This method is based on what Rosenbaum and Rubin called *strongly ignorable treatment assumption*. This is an assumption where treatment assignment is "*strongly ignorable giren the observed covariates* x if (a) the responses (r0, r1, .... rt) are conditionally independent of the treatment assignment z given the observed covariates x, and (b) at each value of x, there is a positive probability of receiving each treatment" (Paul R Rosenbaum, 1984:42-43). In propensity score matching, first we estimate the propensity score, which is the propensity towards spending adolescence during the welfare reform

era given the observed covariates x. This can be estimated by logit regression. Youth are divided into two different groups: (1) those who spent their adolescence after the 1996 welfare reform; (2) those who spent their adolescence before the 1996 welfare reform. In this study, the first group is considered the "treatment group," and the second group is considered as the control group. In this counter-factual setting, we will examine how the outcomes of the treatment group would have been different if they grew up in the pre-welfare reform period.

For propensity score matching, we use nearest matching with replacement. In the matching with replacement method, to increase sample sizes, each person in the treatment group was matched with nearest persons in the control group whose difference in the propensity score were within 0.01. Persons in the control group can be used more than once.

Independent variable: Spending adolescence in the post 1996 welfare reform era

Dependent variables: Receiving food stamps, receiving AFDC/TANF, living under the federal poverty line and being disconnected youth at age 23. A young person's dependence on welfare program or detachment from both the labor market and school may be indicators that he or she may not be economically independent during the transition to adulthood. In particular, without adequate employment and schooling, these youth may forgo the opportunity to build up a career that will ensure future economic security (Bloom, Thompson, & Ivry, 2010; Fernandes & Gabe, 2009). We use receipt of Food Stamps receipt and/or AFDC/TANF to capture respondent's dependence on safety-net programs. We use the combination of factors to define being disconnected as a youth person who is currently not employed, not in school, not in military and not married (Wight, Chau, Aratani, Schwarz, & Thampi, 2010).

To estimate the propensity score of spending the adolescence in poverty in the post welfare reform era, we used the following variables: race/ethnicity of youth (dummy variables for non-Hispanic White, Hispanic, non-Hispanic Black), age, parent's employment status, having teen-age

mom at the child birth, total family income adjusted in 1997 US dollars, the number of siblings, whether having a young dependent child in the household, having two parents, parents being married, parent(s) receiving cash or new cash assistance, mother's education level (less than high school degree, high school graduates, some college or more), and geographic characteristic of the county of the family residence including population size, percentage of Blacks, Hispanics, families living in poverty.

# Findings:

There are a few notable differences in characteristics of low-income youth who spent their adolescence in the pre-1996 welfare reform period (NLSY79 sample) and those who grew up in the post-1996 reform period (NLSY97 sample). There is a higher proportion of Hispanic youth in the NLSY97 sample reflecting the increase of the Hispanic population in the recent years, due to the continued flows of Hispanic immigrants into United States. The Hispanic population is doubled in size between 1980 and 2000 (Hobbs & Stoops, 2002). The NLSY79 low-income youth had a higher average family income, and a larger share of them live with two married parents pre-welfare reform. It is consistent with the demographic changes where marriage rates have fallen over time, and the steepest declines occurred between 1970 and 1980 and between 1990 and 2000 (Cancian & Reed, 2008; Hobbs & Stoops, 2002). It significantly decreased the proportion of children living in married-couple households. Such change in family structure is also associated with povertyincreasing, because single-parent families generally are more than five times as likely to be poor as married-couple families (Cancian & Reed, 2008). Children from single-parent families thus are likely to experience poverty than their peers from married families. On the other hand, low-income youth who grew up in the post welfare reform era had mothers being more educated than those who grew up in the pre reform era. The geographic characteristics of the residence are more or less similar for the two groups of low-income youth.

With regard to outcome variables, 42% of NLSY79 youth who grew up in the pre-welfare reform era completed high school by age 19, while 56% of NLSY97 youth did so. The former group enrolled in Food Stamps program at higher rate, but enrolled at in AFDC/TANF program at lower rate than the latter group. This increase may be reflecting the expansion of the Food Stamps program in 1980s and early 1990s where the participation increased from 20 million in 1979 to 28 million by 1994 where the participation peaked before started to decline after the PRWORA (United States Department of Agriculture, 2015). Among all children who experienced childhood poverty, close to 60% of post-welfare reform youth still lived in poverty at age 23, while only 36% of the prewelfare reform youth remained in poverty at age 23.

