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## The Long-Term Economic Impact of Criminalization in American Childhoods

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### Abstract

This article documents arrest and conviction histories before age 26 years of Panel Study of Income Dynamics (PSID) respondents using a retrospective module that I designed. I find strong positive cohort effects in rising probabilities of arrest for all demographic subgroups. This increased contact with the criminal justice system across birth cohorts was at a more rapid rate over time among Whites and women. These rising rates of arrests and convictions are associated with lower probabilities of being married, lower weeks worked, lower hourly wages, and lower family incomes during the adult years. The size of the estimated associations is quite large.

### Keywords

childhood arrest; convictions; wages; work

### Introduction

There is growing and legitimate concern about the interactions of American youth during their childhood years with the criminal justice system (Western & Pettit, 2010). Arrests and even convictions are common and were rising at very alarming rates for all ethnic groups for boys and girls alike (Brame, Turner, Paternoster, & Bushway, 2012). The long-term economic legacy effects of such a beginning to adult life are not yet known, but it should serve as a red flag that something might be terribly wrong in the United States.

One difficulty impeding analysis of childhood crime and its association with adult economic outcomes is that data on criminal activity were not normally a part of our main economic data sets, especially panel data sets that follow people from childhood into their adult years. To help remedy this limitation, I designed a special retrospective module that was placed into the Panel Study of Income Dynamics (PSID) in an off-panel year in 2014. In addition to capturing a retrospective history of many salient dimensions of the childhoods of PSID respondents, these respondents were also asked about their interactions with the criminal justice system including any arrests and convictions before they were 26 years old.

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Notes

In this article, I will document these reported histories of arrests and convictions across PSID birth cohorts and investigate whether these childhood interactions with the criminal justice system are associated with critical adult economic outcomes, including education, family income, individual earnings, and labor supply. Because it is a possible important pathway, I will also analyze the probability of being currently married. For all these outcomes, childhood contact with the criminal justice system has large estimated associations with adult economic outcomes.

The article is divided into three sections. Section “Data and Basic Descriptives” describes the data and provides descriptive tables of main measures of criminal activity available. The “Statistical Models of SES Outcomes” section summarizes results obtained from statistical models of association of our measures of criminal activity during childhood with the main adult socioeconomic status (SES) measures of interest—education, marriage, weeks worked, earnings, weekly wages, and family income. The “Conclusion” section highlights major conclusions.

## Data and Basic Descriptives

In this section, I describe the most salient aspects of the data that will be used, especially how the principal dimensions of criminal activity—arrests and convictions—are defined and how these vary within the PSID population across gender, age, and racial and ethnic lines.

### PSID Retrospective Early-Life Data

The data come from a linked PSID and the 2014 Childhood Retrospective Circumstances Study, which I designed. PSID has gathered 50 years of extensive economic and demographic data on a nationally representative sample of about 5,000 (original) families and 35,000 individuals living in those families. Details on family income and labor market activity were obtained in each wave since 1968. Starting in 1997, PSID switched to a 2-year periodicity. As part of its structure, the PSID follows all family members of the 1968 panel of respondents as well as any new family members who arrive subsequently. Questions are also asked in each wave about the current economic and demographic status of the spouse.

The 2014 Childhood Retrospective Circumstances Study was designed to capture, for PSID respondents and their spouses, missing parts of life histories not included in the regular panel. The main respondent and spouse report separately their own life histories in the 2014 retrospective. Life-history circumstances reported include aspects of their prior pre-PSID life including periods of deprivation, their family life (mobility, periods of parental separation or divorce, time spent away from parents, etc.), their friendship networks, and school experiences.<sup>1</sup> Questions were asked about parental mental health, periods of depression, anxiety, whether treatment was received, and substance abuse (drug and alcohol) of parents. These questions were asked about the most important mother and father identified by the respondent.

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<sup>1</sup>The 2014 Childhood Retrospective Circumstances Study is in some ways an update of an earlier childhood retrospective survey that I also designed and which was placed into the Panel Study of Income Dynamics (PSID) in 2007. The 2007 retrospective survey did not contain any information on criminal activity.

Respondents were asked about the quality of communication and relationship with parents, violence between parents and between siblings, childhood SES, and childhood neighborhood and friendship quality. Also included was the retrospective childhood health instrument that I designed to all respondents in the 2007 round of the retrospective survey. The information requested included the existence and timing of the same list of childhood illnesses with the same memory triggers.

Most important, PSID respondents were also asked for the first time about their interactions with the criminal justice system. These questions included whether and how many times you were arrested before age 26. For the first and last arrests, respondents were asked reason for arrest. The set of categories for reasons for arrest are listed in Note 2.<sup>2</sup> Respondents were asked whether before age 26, they had been convicted of a crime, the reasons for the conviction for the first and last convictions using the same set of categories listed in Table A1, and whether they had ever been sentenced to probation. Finally, respondents were asked about number of arrests since age 25 and whether they were ever sentenced to jail or prison.

### **Interactions With the Criminal Justice System During Childhood**

Before presenting PSID data, there are several issues that should be discussed. First, to what extent does PSID correspond to national statistics on arrests and crime based on FBI data.<sup>3</sup> There are several reasons these will not be an exact match. Most important, the underlying unit of observation in the PSID is the individual, whereas in FBI crime statistics, it is an arrest and not the individual with no public matching of individuals on arrests. A subset of the population will have many arrests during childhood, so there are many more arrests than individuals arrested. To a significant extent, FBI crime data are driven by the multiple arrest subpopulation. There are many advantages to having a person-based population such as the PSID because arrests can be related to far more individual covariates both at the time of the arrest and into the future.

