

# State Investments in Successful Transitions to Adulthood

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## *INTRODUCTION*

Over the last four decades young Americans have experienced unprecedented changes in economic opportunities as a result of de-industrialization and market restructuring. Prior research has documented the increased inequality and persistence of disadvantage associated with these processes. These changes have hurt the life chances of youth without the education needed to navigate new labor market opportunities. States have responded to economic restructuring by mounting a variety of development policies to promote economic opportunities and job creation within their borders. Some states have focused on the creation of new high-technology industries and jobs while attempting to develop and improve the skills of their labor force. Other states have focused on policies that encourage entrepreneurs and promote the retention and attraction of businesses and industries that will increase the number of jobs available.

Our project is the first to explicitly investigate whether state policies in reaction to these economic changes have improved or harmed the opportunities of young persons in general, and of disadvantaged youth in particular. In this research we investigate whether these policies have altered youth educational opportunities, their labor market outcomes, their ability to establish an independent residence (from their parents), their chances to form a serious romantic relationship (marriage or cohabitation), and their chances of becoming parents.

We start by investigating the extent to which ascribed characteristics (sex, race/ethnicity), family resources (social and economic resources, family organization), and personal circumstances (health and disability, premature family obligations, agency) modify the timing and linkages of transitions, and affect successful transition to adult life. A critical issue is the extent to which such differences will lead to persistence or lessening of disadvantageous life chances.

Previous research suggests that members of different racial and ethnic groups have different probabilities of experiencing each of the events that make up a part of the transition to adulthood, and that they on average experience these events at different ages (Fussell and Furstenberg 2005; Sandefur et al 2001). Asians and Whites, for example, are more likely to obtain a college degree than are American Indians, Hispanics, or Blacks. Blacks are more likely to experience an early out-of-wedlock birth than are any of the other groups. Latinas marry and have children within wedlock earlier in life than any other group (Sandefur et al. 2001). These differences arise partly from the socioeconomic conditions of the groups, but also reflect differing choices about pathways to adulthood. We are especially interested in the role that state investments play in altering the effects of disadvantageous life chances. We expect state context to modify the effects of ascribed characteristics and family resources on transitions to adulthood.

Some contexts will reinforce family socioeconomic advantages and make it difficult for disadvantaged youth to overcome their social origins. Other contexts will facilitate and augment the family resources of disadvantaged youth and facilitate successful transitions to adulthood. Specifically, there is great debate about whether the development of new high-technology-based economic growth is beneficial for minorities or produces further disadvantage through the mechanisms of skill biased technological change (see Wilson 1996; Galbraith 1998).

## *RESEARCH RESULTS*

We analyzed nationally-representative longitudinal data from the 1986/87 National Longitudinal Study of Adolescent Health (initial cohort ages 13-19 years) to follow the transition to adulthood from ages 12 to 25 years. Outcomes of interest included age-specific rates of school enrollment, full-time employment, residence independent of parents, co-residence with a romantic partner (marriage or cohabitation), and status as a parent. We analyzed monthly life activities/statuses, noting the first transitions for these adolescents (e.g., getting a first job, becoming romantically involved) and well as subsequent changes in statuses (e.g., losing one's job, breaking up with one's partner).

Using a state-level data set assembled by Leicht and colleagues, states were characterized according to their commitments to an array of specific economic development policies, the articulation of social class interests, the administrative capacities of state institutions, and underlying production regimes and labor market structures. These classifications yield distinctive indicators of local commitment to economic development and opportunities, and the unique constellations of state and local interests that may facilitate or retard high-quality job growth in local labor markets. In this analysis we draw on this unique data set that assembles indicators of state-level political and economic contexts from a wide variety of sources for the period from 1970 to 2000.

We conducted latent class analyses on these state development data to characterize broad patterns of state economic strategies. Because we are interested in the general economic context describing the period 1970-2000, the latent class models used data from the 50 states pooled for the years 1970, 1980, 1990 and 2000 (N=200). While a wide variety of state development strategies were conceptually possible, the analysis yielded two latent classes that distinguish states according to their status in terms of state business capacity and high-technology employment strategies. The first dimension distinguishes between (1) states with a high interest in entrepreneurial economic development policies that seem to have the capacity to pull it off with a business community that is paying attention (“state and business capacity” class taking the value of “1” on the dummy variable LCST in tables 1-5 and including FL, GA, LA, MD, MA, NV, NM, NY, and TX) and (2) the remaining states, labeled “business political dominance/deindustrialization” states (taking the value of “0” on the dummy variable LCST in tables 1-5). These later states have either experienced manufacturing employment loss from 1970-2000, and/or have a local political system that is dominated by business interests.