# [Table 2 about here]

\_Table 2 shows the results of logistic regression to estimate the propensity score of growing up in the post welfare reform era using youth/family and geographic characteristics. Most of the variables were significant predictors of estimating the propensity score with exception of race/ethnicity, gender, age, family income, having teen-mom at the child birth, parent receiving AFDC/TANF, or having two parents.

### [Table 3 about here]

The success of matching can be assessed by comparing the means of background variables across matched groups (Hill et al., 2002). To test the balance between the comparison groups (how similar the comparison groups are), we calculated t-statistics for the differences in all the covariates across treatment and control groups before and after the matching. The smaller the t-statistic, the better balance between the treatment and control groups the matching has achieved. Therefore, determining whether including each covariate in a model to estimate the propensity score was determined by the statistical significance of the covariate and how well the balance is while having

the covariate in the model or not. In Table 3, we present the matching results. In the unmatched samples, there are high t-statistics in many of youth/family and geographic characteristics. In particular, child age, number of sibling, having a young dependent child, family income, mother's education level, parental employment status, parents' AFDC/TANF receipt, marital status, family structure, percent of blacks and Hispanics at the county of residence have very high t-statistics between the treatment and control groups before matching. However in matched samples, all the t-statistics are under critical values, or they are substantially reduced and mostly close to zero. Thus, a good balance is achieved between the samples from pre- and post-welfare reform eras.

# [Table 4]

Table 4 results shows the treatment effect (the effect of growing up in the post-welfare reform era) on socio-economic outcomes at age 23 among low-income youths. For the full sample (in the left panel) as well as the sample matched with replacement (in the right panel), we present differences in means and regression estimates of the probability of each outcome while controlling for all the covariates that we used to estimate a propensity score. Regression estimates that control for pre-treated covariates aim to achieve more precision in the results because it is possible that matching may not have caught differences between the treatment and control groups. Since the magnitude of the impact of welfare reform on children's different outcome at age 23 for the full sample is quite similar to that for the matched sample, the estimate appears to be robust. The following section will just focus on the regression results using the matched sample.

First, in terms of educational attainment, low-income youth who grew up in the post-welfare reform period are more likely to obtain the high school degree or GED by the age of 19 than their peers who grew up in the pre-reform period, by approximately 11%. Second, growing up in the post-welfare reform period is positively associated with food stamp receipt but negatively

associated with AFDC/TANF receipt during transition to early adulthood. This means that if low-income youth grew up in the post-welfare reform era, their likelihood of receiving Food Stamp would have been 6% higher, but receiving cash assistance (AFDC/TANF) would have been 5% lower, reflecting the reduction of the cash assistance during this period. Lastly, if youth grew up in the post welfare reform era, their likelihood of living under the federal poverty line is significantly higher by 22%, and their likelihood of being disconnected youth at age 23 is higher by 6%.

### **Conclusions:**

We examined the impact of growing up in the post welfare reform era on socioeconomic status of low-income youth. By creating a comparable sample of youth from pre- and post-PRWORA period, we found that low-income youth are more likely to graduate from high school yet experiencing a more difficult transition to the young adulthood where they are more likely to be living in poverty and to be disconnected youth at age 23. Thus, the welfare reform did not increase the odds of moving out of poverty for youth who experienced childhood poverty.

Thus, the findings of this study provide some evidence for the shrinking safety net thesis and that as the federal government cut cash assistance for the poor under the 1996 reform, thus social-safety net programs became very limited in the post welfare era and youth who grew up during this era are facing more difficulties in transitioning to the early adulthood, despite the increasing high school graduation rate. The period we observed includes the implementation of the No Child Left Behind (NCLB), which had mixed impact on the high school graduation (Darling-Hammond, 2006), while the national graduation rate has overall increased. The paradox is that despite the result that low-income youth who grew up in the post PRWORA period are more likely to graduate from high school, they face more challenges to achieve self-sufficiency during young adulthood. More dependence on the food stamps also may be the result of the Food Security and Rural Investment

Act of 2002, which included the reauthorization of the Food Stamps program and expanded and improved eligibility criteria, particularly for immigrant families when the outcome data were available from the NLSY97 sample (2006-2008) (United States Department of Agriculture, 2015). The finding also indicates that the importance of the Food Stamp program as a federal entitlement program which can help low-income young adults during their transitional period; however, with the recent drastic cut in the food stamps program, such support may no longer become available and low-income youth are possibly facing more economic hardship during the Great Recession. Further research is needed to understand the long-term impact of the welfare reform on the wellbeing of low-income children. In particular, previous research found more favorable short-term impact of welfare reform on younger children (Gennetian et al., 2004), and future studies should examine the long-term impact of the 1996 welfare reform on those who spent early childhood in mid 1990s.