Second, although PSID is nationally representative, it does not always represent small subpopulations with unique behaviors. One such population would be the currently incarcerated population and career criminals with many arrests. PSID does not conduct interviews with those in jail, and if a respondent was in jail for two successive waves, the case is dropped. Career criminals with a long history of arrests and convictions are unlikely to see the advantage of joining the PSID as a long-term respondent. According to the U.S. Bureau of Justice Statistics, 2.2 million people were incarcerated in U.S. federal and state prisons in 2014. Total correctional population in the same year was 6.9 million (Kaeble & Glaze, 2016).

The third issue that arises is that criminal justice information is retrospective rather than prospective. Recent evidence indicates when the event to be remembered is very salient, and

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<sup>2</sup>The categories are (a) assault (battery, rape, aggravated assault, manslaughter); (b) robbery (using a weapon or physical force); (c) theft (taking something without force, such as burglary, larceny, shoplifting); (d) receiving, possessing, or selling stolen property; (e) destroying property or another property offense (trespassing, breaking, and entering); (f) possessing, selling, or using illegal drugs; (g) major traffic offense (driving while intoxicated, driving under the influence, driving while impaired, reckless driving, driving without a license); (h) drinking or purchasing alcohol while under age; (i) possessing or selling illegal firearm; (j) other felony, and (k) other misdemeanor.

<sup>3</sup>See <https://ucr.fbi.gov/ucr> for a description of the FBI data.

arrests would certainly be counted as salient, retrospective histories are quite reliable. For example, Smith (2009a) investigated several quality markers for retrospective childhood health histories, and showed that his prior PSID retrospective instrument was successful in matching known secular trends in childhood illnesses. Moreover, there was no evidence of backward attribution of new episodes of adult health problems into a reevaluation of childhood health. Adult respondents whose health deteriorated between PSID waves were no more likely than before to say their childhood health was not good or to cite additional childhood health problems. Finally, the PSID retrospective childhood criminal justice histories match well to established facts from external FBI arrest records and other studies (Brame et al., 2012; McGonagle & Smith, 2012) such as the large increase in arrests over time over the time period covered by this article.<sup>4</sup>

The data in this article represent more than 95% of the American population that excludes hard-core career criminals. The associations with adult life I document are accurate for that subpopulation and provide a rich set of associations that were not available previously.

Table 1 shows data on percent of PSID respondents across all education groups arrested at least once by age 26. These data are stratified by age to highlight secular trends in arrests and are shown separately by race and gender. Across all age groups, PSID men are almost 3 times more likely to be arrested than PSID women are. Among men, African Americans are 43% more likely to have been arrested than Whites are, whereas differences between races for women are relatively small, except for the youngest age group in the table—those 26 to 35 years old where Black female arrests are much higher than those of White women.

The most salient trend is the dramatic rise in arrests across birth cohorts. Across all groups in Table 1, those between ages 26 and 35 years were 3.6 times more likely to be arrested compared with those who are at least 66 years old. The secular rise in arrests has accelerated in absolute terms across birth cohorts. All gender and ethnic groups in Table 1 shared in these general criminal trends. About one third of PSID men between ages 26 and 35 (those born between 1979 and 1988) were arrested at least once, 2.6 times the arrest rate of men above 65 years. Women have experienced an even more rapid relative increase in arrests, albeit from a much lower base (Moffitt, Caspi, Rutter, & Silva, 2001). Among those above age 65 years, arrests among women in their childhood were very rare indeed—about one in 100. In the youngest age group listed in Table 1 (those aged 26–35), about one in every seven PSID women was arrested at least once.

Secular arrest trends by race are perhaps surprising, in that, the trend to more arrests is stronger in relative and absolute terms among White men. PSID arrests during the childhood years are still more common among Black men compared with White men (43% for Blacks compared with 32% for Whites) but the probability of being arrested is clearly converging over time. Racial trends are very different among women. Especially between the birth cohorts of 1959 and 1988, the frequency of arrests is increasing much faster among African American women compared with White women, although it is clearly accelerating rapidly for both groups.

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<sup>4</sup>FBI data show a recent decrease in arrests but that is after the period in this article.

Table 1 stratifies the data into three education groups: 0 to 11, 12 to 15, and 16 or more years of schooling, with wider age groups due to sample sizes. There is a steep and growing negative education gradient to arrest behavior, with higher arrest rates among the least educated for all ethnic and gender groups. There is a particularly large drop in arrests between those with 12 to 15 years of schooling and the college educated. Among those aged 26 to 35 years, a somewhat astonishing 60% of PSID men with less than a high school degree (about the same for young Whites and Blacks) had been arrested at least once. This compares with about 23% among male college graduates in the youngest age group, once again without any real male racial difference.

There is a similarly steep education gradient for PSID women although arrest rates in all education groups are much smaller for women than men. In the youngest age group in, Table 1, 27% of women without a high school degree have been arrested compared with about 8% among young college graduates. The primary story is not racial and ethnic differences in criminal behavior but rather very pronounced cohort effects making the childhood and adolescent experiences of newer American cohorts quite different than their predecessors. Table 1 suggests that education plays a large role in explaining racial arrest differences especially for men in younger cohorts. For those born between 1979 and 1988, arrest percentages are similar in the three education groups for White and Black men. The overall higher rate of arrests among young Black adults is due to their low education levels. This is much less true among women.

Table 2 illustrates another central dimension in the increasing contact of respondents during childhood with the criminal justice system by showing the fraction of PSID respondents who have been arrested more than once. Multiple arrests are becoming far more common over time, with about 11% of the youngest age group in Table 2 having experienced more than one arrest in their youth. This is a particularly common phenomenon for young PSID Black men with more than one quarter of those in the youngest age group being arrested more than once.

Table 2 also conditions on having at least one arrest. Multiple arrests are far more common among men compared with women and among Black men compared with White men in all age groups. Examining the youngest age group in the table—those aged 26 to 35 years—given at least one arrest, almost half of men and 40% of women were arrested more than once. Using the same metric and age group, 62% of young African American men had been arrested multiple times.