The second dimension distinguishes between (1) states where high technology employment of all kinds is growing the fastest (AL, AR, FL, GA, ID, IA, KS, KY, ME, MS, MT, NE, NM, NC, ND, OK, OR, RI, SC, SD, TN, UT, VT, WV, and WI, taking the value of “1” on the dummy variable HIGROW in tables 1-5) and (2) states where earnings of high technology jobs are above the national average (“high-technology earnings advantage” states, taking the value “0” on the dummy variable HIGROW in tables 1-5). These later states pay high technology workers especially well, and have more high-technology jobs overall, but they are at the bottom in generating new high-technology jobs, feature which characterizes the former.

Our analytic strategy was to estimate a series of multilevel logistic regression models for each activity (school enrollment, employment, independent residence, romantic partner coresidence, and parenthood), starting with models including only individual and family characteristics, and then adding state policies variables and a series of interactions between the contextual and individual level variables (tables 1-5).

The results show that most individual and family characteristics have the expected effects. Males are on average less likely to marry and become parents before age 25, less likely to be enrolled in school and more likely to become employed compared to females. Blacks and Hispanics are less likely to live independently from their parents, and less likely to be in a relationship, but more likely to become parents compared to whites. Those growing up in a single parent or step-parent family are less likely to be enrolled in school, and more likely to live independently with a partner, and to become parents before age 25 compared to those growing up in a two parent- family. Those who attended a private school are more likely to be enrolled in school, more likely to be independent, and less likely to be married and become parents before age 25. Finally, those in poor physical and mental health, and those having a disability are less likely to be enrolled in school and to become independent, less likely to be employed, but more likely to live with a sexual partner and become parents before the age of 25.

In terms of state investments variables, our results (see model 2 in tables 1-5) show that they have important effects on adolescents’ transitions to adulthood. The young people who live in the states with a high interest in entrepreneurial economic development policies that collaborate with the business community without being dominated by it have 18 percent higher odds of being enrolled in school before age 25 compared to their counterparts living in states where business interests dominate politics. Nevertheless, those living in “state and business capacity” states are less likely to become independent

before age 25, less likely to live with a sexual partner, less likely to become parents and less likely to become employed. These findings are consistent with the emphasis of this state development strategy on the investment in human capital. In part, these young people are able to stay in school longer and delay work by continuing to live at home—their age-specific likelihood of independent residence is about one-third less than for young people who live in states that do not emphasize education as a vehicle for attracting high-wage jobs. These young people also are one-third less likely to cohabit with a sexual partner but have equal probabilities of marriage (results not shown). Young persons in “state and business capacity” states that emphasize investments in human capital through education have age-specific rates of parenthood that are about one-quarter less than their counterparts in other states.

The youth living in the states where high technology employment is growing the fastest have 11 percent higher odds of becoming independent before age 25 compared to those living in “high-technology earnings advantage” states. Interestingly, the young living in states paying high technology workers well have 14 percent higher odds of becoming employed compared to their counterparts in other states. High technology state strategies have little or no impact on the odds of marriage and parenthood for young adults.

Young people growing up in states that emphasize both high-technology job growth and entrepreneurial job expansion are particularly likely to remain in school for higher levels of education (91 percent higher odds). They also are more likely to delay the formation of romantic unions, and more likely to become employed, most likely in parallel with schooling.

There are social disparities in the effects of these development strategies on the lives of young people. In states that emphasize human capital growth (“state and business capacity”), whites and Hispanics are more responsive to the need to obtain higher levels of education than blacks. However, higher levels of state investment in education especially are beneficial for persons from poor families (poor young people living in “state and business capacity” states have 62 percent higher odds of being enrolled in school). The states with high technology growth present a huge advantage for Hispanics, who are more than twice as likely to prolong their school enrollment, but also for blacks. Hispanics in these states also have significantly decreased chances of living with a sexual partner and of becoming parents. Females are more likely than males to be enrolled in school when they live in states that emphasize human capital growth or states with fast high technology growth. While in the population overall age-specific rates of employment did not respond to entrepreneurial job growth strategies, females in these states are more likely than young men to respond by beginning work at younger ages.

