Breaking Down the Effects of Juvenile Arrest on Educational Attainment at the Transition to Adulthood

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Abstract

The majority of research up to this point that assesses the impact of juvenile criminal justice involvement on educational attainment looks primarily at aggregated general measures of arrest and incarceration that do not distinguish between arrest types. This general categorization may miss patterns and effects that exist for different *types* of arrest. Using longitudinal data, this article this study compares the effects of drug, violent, and property arrests on educational attainment, specifically in the transition to adulthood (high school completion and college enrollment), and also looks at racial differences in the effects of juvenile arrests, adjudicating between labeling and propensity theories, which suggest different effects of arrest. The results indicate that juvenile drug arrest are significantly more damaging to the educational outcomes of youth, compared to other types of arrest; and this effect is more pronounced for Black and Latino youth.

The majority of research up to this point that assesses the impact of criminal justice involvement on life outcomes, for both juveniles and adults, looks primarily at aggregated general measures of arrest and incarceration that do not distinguish between arrest type (De Li, 1999; Sweeten, 2006; Tanner, Davies, & O'Grady, 1999). This general categorization may miss patterns and effects that exist for different *types* of arrest. In order to fill this gap in the literature and disentangle how the effects of a juvenile arrests on life outcomes may be different for different types of arrest (i.e. drug, violent, or property crimes), this study compares the effects of drug, violent, and property arrests on educational attainment.

Drug arrests are unique in several ways from other types of arrest, and these differences warrant a study that looks mainly at its effects. First, unlike other types of arrest, drug arrests and drug policies have been highly controversial over the past century. The shift from treating drug abuse, especially among juveniles, as a medical problem to treating it as crime problem, and the simultaneous illegalization, surveillance, and harsh sentencing of some drugs over others has created a national drug policy program that is often criticized as biased, inefficient, and disproportionately harmful to Blacks, Latinos, and the poor (Bobo & Thompson, 2006; Fellner, 2000; Provine, 2007; Tonry, 1994). The drug problem itself has been framed around and become synonymous with urban minority youth, who are policed, stopped, searched, and arrested at disturbingly high rates, despite the fact that drug sale and use are just as prevalent in suburban neighborhoods (Covington, 1997).

This leads to the second unique aspect of drug arrests – its victimless nature. As opposed to violent and property crimes that are committed against and harm another person, the majority

of drug arrests are for low-level victimless offenses like drug possession (Uniform Crime Reports, Federal Bureau of Investigations 2010). In fact, recreational drug use is relatively common among youth, regardless of their race or class. University of Michigan's Monitoring the Future Study (2010) found that 35% of high school seniors had used marijuana in the previous year, and this rate had remained relatively stable over the past two decades when the drug war was at its peak. The nature of most drug offenses, therefore, are quite different than the nature of offenses with a victim, therefore the youth captured under the umbrella of drug arrests can be quite different as well. Given the prevalent rate of drug use in the U.S., at any given moment in time a substantial proportion of teenagers may possess drugs, and therefore "break the law". However, in contrast to violent and property laws that are broken, most of the teenagers breaking drug laws are not necessarily dangerous to others or inclined to violence or serious crimes (Benson, Kim, Rasmussen, & Zhehlke, 1992; Resignato, 2000). For this population of youth, the odds of getting arrested, and the risk of being stigmatized, has less to do with breaking the law and being reported to the police, and more about being in the wrong place at the wrong time. Here, the discretion of police officers is key, and racial profiling becomes a relevant problem. For violent and property crimes, where a victim exists, arrest is often the result of reports (by the victim or another person) and less subjective when compared to drug arrests. So, the effect of a drug arrest may be quite different than the effect of juvenile violent and property crimes because theses types of arrest may be capturing different populations of youth. Therefore, a key contribution of this project is that it will break down commonly used measures of criminal justice contact, and highlight why it is important to look at more specific types of arrest. Furthermore, by disentangling arrest, this research will show how drug arrests are unique and deserve closer examination.