Table 3 portrays the probability of being convicted using the same table structure as in Table 2. These conviction probabilities are presented as unconditional and conditional on arrest probability. The unconditional conviction rate among PSID respondents has risen dramatically over time, especially for women. Across all groups, the youngest age group in Table 3 is 6.5 times more likely to have been convicted of a crime compared with the oldest age group. All subgroups participated in the conviction increase, especially for younger cohorts.

The data in Table 3 demonstrate that this increase in convictions is due both to an increase in the probability of arrest and an increase in conviction given arrest. In the 66+ age group the probability of conviction after arrest was about one in four—now it is approaching an even bet. Conditional on arrest, there are perhaps surprisingly small differences in conviction rates by gender and race, so that most of the gender and race differences are due to arrest differences and not conviction differences given arrest.

Table A1 lists distributions of arrest reasons for first arrest for men and women separately for those aged 26 to 45 years and those aged 46+, and in the third column for the full age group. The fourth column provides a separate distribution of reasons for arrests for Blacks, and the final column indicates, for the full sample, percent of arrests that took place in the younger age sample. Although many arrest reasons may not seem that serious (other misdemeanors represent 31% of arrests for women and 28% for men and underage drinking accounts for 11%–16% of all arrests), many reasons for arrests are serious indeed. Combined assaults, robberies, and thefts account for about 19% of all arrests for men and 28% for women. Similarly, drugs are the reason for arrests in 9% of the cases for men and about 8% for women.

Given a rapid rise in overall arrests, most types of arrest are also increasing over time. If the fraction in the young age column (26–45 years) is higher than the fraction in the old age column (age 46+), this means this reason for arrest is rising faster over time than overall arrests. This would include robbery, theft, drug, and firearm offenses for men, and robbery, theft, and possession of stolen goods for women. One notable secular trend is perhaps not surprising. Drug arrests have become much more common over time especially for women even though, as a fraction of all arrests, drugs are a less common reason relative to other reasons. Among women, two thirds of all drug arrests in childhood took place in the younger cohort sample. The comparable number for men was 69%. Although arrests for all reasons have been rising over time, the other types of reasons for arrests that exhibit especially strong trends are robberies for men.

If we compare the all-Black with the all-races columns, we see that Black males are disproportionately more likely to be arrested for drugs, assaults, and robberies, the more serious crimes and often violent offenses in the list. Black women are more likely than White women to be arrested for assaults and robberies but less likely than the full sample to be arrested for drugs.

Table 4 presents ordinary least squares (OLS) models of interactions with the criminal justice system for arrests, multiple arrests, convictions. These models include controls for 10-year age groups starting at ages 26 to 35, with those above age 65 as the reference group. Other controls are added for White females, Black men and Black women, Hispanic men and Hispanic women, Other races by gender, with White men as the reference group. Variables are included for years of father's education and region of residence (northeast, north central, and west regions of the United States, and foreign country resident with the south as the reference group). There is a control for urban residence.

There are strong statistically significant cohort effects for all types of interactions with the criminal justice system before age 26 among PSID respondents. There is a clear and steady cohort increase in these interactions, so that arrests, multiple arrests, convictions, and convictions conditional on arrests are all rising rapidly over time. When we examine gender and racial differences, White women have much lower levels of arrests, multiple arrests, and convictions, but are not statistically different from White men in convictions conditional on arrests.<sup>5</sup> In fact, in the models summarized in Table 4, there is little evidence of gender and race differences in the probability of conviction given arrest. Differentiation across these groups occurs instead at the arrest level. Similarly, these models indicate that Black males in the PSID have higher arrest, multiple arrests, and conviction rates compared with White men in the PSID. In contrast, there appear to be little difference in any of these outcomes between Black and White PSID women.

Having a more educated father reduces childhood contact with the criminal justice system.<sup>6</sup> The region of the country with the highest rates of interaction with the criminal justice system is the north central region, which stands out in terms of very high rates of conviction conditional on being arrested. Finally, we find relatively small differences between urban and rural areas of the country, except that conditional conviction rates are smaller in urban places.

I explored in additional models not reported here of secular trends across birth cohorts in arrests and convictions across gender and ethnic groups. It very much depends on whether we are evaluating secular trends in absolute or relative differences between groups. Given the sharp rise in arrests and convictions over time, not surprisingly, the absolute differences between all groups are rising over time. But in terms of relative percentage differences, there has been a clear and steady convergence across gender and racial groups within the PSID sample.

## Statistical Models of SES Outcomes

I discuss results from models that estimate the association of interactions with the criminal justice system during childhood in terms of arrests and convictions in the PSID sample with subsequent salient adult labor market outcomes. These outcomes include education, marriage, weeks worked, yearly labor market earnings, and family income, all well measured in PSID. I estimate OLS models for each adult SES outcome. I present estimates indicating that many interactions with the criminal justice system health before age 26 have quantitatively large associations on virtually all PSID adult SES indicators.

OLS models have two variants. Besides family background variables and demographic controls, the first model includes variables for being arrested, being arrested more than once, and for being convicted. The second variant distinguishes between reason for arrest separating arrests into these categories—violent, property, drug, and other.<sup>7</sup> In the models,

<sup>5</sup>Lack of statistical significance is due to lower sample size in conviction conditional on arrest.

<sup>6</sup>I did not include own education as a covariate in the model in Table 4 because own education may be affected by criminal justice contact. When it is included, the own education group that stands apart from the others in these outcomes is those with a college education or more who are much less likely to be arrested once or multiple times and much less likely to be convicted of a crime.