### *SIGNIFICANCE*

Prior research on the transitions of young persons to adult life has emphasized the influence of local environmental factors such as neighborhood quality, concentrated poverty, and local unemployment rates. This research demonstrates that attention also needs to be directed towards the broader economic context in which young persons grow up, with particular attention to state supports for human capital investment. When state investments in education increase opportunities for advanced education, young persons seize the opportunity to enhance their human capital (net of other factors known to influence youth-to-adult transitions). They also restructure other aspects of their lives to support advanced education—they continue to live at home longer, they delay employment, and they are much less likely to cohabit or become parents at young ages. All of these changes in the life course are associated with individual agency—young persons choose life course trajectories that maximize lifetime career and personal life satisfaction when states provide the opportunities for them to do so. State supports for education are especially beneficial to young persons who grow up in poor families, suggesting that other types of cumulative disadvantage can be remedied through effective public policies.

**Table 1. Robust Logistic Regression Models Predicting the Likelihood of Being in School based on a Series of Individual, Family Level and State Policy Characteristics in a Sample of 11095 AddHealth Adolescents to Young Adults**

	Model1 (Odds Ratios)	Model2 (Odds Ratios)	Model3 (Odds Ratios)	Model4 (Odds Ratios)
Gender (Female)				
Male	0.756***	0.756***	0.755***	0.867**
Race/Ethnicity (White/Asian)				
Black	1.142**	1.113*	1.127*	1.112
Hispanic	1.186**	1.094	1.049	0.834
Parents Education (College Degree)				
Less Than High School	0.393***	0.394***	0.398***	0.389***
High School Degree	0.531***	0.540***	0.538***	0.544***
Family Structure				
Single Parent	0.613***	0.616***	0.610***	0.619***
Step Parent	0.549***	0.553***	0.549***	0.554***
Other	0.546***	0.553***	0.551***	0.553***
Poverty Measure (1994)	0.695***	0.699***	0.699***	0.551***
School Type (Public School)				
Private School	1.690***	1.718***	1.726***	1.726***
Other/Unknown School	0.821***	0.813***	0.818***	0.832***
Health Status (Excellent/V.Good/Good)				
Fair or Poor Health	0.567***	0.568***	0.577***	0.571***
Disability Status (No Disability)				
Serious Disability	0.769	0.771	0.760*	0.748*
Mild Disability	0.995***	0.988	0.998	1.015
Depression Status (Not Depressed)				
Depressed	0.798**	0.795**	0.806**	0.797**
LCST: State and Business Capacity (Business Interests Domination)		1.181***	1.027	1.171**
HIGROW: High Tech Growth (Highly Paid High Tech Jobs)		0.997	0.816***	0.892
LCST*HIGROW			1.915***	
Black*LCST				0.823*
Black*HIGROW				1.403***
Hispanic*LCST				1.089
Hispanic*HIGROW				2.092***
Male*LCST				0.824**
Male*HIGROW				0.850*
Poor*LCST				1.622***
Poor*HIGROW				0.998
Log pseudolikelihood	-506167.5	-505674.4	-504294.08	-503127.2
N	1198260	1198260	1198260	1198260
Clusters	11095	11095	11095	11095

Models control for age and missing cases (not shown in table)

\*  $p < 0.05$  \*\*  $p < 0.01$  \*\*\*  $p < 0.001$

Reference Group in Parentheses

**Table 2. Robust Logistic Regression Models Predicting the Likelihood of Living Independently based on a Series of Individual, Family Level and State Policy Characteristics in a Sample of 11095 AddHealth Adolescents to Young Adults**