Comparison to Property and Violent Crime Juvenile Arrests

To understand the unique nature of drug arrests and the impact this type of arrest has on the life outcomes of youth, it is essential to compare drug arrest effects to the effects of other types of arrest. I will be analyzing 1) how the effect of an arrest on educational and employment outcomes varies by arrest type and 2) whether racial differences in the effect of a juvenile arrest exist for some times of arrest, but not others. No known studies up to this point have done this type of analysis. Using propensity theories and labeling theories, I can hypothesize how these effects may vary. As mentioned, drug offenses differ from property and violent crimes in one major way – drug offenses are often a victimless crime, as the majority of juvenile drug arrests are for low-level victimless offenses like drug possession (Uniform Crime Reports, Federal Bureau of Investigations 2010). The nature of most drug offenses, then, are quite different than the nature of offenses with a victim, therefore the youth arrested for drug offenses can also be quite different than those arrested for property/violent crimes. In contrast to youth who commit violent and property offenses, most of the teenagers breaking drug laws are not necessarily "dangerous" to others or inclined to violence or serious crimes (Benson, et al., 1992; Resignato, 2000). For drug-arrested youth, the risk of getting caught and arrested is more about being in the wrong place at the wrong time, rather than simply breaking a law and being reported to the police (Beckett, Nyrop, Pfingst, & Bowen, 2005). The discretion of police officers and racial stereotypes or profiling become key tools in deciding who gets caught and who does not (Beckett, Nyrop, & Pfingst, 2006). For violent and property crimes, arrest is less subjective, as it is often the result of a report, by the victim or witness (Snyder, Justice, & Prevention, 2002). So, the effect of a drug arrest may be quite different than the effect of juvenile violent and property

crimes because theses types of arrest may be capturing different populations of youth. So it could be that youth who commit violent and property crimes and are arrested may be youth already on a "delinquent" path, because of the nature of these crimes. Therefore, propensity theories may best explain the relationship for these types of arrest and future outcomes. As mentioned, propensity theories posit that individual behavioral traits explain both contact with the criminal justice system and negative outcomes, and therefore, any relationship between the two would be spurious (Gottfredson & Hirschi, 1990). In other words, these are the most delinquent youth who would have dropped out, not attended college, and had unstable employment outcomes regardless of being arrested.

Furthermore, less racial and class biases exist in violent and property law-enforcement practices (vastly different that the biases in drug enforcement). Some research has shown that the disproportionate violent/property arrest rates between racial/class groups are most likely attributable to differential involvement in crime rather than to racially biased law enforcement practices (Pope, Snyder, Justice, & Prevention, 2003). For drug arrests, however, vast racial and class biases exist. For example, although African Americans are the *least* likely to do drugs (Wallace & Bachman, 1991), they have the *highest* chance of being caught possessing it. One study notes that "by the time they are in their twenties, most African American males regardless of socioeconomic status, have been stopped by the police because 'Blackness' is considered a sign of possible criminality by police officers" (p. 14, Feagin, 1991). Even in areas where police may not *stop* African Americans and Latinos disproportionately, they may be searched and arrested for drug related charges disproportionately (Petrocelli, Piquero, & Smith, 2003).

These differences mean that for violent and property crimes, the most deviant youth (regardless of race or class) are getting caught, and may already have the propensity for low

levels of educational and labor market attainment. Therefore, I expect that 1) any affect of violent or property arrest on educational or labor market outcomes would be explained by behavioral variables and 2) there would be minimal racial and class differences in the effect of violent or property arrest on future outcomes. As stated previously, the effect of a drug arrest appears be more complex because of the biases in law enforcement and arrest. Especially for Black and Latino low-income youth who have been arrested for drug related charges - the most deviant youth are not necessarily the only ones who get arrested because they are stopped and searched so often. Therefore, I expect that the effects of a drug arrest will vary (in comparison to other types of arrest) because 1) the effect of a drug arrest may not be explained away for these groups by individual behavior variables (propensity variable) and labeling theory may be at work and 2) there may be racial and class differences in the effect of a drug arrest on subsequent outcomes (more detrimental for Black/Latino/low-SES groups than for White/Middle-High-SES groups). These findings will underscore the ways in which drug policies and drug enforcement serve as a mechanism for racial and socioeconomic inequality. Not only are Black, Latino, and poor youth much more likely to be arrested than Whites and higher SES youth for drug related charges (Fellner 2009); but based on this research, these groups may also be more strongly affected by the impact of a drug arrest. Previous estimates of the aggregate consequences of drug arrests, and more broadly the war on drugs, may therefore underestimate the impact on racial and class disparities.

Data and Sample

This research will use three of the four waves of data drawn from Add Health. The first wave, conducted in 1994 and 1995, comprises an in-home interview with a subsample of 20,745 seventh-twelfth grade students, selected from a larger sample of 90,000 students included in an

in-school survey not used here. The third and fourth wave of the Add Health project, conducted in 2002/3 and 2007/8, respectively, attempted to re-interview all the original in-home survey respondents who were at that point between the ages of 18 and 26 (wave 3), and then 24 and 32 (wave 4). In total, 15,197 respondents were administered the in-home interviews at all three waves – Waves 1, 3, and 4 – (Harris et al., 2003), and are used in the present study.

Several constraints will be imposed on the sample. To create temporal order for the high school completion/dropout outcome, the measure for drug arrest will be restricted to those whose first arrest was drug related and occurred prior to completing the tenth grade, and the high school dropout measure will be restricted to those who dropped out after completing the tenth grade. This is done because of the limited data available on when *exactly* these events took place. By restricting these variables, I am able to ensure temporal order, where drug arrest unequivocally comes before a student drops out. I will also employ multiple imputation for missing values on the independent variables to prevent the sample size of drug arrests from getting smaller than it already is. Finally, all analyses include grand sample weights to account for the oversampling of certain ethnic and racial groups. Add Health did not assign weights to all respondents, therefore only those with assigned weights were included. The final sample consists of 11,833 respondents.