<sup>7</sup>There is an overlap between reasons for arrests and conviction to provide separate estimates.



standard errors are adjusted for intracluster correlation at the family level. The *t* statistics are based on robust standard errors. Besides a standard set of demographic controls (age quadratic to capture life cycle and cohort effects), race (=1 if Black), Hispanic ethnicity (=1 if Latino), Other ethnicity (=1 if Other), and gender (=1 if male), all models include family background measures (education of both mother and father, and average ln parental income during all years when child was less than 17 years old and the family was present in PSID).<sup>8</sup> Controlling for this measure of family income during childhood implies that the interactions with the criminal justice system effects I estimate in this article are not simply due to growing up in a poor family.<sup>9</sup>

Reductions in adult SES measures may be due to childhood physical or mental health problems (Smith & Smith, 2010). I also control for measures of physical and mental health experienced by PSID respondents in their childhood up to age 16 obtained from my 2014 retrospective survey. Physical measures include presence of any childhood contagious disease (mumps, measles, and chicken pox), major childhood physical problems (asthma, diabetes, respiratory problems, heart problem, epilepsy, high blood pressure), and minor childhood physical health problem (speech impairment, allergic conditions, chronic ear problems or infections, hearing problem, severe headaches or migraines, gastrointestinal conditions, difficulty seeing despite eyeglasses). Childhood mental health conditions are divided into the following categories—drug/alcohol abuse, depression, attention deficit disorder (ADD), anxiety or panic attacks, and other.

Table 5 presents estimated effects for years of schooling completed. Most of the secular changes in modeled outcomes such as rising education levels over time are captured by parents' education and parental income during childhood, so that estimated age quadratic is not capturing secular changes in education. Estimated associations of demographic variables and family background variables are consistent with prior literature (Case, Fertig, & Paxson, 2005; Currie & Stabile, 2003). Higher education of either parent, greater parental income of parents during the childhood years, and fewer siblings, all are significantly associated with an increase in adult schooling. In fact, controlling for these family background effects leads to small and statistically insignificant estimated effects of gender, race, and ethnicity, implying that most of the observed gender, race, and ethnic differences in adult education levels are in fact due to family background effects.

Consistent with previous estimates in Smith (2009b, 2010), the principal negative health association with education flows from childhood mental health issues in contrast to physical health problems. There are statistically significant negative effects of childhood depression and ADD and particularly of drug/alcohol abuse on education attainment. In contrast, anxiety and panic attacks are somewhat positively associated with education accomplishments, perhaps reflecting one source of the anxiety.

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<sup>8</sup>.For PSID respondents for whom we did not observe family income when they were between ages 1 and 16 years, we imputed family income.

<sup>9</sup>.These models also include separate dummy variables for missing values for the following variables: father's education, mother's education, and ln childhood family income. The estimated coefficients for these missing value indicators are not displayed in the regression tables.



My criminal justice variables include whether respondents were ever arrested before age 26, whether arrested more than once before that age, and whether ever convicted of a crime before age 26. In the second model variant, I separate arrests into four types—violent, property, drug, and other. With multiple arrests, I use the type of the first childhood arrest to characterize the arrest.<sup>10</sup> Being arrested before age 26 is associated with almost half a year less schooling on average, and this effect is almost doubled to a year of schooling less if there were multiple arrests. In contrast, a conviction carried no additional educational penalty on years of schooling. When we distinguish in the second model variant among the reasons for the arrest, the largest negative association in terms of lower education is from arrests for drugs and violent crimes with smaller magnitudes for the other reasons for arrests. Although the criminal justice association with education may be an important pathway for lower adult incomes in an individual's adult years' future, our estimates below indicate it is not the sole or the major pathway.

The next adult outcome I examine is whether the PSID respondent was currently married at the time of the 2014 survey. Table 6 contains estimated parameters of OLS marriage models using the same set of covariates as those used in Table 5 for education. Men are more likely to be married than women—largely due to the earlier widowhood for women; and Blacks are less likely to be married than White Americans. Physical health problems during childhood have very small associations with adult marriage probabilities but childhood depression and ADDs both significantly lower adult marriage probabilities.

Being arrested for a crime is associated with a reduction in marriage probability by 3.5 percentage points, with multiple arrests having a significantly lower probability of currently married of an additional 9 percentage points. The added estimated effect of a conviction is about 3 percentage points but this is not statistically significant at conventional levels. When I separate arrests into reason for arrest, the largest estimated association is for childhood drug arrests.

The remainder of our models in Tables 7 to 9 deal with estimated associations of interactions with the criminal justice system on the central labor market outcomes measured in the PSID—weeks worked, yearly earnings, and ln family income. These economic outcomes are all known to be reported well in the PSID because that remains the primary PSID focus. When I examine yearly weeks worked in Table 7, once again the estimated demographic associations are conventional—men work more than women (5.3 weeks on average) and Blacks work less than Whites (2.6 weeks on average). Major physical health problems during childhood have a modest but statistically significant effect on weeks worked (1.4 fewer weeks) with much larger estimated associations on childhood mental health problems with the largest estimated size for childhood depression (3.2 fewer weeks worked), anxiety or panic attacks (two fewer weeks worked), and other childhood mental health issues. Those who were arrested more than once in their youth, on average, work more than 3 weeks less in a typical adult year (Dobbie, Goldin, & Yang, 2016; Nagin & Waldfogel, 1995). I estimate a smaller and statistically insignificant association for convictions. When I

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<sup>10</sup>Model estimates are if we use type of arrest for the last arrest when there were multiple arrests.

distinguish between the reasons for being arrested, the largest negative associations are arrests for property crimes and for violent crimes.