Table 1: Youth/Family, and Geographic Characteristics of NLSY79 and 97 Samples

NLSY79 sample (pre-1996 welfare reform) NLSY97 sample (post-1996 welfare reform)

	N=	=940	N=	849
Variable	Mean	Std. Dev.	Mean	Std. Dev.
youth/family characteristics				
Hispanic	0.22	0.41	0.35	0.48
Black	0.43	0.49	0.42	0.49
Male	0.51	0.50	0.49	0.50
Parent employment status (employed)	0.46	0.50	0.58	0.49
Having teen-mom	0.31	0.46	0.25	0.43
Total family income	12,855	6140	10,313	16317
# of sibs	3.43	2.35	2.01	1.58
# of young dependent child	.54	.50	.47	.50
Age	15.25	0.74	14.95	0.81
Having two parents	0.54	0.50	0.30	0.46
Parents being married	0.50	0.50	0.27	0.44
Parents receiving AFDC/TANF	0.42	0.49	0.40	0.49
Mother having less than High school				
degree	0.68	0.47	0.49	0.50
Mother HS graduates	0.27	0.44	0.35	0.48
Mother some college	0.04	0.19	0.12	0.32
Mother college degree	0.01	0.10	0.04	0.19
Geographic characteristics of the reside	ence			
Population size (in 1,000)	783	1,474	1,092	2,066
% Blacks in the population	0.17	0.16	0.18	0.18
% Hispanics in the population	0.11	0.17	0.14	0.18
% of families living in poverty	0.16	0.10	0.13	0.08
Outcomes at age 23				
Completing High School by Age 19	.42	.49	.56	.50
Receiving Food Stamps	0.18	0.38	0.25	0.43
Receiving AFDC/TANF	0.11	0.32	0.05	0.23
Living in Poverty	0.36	0.48	0.57	0.50
Disconnectiveness	.11	.32	.19	.40

Table 2: Logistic regression results to estimate the propensity of growing up in the postwelfare reform era (N=1790)

		Std.	
	Coef.	Err.	
black	-0.328	0.208	
hispanic	0.065	0.241	
male	0.023	0.139	
age	-0.458	0.089	**
# of sibs	-0.3581	0.041	**
Having young dependent child	.247	.150	+
Total family income	0.000	0.000	
Mother having less than High school			
degree	-1.236	0.286	**
Mother HS graduates	-0.637	0.296	*
Parent employment status	0.465	0.140	**
Having teen-mom	-0.254	0.155	
parents receiving AFDC/ TANF	223	0.150	
parents being married	-0.715	0.271	**
having two parents	-0.323	0.265	
population size	-0.102	0.044	**
% Blacks	3.584	0.772	**
% Hispanics	3.609	0.798	**
% of families living in poverty	-4.734	1.556	**
constant	9.426	1.393	**

Table 3: Balance between NLSY79 and NLSY97 Samples before and after the matching

	Variable	$M_{c}$	ean	t-test		
	Sample	Treated	Control	t-test	significance	
Black	Unmatched	0.422	0.438	-0.52	vignijium.	
	Matched	0.429	0.421	0.32		
Uist anio	Unmatched	0.342	0.323	0.65		
Hispanic	Matched	0.342	0.350	-0.62		
	танпей	0.999	0.990	-0.02		
Male	Unmatched	0.494	0.487	0.23		
	Matched	0.490	0.490	-0.02		
Age	Unmatched	14.945	15.244	-6.27	**	
8	Matched	14.968	14.928	0.98		
	1120000	,	, =0	0.70		
# of sibling	Unmatched	2.018	3.363	- 11.72	**	
	Matched	2.074	2.065	0.11		
Having young dependent						
child in the household	Unmatched	.472	.543	-2.37	**	
	Matched	.484	.564	-3.06	**	
Total family income	Unmatched	10712	13290	-3.03	**	
<i>y y</i>	Matched	10931	12289	-2.02	*	
Mother less than HS	Unmatched	0.495	0.672	-5.98	**	
	Matched	0.518	0.540	-0.45		
Mother with HS degree	Unmatched	0.352	0.281	2.51	*	
	Matched	0.359	0.346	0.52		
Parent being employed	Unmatched	0.592	0.504	2.96	**	
1 ureni veing empioyeu	Matched	0.578	0.561	0.62		
	тиштей	0.578	0.501	0.02		
Teen mom	Unmatched	0.257	0.300	-1.60		
	Matched	0.266	0.299	-1.38		
Parents receiving						
AFDC/TANF	Unmatched	0.411	0.452	-1.38	**	
	Matched	0.424	0.453	-1.13		
Married	Unmatched	0.262	0.480	-7.81	**	