	Model 1 (Odds Ratios)	Model 2 (Odds Ratios)	Model 3 (Odds Ratios)	Model 4 (Odds Ratios)
Gender (Female)				
Male	0.685***	0.683***	0.682***	0.689***
Race/Ethnicity (White/Asian)				
Black	0.678***	0.712***	0.713***	0.776**
Hispanic	0.512***	0.613***	0.610***	0.827
Parents Education (College Degree)				
Less Than High School	0.720***	0.708***	0.708***	0.712***
High School Degree	0.876**	0.840***	0.839***	0.839***
Family Structure				
Single Parent	1.093*	1.081	1.080	1.076
Step Parent	1.388***	1.366***	1.365***	1.356***
Other	1.289*	1.250	1.249	1.242
Poverty Measure (1994)	0.950	0.931	0.931	1.005
School Type (Public School)				
Private School	1.254**	1.225**	1.225**	1.234**
Other/Unknown School	1.032	1.062	1.063	1.057
Health Status				
(Excellent/V.Good/Good)				
Fair or Poor Health	0.878	0.879	0.881	0.875
Disability Status (No Disability)				
Serious Disability	0.612**	0.611**	0.610**	0.614**
Mild Disability	0.555***	0.565***	0.565***	0.559***
Depression Status (Not Depressed)				
Depressed	0.962	0.971	0.973	0.973
LCST: State and Business Capacity (Business Interests Domination)		0.701***	0.690***	0.742***
HIGROW: High Tech Growth (Highly Paid High Tech Jobs)		1.110**	1.086	1.294***
LCST*HIGROW			1.078	
Black*LCST				0.890
Black*HIGROW				0.879
Hispanic*LCST				0.705**
Hispanic*HIGROW				0.817
Male*LCST				1.068
Male*HIGROW				0.873
Poor*LCST				0.923
Poor*HIGROW				0.895
Log pseudolikelihood	-629695.280	-626145.350	-626121.780	-625517.070
N	1198260	1198260	1198260	1198260
Clusters	11095	11095	11095	11095

Models control for age and missing cases (not shown in table)

\*  $p < 0.05$  \*\*  $p < 0.01$  \*\*\*  $p < 0.001$

Reference Groups in Parentheses

**Table 3. Robust Logistic Regression Models Predicting the Likelihood of Being Employed based on a Series of Individual, Family Level and State Policy Characteristics in a Sample of 11095 AddHealth Adolescents to Young Adults**

	Model 1 (Odds Ratios)	Model 2 (Odds Ratios)	Model 3 (Odds Ratios)	Model 4 (Odds Ratios)
Gender (Female)				
Male	1.324***	1.331***	1.331***	1.396***
Race/Ethnicity (White/Asian)				
Black	0.544***	0.582***	0.586***	0.556***
Hispanic	0.825***	0.973	0.945	0.829*
Parents Education (College Degree)				
Less Than High School	0.830***	0.822***	0.828***	0.824***
High School Degree	1.056	1.024	1.024	1.026
Family Structure				
Single Parent	1.077*	1.061	1.056	1.056
Step Parent	1.157***	1.143**	1.139**	1.144**
Other	0.980	0.964	0.963	0.963
Poverty Measure (1994)	0.856***	0.849***	0.849***	0.850**
School Type (Public School)				
Private School	1.010	0.955	0.956	0.937
Other/Unknown School	0.918**	0.930*	0.933*	0.933*
HealthStatus (Excellent/V.Good/Good)				
Fair or Poor Health	0.812***	0.806***	0.816***	0.809***
Disability Status (No Disability)				
Serious Disability	0.594***	0.591***	0.587***	0.588***
Mild Disability	0.909	0.911	0.911	0.916
Depression Status (Not Depressed)				
Depressed	0.761***	0.763***	0.770***	0.761***
LCST: State and Business Capacity (Business Interests Domination)		0.687***	0.619***	0.688***
HIGROW: High Tech Growth (Highly Paid High Tech Jobs)		0.862***	0.744***	0.807***
LCST*HIGROW			1.583***	
Black*LCST				1.149
Black*HIGROW				0.970
Hispanic*LCST				1.184
Hispanic*HIGROW				1.221*
Male*LCST				0.821***
Male*HIGROW				1.186**
Poor*LCST				1.064
Poor*HIGROW				0.901
Log pseudolikelihood	-581107	-578517	-577740	-577727
N	1198260	1198260	1198260	1198260
Clusters	11095	11095	11095	11095

Models control for age and missing cases (not shown in table)

\*  $p < 0.05$  \*\*  $p < 0.01$  \*\*\*  $p < 0.001$

Reference Groups in Parentheses

**Table 4. Robust Logistic Regression Models Predicting the Likelihood of Being Married/Cohabiting based on a Series of Individual, Family Level and State Policy Characteristics in a Sample of 11095 AddHealth Adolescents to Young Adults**