Table 8 contains estimated coefficients for yearly earnings. The models are limited to PSID respondents who worked at least 1 week in the previous year to separate a wage effect from whether one worked or not. Yearly earnings display a standard inverse u-shaped age curve with men earning significantly more than women on a yearly basis and Whites more than Blacks do. Economic advantage is transferred across generations as those with more educated parents whose incomes are higher and with fewer siblings have higher incomes themselves.

Not surprisingly given the results above, poor mental health conditions in childhood significantly reduce PSID respondents' earnings as adults. These associations are particularly large among those who suffered from drug/alcohol abuse, depression, and ADD during their childhood years. Those who were arrested at least once during childhood had about US\$5,000 less in earnings per year as adults, an association that was about US\$8,000 higher if there were multiple arrests during childhood. The second model in Table 8 shows that the largest negative arrest penalties were associated once again with violent and drug arrests, where they averaged about US\$11,000 per year. Over a lifetime, these yearly income reductions are very large indeed. If people, on average, worked 35 years, the average lifetime penalty for being arrested would be US\$180,000 with an additional lifetime yearly penalty of about US\$275,000 for multiple arrests.

A parallel model for the ln family income is presented in Table 9. I demonstrated in Table 6 that an important pathway of childhood mental health issues and interactions with the criminal justice system was through the probability of being married. Therefore, to control for that pathway, the ln family income models in Table 9 are presented with and without a dummy variable controlling for being currently married or partnered.

Childhood mental health issues are associated with much lower levels of family income compared with a decrement associated with childhood physical health problems (Delaney & Smith, 2012). Even major childhood physical health problems only reduce family income by a statistically significant 4% compared with about a 15% reduction in family income per year from both substance abuse and depression, with a somewhat smaller effect for those who suffered from ADDs as children. These estimated effects are somewhat smaller when we control for having a spouse/partner. However, the reduction in the negative effect of both childhood ADD and panic and anxiety attacks are particularly large when marriage/partnership is control. This suggests that especially for those two forms of mental health issues during childhood that stable marriages are an important pathway for the negative family income effects.

There are large estimated negative associations especially for multiple arrests on family income with violent arrests and drugs carrying the largest load. Multiple arrests during childhood are associated with an extra 22% lower adult family income per year. When we look at types of crimes, arrests for violent crimes have the biggest negative effect—22%

lower family income. Being convicted of a crime is associated with another 13% lower family income.

## Conclusion

In this article, I document some salient and disturbing trends concerning the interaction of American youth with the criminal justice system based on a module I recently added to the PSID. It could be reasonably argued that self-reports of arrests and convictions in studies such as the PSID may understate arrest and conviction prevalences if respondents are concerned about revealing this type of information. But that would imply that the rates reported in this article are understatements. In addition, corrections data point to the same secular trends.

In addition to better documented higher probability of arrests and convictions among men and African Americans, I find strong cohort effects of rapidly rising rates of arrests, multiple arrests, and conviction over time for all groups. To illustrate, arrest rates for White men have increased almost threefold among demographic groups examined and the relative increase in arrests, multiple arrests, and convictions are even larger among women. In relative terms, there has taken place a racial convergence in arrests over time. Because Whites remain the overwhelming majority racial population in this country, the rising rates of interaction with the criminal justice system should be viewed principally, but not exclusively, as a White American issue.

These rising rates of arrests and convictions over time are associated with large negative economic consequences for those involved. The increased criminalization of the American population is associated with reduced work activity, the prospects of marriage, hourly wages, and yearly incomes for those involved. The models I estimate in this article are of course associations and not causal effects. But the size of the estimated associations suggests that there may well be significant causal effects as well. Future work should explore this.

There is a fundamental issue about the underlying trends that data on self-reports of interactions with the criminal justice system upon which I rely can-not answer by themselves: That is, to what extent do these trends reflect a real increase in criminal behavior during childhood, and to what extent do these trends reflect an increase in arrests and conviction for the same patterns of behavior that existed in the past. This is clearly an important issue for the United States to resolve with appropriate data. To me, the sheer size of the secular increase in interactions with the criminal justice system would suggest that there are elements of both increased activity and increased enforcement for the same types of activity going on. It is imperative that we are better able to document the relative role that is being played by activity and enforcement.

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## Appendix

**Table A1.**

Arrest Crime Type by Age.

	26–45	46+	All	All Black	% arrests in younger group
Men					
Assault	4.1	4.8	4.4	7.2	55.9
Robbery	3.4	1.6	2.7	5.5	76.2
Theft	12.7	10.8	11.9	13.1	63.4
Possess stolen/destroying property	6.0	7.6	6.7	5.1	53.8
Drug offense	10.5	7.0	9.1	12.3	69.0
Major traffic offense	18.7	15.2	17.3	9.3	64.4
Underage drinking	14.8	16.8	15.6	5.1	56.6
Firearm offense	1.9	0.6	1.4	3.4	81.8
Other felony	3.2	2.5	2.9	3.8	65.2
Other misdemeanor	24.5	33.0	27.9	35.2	52.3
Women					
Assault	3.6	6.7	4.5	11.1	56.3
Robbery	0.8	1.9	1.1	1.5	50.0
Theft	23.3	21.2	22.7	23.0	72.5
Possess stolen/destroying property	4.4	3.8	4.2	8.1	73.3
Drug offense	7.2	9.6	7.9	5.9	64.3
Major traffic offense	14.9	14.4	14.7	8.9	71.2
Underage drinking	10.8	9.6	10.5	1.5	73.0
Other felony	3.6	2.9	3.4	6.7	75.0
Other misdemeanor	31.3	29.8	30.9	33.3	71.6

*Note.* These data are for first arrests.

## Author Biography

**James P. Smith** received his PhD in economics from the University of Chicago. He has published extensively on the economic history of African Americans in the United States; role of women in the labor market; economic loss in wrongful death cases; economic development; the economic, demographic, and health effects of immigration; and aging around the world. He is a two-time recipient of a National Institutes of Health (NIH) MERIT Award, the highest award NIH gives to a researcher. He has received honorary degrees from the University of Stirling and Trinity College Dublin.