	Matched	0.274	0.284	-0.41	
living with two parents	Unmatched	0.305	0.508	-7.08	**
	Matched	0.317	0.333	-0.65	
Population size					
(in 100,000)	Unmatched	1.021	1.036	-0.14	
,	Matched	1.020	1.058	-0.42	
% of blacks	Unmatched	0.182	0.154	2.84	**
J	Matched	0.180	0.175	0.64	
% of Hispanics	Unmatched	0.132	0.109	2.17	*
J = I	Matched	0.125	0.131	-0.61	
% of family living in poverty	Unmatched	0.134	0.129	0.96	
33 3 8 1 3	Matched	0.133	0.135	-0.66	

Table 4: Causal Effect Estimates of Growing up in the Post 1996 Welfare Reform Era

	A11 (	Withou	t Matchi	ng)	Matched with replacement				
	Diff. Means Regression		Diff. M	Regress	sion				
N	1,790				108	38	O		
	t.e.	t	t.e.	t	t.e.	t	t.e.	t	
	0.14**	5.68	.11**	2.96	0.13**	3.95	0.11**	2.94	
			Receiv	ving Food	l Stamps at A	ge 23			
	All (	Withou	t Matchi	ng)	M	atched with	replacement		
	Diff. N	Ieans	Regre	ssion	Diff. M	eans	Regress	sion	
N		1,7	790			108	38		
	t.e.	t	t.e.	t	t.e.	t	t.e.	t	
	0.07**	3.69	.05*	2.08	0.06*	2.18	0.06*	2.10	
			Receiv	ing AFD	C/TANF at A	.ge 23			
	All (	Withou	t Matchi	ng)	Matched with replacement		replacement		
	Diff. N	Ieans	Regre	ssion	Diff. Means		Regress	Regression	
N		1,790			1088				
	t.e.	t	t.e.	t	t.e.	t	t.e.	t	
	-0.06**	-4.36	-0.05**	-4.23	-0.08**	-4.55	-0.05**	-4.2	
		Livi	ng under	the Fede	ral Poverty Li	ne at Age 23			
	All (	All (Without Matching)			Matched with replacement				
	Diff. N	Ieans	Regre	ssion	Diff. M	eans	Regress	sion	
N		1,7	790			98	9		
	t.e.	t	t.e.	t	t.e.	t	t.e.	t	
	0.21**	7.96	0.22**	5.49	0.22**	5.99	0.22**	5.54	
			Ι	Disconnec	cted at Age 23				
	All (	Withou	t Matchi	ng)	M	atched with	replacement		
	Diff. Means Regression			Diff. Means Regression					
N		1,790		989		9			
	t.e.	t	t.e.	t	t.e.	t	t.e.	t	
	0.08**	4.48	0.06**	2.27	0.08**	3.39	0.06*	2.2	