	Model 1 (Odds Ratios)	Model 2 (Odds Ratios)	Model 3 (Odds Ratios)	Model 4 (Odds Ratios)
Gender (Female)				
Male	0.554***	0.553***	0.553***	0.524***
Race/Ethnicity (White/Asian)				
Black	0.534***	0.548***	0.545***	0.618***
Hispanic	0.821***	0.924	0.941	1.139
Parents Education (College Degree)				
Less Than High School	1.235	1.435	1.545***	1.554***
High School Degree	1.563***	1.553***	1.456***	1.449***
Family Structure				
Single Parent	1.493***	1.333***	1.334***	1.328***
Step Parent	1.329***	1.712***	1.716***	1.704***
Other	1.697***	1.655***	1.656***	1.649***
Poverty Measure (1994)	1.412***	1.398***	1.398***	1.599***
School Type (Public School)				
Private School	0.751**	0.743**	0.741***	0.748**
Other/Unknown School	1.032	1.048	1.044	1.032
Health Status (Excellent/V.Good/Good)				
Fair or Poor Health	1.144	1.146	1.138	1.134
Disability Status (No Disability)				
Serious Disability	1.599**	1.607**	1.612***	1.632
Mild Disability	0.730	0.738	0.734	0.718
Depression Status (Not Depressed)				
Depressed	1.059	1.067	1.061	1.068
LCST: State and Business Capacity (Business Interests Domination)		0.800***	0.847***	0.855*
HIGROW: High Tech Growth (Highly Paid High Tech Jobs)		1.082*	1.169***	1.252***
LCST*HIGROW			0.768**	
Black*LCST				0.904
Black*HIGROW				0.779*
Hispanic*LCST				0.874
Hispanic*HIGROW				0.621***
Male*LCST				1.145
Male*HIGROW				0.977
Poor*LCST				0.779**
Poor*HIGROW				0.948
Log pseudolikelihood	-352556.34	-351824.82	-351676.21	-351203
N	1192449	1192449	1192449	1192449
Clusters	11095	11095	11095	11095

Models control for age and missing cases (not shown in table)

\*  $p < 0.05$  \*\*  $p < 0.01$  \*\*\*  $p < 0.001$

Reference Groups in Parentheses



**Table 5. Robust Logistic Regression Models Predicting the Likelihood of Being a Parent based on a Series of Individual, Family Level and State Policy Characteristics in a Sample of 11095 AddHealth Adolescents to Young Adults**

	Model 1 (Odds Ratios)	Model 2 (Odds Ratios)	Model 3 (Odds Ratios)	Model 4 (Odds Ratios)
Gender (Female)				
Male	0.433***	0.433***	0.433***	0.450***
Race/Ethnicity (White/Asian)				
Black	1.380***	1.446***	1.433***	1.411**
Hispanic	1.167*	1.337***	1.378***	1.468**
Parents Education (College Degree)				
Less Than High School	1.858***	1.848***	1.836***	1.827***
High School Degree	1.546***	1.507***	1.506***	1.490***
Family Structure				
Single Parent	1.472***	1.454***	1.464***	1.458***
Step Parent	1.847***	1.824***	1.832***	1.820***
Other	1.305	1.278	1.280	1.267
Poverty Measure (1994)	1.447***	1.438***	1.439***	1.731***
School Type (Public School)				
Private School	0.609***	0.591***	0.590***	0.596***
Other/Unknown School	1.075	1.085	1.079	1.064
Health Status (Excellent/V.Good/Good)				
Fair or Poor Health	1.289***	1.287***	1.270**	1.268**
Disability Status (No Disability)				
Serious Disability	1.009	1.010	1.018	1.025
Mild Disability	1.622***	1.628***	1.628***	1.622***
Depression Status (Not Depressed)				
Depressed	1.322***	1.330***	1.317***	1.326***
LCST: State and Business Capacity (Business Interests Domination)		0.754***	0.834**	0.800**
HIGROW: High Tech Growth (Highly Paid High Tech Jobs)		0.945	1.083	1.217
LCST*HIGROW			0.608***	
Black*LCST				1.162
Black*HIGROW				0.863
Hispanic*LCST				1.126
Hispanic*HIGROW				0.455***
Male*LCST				1.024
Male*HIGROW				0.837
Poor*LCST				0.723**
Poor*HIGROW				0.891
Log pseudolikelihood	-537019	-535730	-534972	-533871
N (Person-Months)	1197288	1197288	1197288	1197288
Clusters (Number of Adolescents)	11086	11086	11086	11086

Models control for age and missing cases (not shown in table)

\*  $p < 0.05$  \*\*  $p < 0.01$  \*\*\*  $p < 0.001$

Reference Groups in Parentheses