## References

Brame R, Turner MG, Paternoster R, & Bushway SD (2012). Cumulative prevalence of arrest from ages 8 to 23 in a national sample. *Pediatrics*, 129(1), 21–27. [PubMed: 22184650]

- Case A, Fertig A, & Paxson C (2005). The lasting impact of childhood health and circumstance. *Journal of Health Economics*, 24, 365–389. [PubMed: 15721050]
- Currie J, & Stabile M (2003). Socioeconomic status and child health: Why is the relationship stronger for older children? *The American Economic Review*, 93, 1813–1823. [PubMed: 29058847]
- Delaney L, & Smith JP (2012). Childhood health: Trends and consequences over the life-course. *The Future of Children*, 22, 43–63. [PubMed: 22550685]
- Dobbie W, Goldin J, & Yang C (2018). The effects of pre-trial detention on conviction, future crime, and employment: Evidence from randomly assigned judges. *American Economic Review*, 108(2), 201–240.
- Kaebler D, & Glaze L (2016, 12). *Correctional populations in the United States, 2015* (NCJ, 250374) Washington, DC: U.S. Department of Justice Bulletin.
- Moffitt TE, Caspi A, Rutter M, & Silva P (2001). *Sex differences in antisocial behavior: Conduct disorder, delinquency, and violence in the Dunedin longitudinal study* Cambridge, UK: Cambridge University Press.
- Nagin D, & Waldfoegel J (1995). The effects of criminality and conviction on the labor market status of young British offenders. *International Review of Law and Economics*, 15, 109–126.
- Smith JP (2009a). Reconstructing childhood health histories. *Demography*, 46, 387–403. [PubMed: 21305399]
- Smith JP (2009b). The impact of childhood health on adult labor market outcomes. *The Review of Economics and Statistics*, 91, 478–489. [PubMed: 23585697]
- Smith JP, & Smith GC (2010). Long-term economic costs of psychological problems during childhood. *Social Science & Medicine*, 71, 110–115. [PubMed: 20427110]
- Western B, & Pettit B (2010). Incarceration & social inequality. *Daedalus*, 139(3), 8–19. [PubMed: 21032946]

**Table 1.**

Percent Arrested Before Age 26 by Age and Education.

Age group	All education groups																		
	Education = 0-11			Education = 12-15			Education = 16+												
Birth cohorts	26-35	36-45	46-55	56-65	66+	All	26-35	36-55	56+	All	26-35	36-55	56+	All	26-35	36-55	56+	All	
	1988-1979	1978-1969	1968-1959	1958-1949	Pre-1949	1988-1979	1988-1979	1978-1959	Pre-1959	1988-1979	1988-1979	1978-1959	Pre-1959	1988-1979	1988-1979	1978-1959	Pre-1959	1988-1979	1988-1979
All men	34.7	28.0	22.9	19.2	13.3	25.1	59.7	35.1	22.1	35.3	40.3	31.1	20.1	30.0	22.8	14.7	11.7	15.9	15.9
All women	14.6	11.2	7.6	3.8	1.0	8.7	26.5	10.3	2.0	9.9	20.0	10.2	2.9	10.1	8.0	7.5	2.6	6.4	6.4
White men	32.3	27.5	21.5	17.3	11.5	22.9	57.1	31.4	25.0	33.0	39.1	31.3	17.9	28.3	23.6	15.4	10.2	15.6	15.6
African American men	42.7	35.2	25.3	25.5	28.3	32.8	64.5	54.5	25.6	45.7	44.4	31.8	26.1	34.0	22.7	12.2	32.0	20.3	20.3
White women	12.4	10.4	7.7	3.6	0.8	7.5	41.2	18.9	1.6	12.9	18.5	9.7	2.4	8.5	7.0	7.1	2.6	5.8	5.8
African American women	19.6	12.1	8.1	4.5	2.0	10.9	28.1	9.4	2.9	10.4	23.0	10.7	4.8	12.5	11.3	7.0	1.7	7.5	7.5
Overall	23.0	18.7	13.8	10.7	6.4	15.7	42.3	19.7	10.6	20.6	29.1	19.2	10.0	18.6	13.5	10.5	7.2	10.5	10.5



**Table 2.**

Percent Arrested More Than Once Before Age 26 by Age.

	26–35	36–45	46–55	56+	All
All men	17.2	11.4	10.5	5.8	10.9
All women	5.8	3.0	1.3	0.4	2.6
White men	14.2	10.5	9.6	4.3	8.9
African American men	26.5	17.0	11.8	12.3	17.5
White women	4.8	1.8	1.2	0.2	1.9
African American women	8.4	5.3	1.7	1.2	4.1
Overall	10.6	6.8	5.0	2.8	6.2

Percent Arrested More Than Once Before Age 26 by Age Conditional on One Arrest.