#### References

- Aaronson, D. (1998). Using Sibling Data to Estimate the Impact of Neighborhoods on Children's Educational Outcomes. *The Journal of Human Resources*, 33(4, Autumn), 915-946.
- Ajilore, O. (2008). The Impact of the Earned Income Tax Credit on Poverty: Analyzing the Dimensions by Race and Immigration. *The Review of Black Political Economy, 35*(4), 117-127. doi: 10.1007/s12114-008-9030-2
- Antel, J. J. (1992). The Intergenerational Transfer of Welfare Dependency: Some Statistical Evidence. *The Review of Economics and Statistics*, 74(3), 467-473.
- Aratani, Y., Lu, H.-H., & Aber, J. L. (2014). Shrinking the Public Safety Net or Helping the Poor Play by the Rules? The Changes in the State-Level Policies That Affected Low-Income Families With Children in the Welfare Reform Era 1994–2002. *American Journal of Evaluation*, 35(2), 189-213.
- Armocost, M. H., Laracy, M. C., & Phillips, J. (2001). Forward. In R. M. Blank & R. Haskins (Eds.), The new world of welfare (pp. V-XI). Washington, D.C.: Brookings Institution Press.
- Besharov, D. J. (2007). Welfare reform and the caseload decline. Gender issues, 24(1), 32.
- Bitler, M., & Hoynes, H. W. (2010). The state of the safety net in the post-welfare reform era: National Bureau of Economic Research.
- Blank, R. M. (2002). Evaluating Welfare Reform in the United States. *Journal of Economic Literature*, 40(4), 1105-1166. doi: doi: 10.1257/002205102762203576
- Bloom, D., Thompson, S. L., & Ivry, R. (2010). Building a learning Agenda Around Disconnected Youth. New York: MDRC.
- Bok, M., & Simmons, L. (2002). Post-welfare reform, low-income families and the dissolution of the safety net. *Journal of Family and Economic Issues*, 23(3), 217-238.
- Cancian, M., & Reed, D. (2008). Family structure, childbearing, and parental employment: Implications for the level and trend in poverty: Citeseer.
- Cawley, J. (2006). How Did Welfare Reform Affect the Health Insurance Coverage of Women and Children? *Health services research*, 41(2), 486-506. doi: 10.1111/j.1475-6773.2005.00501.x
- Chavkin, W. (2000). State welfare reform policies and declines in health insurance. *American journal of public health (1971), 90*(6), 900-908.
- Dahl, G. B., & Lochner, L. (2012). The Impact of Family Income on Child Achievement: Evidence from the Earned Income Tax Credit. *American Economic Review*, 102(5), 1927-1956. doi: doi: 10.1257/aer.102.5.1927
- Darling-Hammond, L. (2006). No Child Left Behind and high school reform. *Harvard Educational Review*, 76(4), 642-667.
- Ellwood, D. T. (2000). The Impact of the Earned Income Tax Credit and Social Policy Reforms on Work, Marriage, and Living Arrangements. *National Tax Journal*, *53*(4), 1063-1105. doi: 10.2307/41789510
- Fernandes, A. L., & Gabe, T. (2009). Disconnected Youth: A Look at 16-to 24-year Olds who are Not Working or in School: DIANE Publishing.
- Gennetian, L. A., Duncan, G., Knox, V., Vargas, W., Clark- Kauffman, E., & London, A. S. (2004). How welfare policies affect adolescents' school outcomes: A synthesis of evidence from experimental studies. *Journal of Research on Adolescence*, 14(4), 399-423.
- Grogger, J., & Karoly, L. A. (2009). Child Outcomes. In J. Grogger & L. A. Karoly (Eds.), Welfare reform: Effects of a decade of change: Harvard University Press.
- Hobbs, F., & Stoops, N. (2002). Demographic trends in the 20th century (Vol. 4): US Census Bureau.

- Hofferth, S. L., Stanhope, S., & Harris, K. M. (2002). Exiting welfare in the 1990s: Did public policy influence recipients' behavior? , 21(5), 433.
- Huang, C.-C., Garfinkel, I., & Waldfogel, J. (2000). Child Support and Welfare Caseloads. Institute for Research On Poverty Discussion Paper, (No. 1210-00). Institute for Research on Poverty, Madison.
- Karoly, L. A. (2001). Estimating the effect of work requirements on welfare recipients.
- Lindsey, D., & Klein Martin, S. (2003). Deepening child poverty: The not so good news about welfare reform. *Children and youth services review*, 25(1-2), 165-173.
- Meyers, M. K., Heintze, T., & Wolf, D. A. (2002). Child Care Subsidies and the Employment of Welfare Recipients. *Demography*, 39(1), 165-179. doi: 10.2307/3088369
- Morris, P., Duncan, G. J., & Clark-Kauffman, E. (2005). Child well-being in an era of welfare reform: The sensitivity of transitions in development to policy change. *Developmental Psychology*, 41(6), 919.
- Pati, S., Romero, D., & Chavkin, W. (2002). Changes in Use of Health Insurance and Food Assistance Programs in Medically Underserved Communities in the Era of Welfare Reform: An Urban Study. *American Journal of Public Health*, 92(9), 1441-1445. doi: 10.2105/AJPH.92.9.1441
- United States Department of Agriculture. (2015). A Short History of SNAP (Supplemental Nutrition Assistance Program). Washington, DC: USDA.
- Wight, V., Chau, M. M., Aratani, Y., Schwarz, S. W., & Thampi, K. (2010). A profile of disconnected young adults in 2010.
- Ziliak, J. P., Gundersen, C., & Figlio, D. N. (2003). Food Stamp Caseloads over the Business Cycle. Southern Economic Journal, 69(4), 903-919. doi: 10.2307/1061657