	26–35	36–45	46–55	56+	All
All men	49.5	41.0	45.7	34.2	43.4
All women	39.7	27.0	17.4	16.7	30.2
White men	43.9	38.2	44.8	28.7	39.0
African American men	62.0	49.0	46.5	47.2	53.5
White women	38.8	17.6	15.8	9.1	25.5
African American women	43.1	43.3	20.7	30.8	37.5
Overall	45.8	36.3	36.4	31.4	39.2

**Table 3.**

## Percent Convicted Before Age 26 Unconditional.

	26–35	36–45	46–55	56–65	66+	All
All men	16.0	11.5	8.9	6.9	3.4	10.2
All women	6.1	4.3	2.7	1.0	0.2	3.3
White men	15.1	10.9	8.1	6.3	2.9	9.2
African American men	20.1	16.2	10.9	9.6	8.7	14.3
White women	5.4	4.7	3.0	0.9	0.3	3.1
African American women	7.3	4.0	2.8	1.2	0.0	3.8
Overall	10.3	7.5	5.2	3.6	1.6	6.3

## Percent Convicted Before Age 26 Conditional on Arrest.

	26–35	36–45	46–55	56–65	66+	All
All men	46.4	41.6	39.3	37.1	25.5	41.1
All women	42.4	39.1	37.3	25.8	33.3	39.2
White men	47.1	39.8	37.9	37.5	25.6	40.5
African American men	47.5	46.9	44.2	39.5	30.8	44.6
White women	44.6	45.1	40.5	26.3	33.3	42.0
African American women	37.5	34.5	34.5	27.3	NA	35.5
Overall	44.9	40.8	38.6	34.8	25.9	40.5

*Note.* NA means not applicable because there were no convictions in the data for Black women.

**Table 4.**

Models of Interactions With the Criminal Justice System Before Age 26.

	<u>Arrested</u>	<u>Arrested more than once</u>	<u>Convicted</u>	<u>Convicted conditional on arrest</u>
	Coefficient	Coefficient	Coefficient	Coefficient
Age 26–35	0.169***	0.095***	0.094***	0.226***
Age 36–45	0.124***	0.056***	0.065***	0.170**
Age 46–55	0.075***	0.036***	0.041***	0.142*
Age 56–65	0.037**	0.016*	0.021**	0.103
White female	-0.156***	-0.072***	-0.062***	-0.008
Black male	0.095***	0.081***	0.049***	0.037
Black female	-0.121***	-0.052***	-0.055***	-0.070
Hispanic male	-0.023	-0.028	-0.046**	-0.186**
Hispanic female	-0.149***	-0.080***	-0.077***	-0.107
Other race male	-0.066*	-0.018	-0.036	-0.069
Other race female	-0.187***	-0.097***	-0.084***	-0.071
Fathers years of education	-0.003*	-0.003*	-0.002*	-0.004
Northeast region	0.000	0.001	0.001	-0.014
North central region	0.050***	0.026***	0.038***	0.101***
Western region	0.025**	0.018**	0.018**	0.063
Foreign	0.160***	-0.017	0.034	-0.097
Urban	-0.011	-0.011*	-0.013**	-0.061*
Constant	0.158***	0.078***	0.054**	0.267***
<i>N</i>	7,423	7,422	7,443	1,150

\* statistical significance at 10% level.

\*\* statistical significance at 5% level.

\*\*\* statistical significance at 1% level.

**Table 5.**

Models of Interaction With Criminal Justice System—Years of Schooling.

Education	Complete sample	
	Coefficient	Coefficient
Age	0.020***	0.020***
Age square	-0.000***	-0.000***
Male	0.023	0.016
Black	0.045	0.035
Hispanic	-0.271	-0.261
Other race	-0.991***	-1.001***
Father's education, in years	0.149***	0.150***
Mother's education, in years	0.170***	0.170***
Ln parental income ages 1–16	0.723***	0.727***
Number of siblings	-0.120***	-0.120***
Contagious disease in childhood	0.516***	0.528***
Major childhood physical problem	0.176**	0.173**
Minor childhood physical problem	0.263***	0.265***
Childhood drug/alcohol abuse	-0.531**	-0.574***
Childhood depression	-0.253*	-0.253*
Childhood ADD	-0.444***	-0.464***
Childhood anxiety or panic attacks	0.192	0.197
Other child mental health problems	0.024	-0.000
Foreign	-1.520***	-1.505***
Arrested more than once < age 26	-0.431**	
Arrested < age 26	-0.486***	
Convicted < age 26	0.034	-0.123
Arrest violent < age 26		-0.688*
Arrest property < age 26		-0.149
Arrest drug < age 26		-0.963***
Arrest other < age 26		-0.636***
Constant	2.313***	2.239***
<i>N</i>	7,027	7,027

Note. ADD = attention deficit disorder.

\* statistical significance at 10% level.

\*\* statistical significance at 5% level.

\*\*\* statistical significance at 1% level.

Table 6.

Models of Interaction With Criminal Justice System—Currently Married.

Married	Coefficient	Complete sample coefficient
Age	0.015***	0.015***
Age square	-0.000***	-0.000***
Male	0.130***	0.128***
Black	-0.268***	-0.270***
Hispanic	-0.093***	-0.092***
Other race	-0.108***	-0.109***
Father's education, in years	0.003	0.003
Mother's education, in years	0.002	0.002
Ln parental income ages 1–16	0.018*	0.019*
Number of siblings	-0.002	-0.002
Contagious disease in childhood	0.001	0.002
Major childhood physical problem	0.014	0.015
Minor childhood physical problem	-0.018*	-0.018
Childhood drug/alcohol abuse	-0.019	-0.029
Childhood depression	-0.091***	-0.091***
Childhood ADD	-0.080***	-0.083***
Childhood anxiety or panic attacks	-0.020	-0.020
Other child mental health problems	0.036	0.034
Foreign	0.046	0.050
Arrested more than once < age 26	-0.091***	
Arrested < age 26	-0.035*	
Convicted < age 26	-0.033	-0.050*
Arrest violent < age 26		-0.064
Arrest property < age 26		-0.045
Arrest drug < age 26		-0.133***
Arrest other < age 26		-0.059***
Constant	0.241**	0.228**
<i>N</i>	7,139	7,139

Note. ADD = attention deficit disorder.

\* statistical significance at 10% level.

\*\* statistical significance at 5% level.

\*\*\* statistical significance at 1% level.

**Table 7.**

Models of Interaction With Criminal Justice System—Weeks Worked Last Year.

Weeks worked	Complete sample	
	Coefficient	Coefficient
Age	0.308***	0.314***
Age square	-0.017***	-0.017***
Male	5.329***	5.199***
Black	-2.614***	-2.653***
Hispanic	0.466	0.463
Other race	-1.253	-1.197
Father's education, in years	0.163*	0.165*
Mother's education, in years	0.319***	0.320***
Ln parental income ages 1–16	2.192***	2.193***
Number of siblings	-0.106	-0.109
Contagious disease in childhood	1.420*	1.382*
Major childhood physical problem	-1.441***	-1.427**
Minor childhood physical problem	-0.595	-0.608
Childhood drug/alcohol abuse	-1.047	-1.398
Childhood depression	-3.225***	-3.226***
Childhood ADD	-0.672	-0.727
Childhood anxiety or panic attacks	-1.987**	-2.043**
Other child mental health problems	-2.942**	-2.893**
Foreign	-2.117	-2.008
Arrested more than once < age 26	-2.158*	
Arrested < age 26	-1.093	
Convicted < age 26	-0.658	-1.148
Arrest violent < age 26		-2.649
Arrest property < age 26		-3.384**
Arrest drug < age 26		-1.213
Arrest other < age 26		-0.642
Constant	9.360*	9.305*
<i>N</i>	7,141	7,141

Note. ADD = attention deficit disorder.

\* statistical significance at 10% level.

\*\* statistical significance at 5% level.

\*\*\* statistical significance at 1% level.



**Table 8.**

Models of Interaction With Criminal Justice System—Yearly Earnings of Workers.

Earnings 2012	Coefficient	Coefficient
Age	1.848 ***	1.854 ***
Age square	−42 ***	−42 ***
Male	18.202 ***	18.123 ***
Black	−4.910 ***	−5.130 ***
Hispanic	2.160	2.069
Other race	5.648 **	5.374 **
Father's education, in years	997 ***	1.056 ***
Mother's education, in years	963 ***	930 ***
Parental income ages 1–16	0.139 ***	0.139 ***
Number of siblings	−529 ***	−540 ***
Contagious disease in childhood	2.375 **	2.548 **
Major childhood physical problem	−1.227 *	−1.385
Minor childhood physical problem	405	472
Childhood drug/alcohol abuse	−5.320 **	−6.150 ***
Childhood depression	−5.642 ***	−5.527 ***
Childhood ADD	−3.477 *	−3.767 **
Childhood anxiety or panic attacks	−1.169	−1.391
Other child mental health problems	−1.787	−1.931
Foreign	−11.239 *	−10.662 *
Arrested more than once < age 26	−7.586 ***	
Arrested < age 26	−5.893 ***	
Convicted < age 26	−798	−3.100
Arrest violent < age 26		−11.102 ***
Arrest property < age 26		−4.031 *
Arrest drug < age 26		−11.102 ***
Arrest other < age 26		−8.392 ***
Constant	−9.960 ***	−10.169 ***
<i>N</i>	5.085	5.085

Note. ADD = attention deficit disorder.

\* statistical significance at 10% level.

\*\* statistical significance at 5% level.

\*\*\* statistical significance at 1% level.

Table 9.

Models of Interaction With Criminal Justice System—Ln Family Income.

Log family income	Coefficient	Coefficient	Coefficient	Coefficient
Married/partnered	NA	0.810 ***	NA	0.811 ***
Age	0.036 ***	0.029 ***	0.037 ***	0.029 ***
Age square	-0.001 ***	-0.001 ***	-0.001 ***	-0.001 ***
Male	0.142 ***	0.028 *	0.133 ***	0.022
Black	-0.438 ***	-0.218 ***	-0.441 ***	-0.222 ***
Hispanic	-0.006	0.035	-0.003	0.039
Other race	-0.107 **	-0.001	-0.106 **	-0.007
Father's education, in years	0.024 ***	0.025 ***	0.024 ***	0.026 ***
Mother's education, in years	0.027 ***	0.023 ***	0.027 ***	0.023 ***
Ln parental income ages 1–16	0.317 ***	0.300 ***	0.318 ***	0.301 ***
Number of siblings	-0.022 ***	-0.018 ***	-0.022 ***	-0.019 ***
Contagious disease in childhood	0.103 ***	0.084 ***	0.103 ***	0.086 ***
Major childhood physical problem	-0.035 *	-0.039 **	-0.036 *	-0.041 **
Minor childhood physical problem	-0.005	0.010	-0.007	0.011
Childhood drug/alcohol abuse	-0.136 ***	-0.120 ***	-0.161 ***	-0.166 ***
Childhood depression	-0.166 ***	-0.126 ***	-0.175 ***	-0.129 ***
Childhood ADD	-0.123 ***	-0.069 *	-0.129 ***	-0.067 *
Childhood anxiety or panic attacks	-0.052 *	-0.023	-0.051 *	-0.020
Other child mental health problems	-0.123 ***	-0.127 ***	-0.129 ***	-0.133 ***
Foreign	-0.070	-0.170	-0.050	-0.112
Arrested more than once < age 26	-0.265 ***	-0.246 ***		
Arrested < age 26	-0.006	-0.013		
Convicted < age 26	-0.151 ***	-0.098 **	-0.183 ***	-0.153 ***
Arrest violent < age 26			-0.149 *	-0.225 ***
Arrest property < age 26			-0.119 **	-0.094 **
Arrest drug < age 26			-0.036	-0.016
Arrest other < age 26			-0.056 *	-0.053 *
Constant	6.624 ***	6.336 ***	6.606 ***	6.318 ***
<i>N</i>	6,783	6,783	6,783	6,783

Note. ADD = attention deficit disorder.

\* statistical significance at 10% level.

\*\* statistical significance at 5% level.

\*\*\* statistical significance at 1% level.