Variables

Educational Attainment

High School Completion: This dichotomous variable will be based off of a self-report question at wave 4, when respondents are between the age of 24-32, asking respondents to indicate the highest level of education they had completed. Students will be coded as having dropped out of

high school if they did not complete the 11th or 12th grade, to create the temporal order previously mentioned. Non-dropouts include all respondents who completed the twelfth grade (i.e. received a high school diploma). The overall dropout rate for the sample is 10%, which falls below the national average of 13% (Day, Jamieson, & United States. Bureau of the Census., 2003). The reason for this is twofold. First, respondents who dropped out before the 10th grade will not be included in the sample. Second, respondents who had a drug arrest during or before the 10th grade, and may have a higher risk of dropping out, were also not included in this sample. Across the groups, Latinos have the highest proportion of dropouts (13%), followed by African Americans (12%), and finally Whites (9%) (descriptives table not presented here).

College Entry: The variable for college entry (v. never attended college) will also be based off the same wave 4 self-report question used for high school completion, where respondents are asked to indicate the highest level of schooling they have completed to date. Respondents who report attending some college (two-year or four-year) by wave 4 (age 24-32), with or without degree completion (bachelor's or associate's), will be coded as having enrolled in college. Respondents who marked any other response (less than high school degree, high school diploma/GED, vocational training) were coded as never enrolling in college.

Bachelor's Degree Attainment: Bachelor's degree completion is coded also coded as a dichotomous variable based of the same self-report variable as the high school completion and college entry variable. Respondents who marked earning a bachelor's degree or higher (master's, doctorate, etc.) as their highest level of education by wave 4 will be coded as having "completed a bachelor's degree." Respondent's who reported anything less, including associate's degree completion, were coded as not having completed a bachelor's degree.

Main Independent Variables

Drug Arrest. In wave 4, respondents are asked to report the number of times they have been arrested, the reason for each arrest, when the arrest took place, and whether or not they were convicted. Only information for *first arrest* will be used, and a dummy variable for drug arrest will be created if respondents report that their first arrest was drug related. Since all the educational and occupational outcomes are measured after age 18, except for high school completion (discussed earlier), drug arrests will consist of first time drug related arrests that occurred before respondents were 18 years old except for the high school completion models.

Race.[1] The wave 1 in-home questionnaire asked two separate questions for race and ethnicity; one question asks respondents if they are ethnically Latino, while another question asks respondents to mark one more races they identify with (White, Black, Native American, Asian, other). In a third question, respondents who marked more than one race are asked to mark one race they 'best' identify with. An overall race variable, with mutually exclusive categories, is created combining the three questions above. Respondents will be coded as Latino if they marked 'Latino' in the ethnicity question, regardless of what they marked in the race questions. This makes all other race categories non-Latino. Whites, Blacks, Native Americans, Asians, and other, were coded directly from the race variable. If respondents marked more than one race, their response from the 'best race' question was used to assign them to a category. Because the number of drug arrests among Asians, Native America, and others were so small, and difficult to quantitatively analyze, they were grouped together as a larger "other" category and not discussed in this study.

[1] Add Health also provides the interviewer's classification of a respondent's race, which would have served as a better measurement of race for this study because it represents perceived race. However, Hispanic/Latino was not one of the possible racial categories interviewers could choose, and would not allow the inclusion of Latinos in this study. Therefore, self-reported race was used. Both the interviewer and self-reports of race were compared, and there were only a hand-full of cases where interviewer reports and self-reports were different for Black and White respondents. The majority of Latinos are categorized by interviewers as either White (about 60%) or Other (35%).

Socioeconomic Status: This scale will include three indicators of "class" to provide a more comprehensive measurement. From the parents' survey in wave 1, I will use the parent(s) self-reported annual household income in the year prior to Wave 1 (1994/1995) and their highest level of education completed (if both mother and father's education is completed, I use whichever is higher). The categories for educational attainment are 'less than a high school diploma', 'a high school diploma or equivalent', those who attended 'some college' but did not achieve at least a bachelor's degree, and an 'earned bachelor's degree or higher' category. Since the parent(s) occupation type was not reported in the parents' survey but was reported in the main study at wave 1, I will use respondent's self-report of their parents occupation and code the occupational prestige of the parent(s) job (if parent(s) have multiple jobs, the job paying the most in earnings is reported). Using these three measures I will create a combined scale of respondents' family SES between 1 and 8. I will then create a final dichotomous variable for use in my models where the SES scores will be broken down into quartiles, respondents with SES scores in the bottom quartile will be coded as low-SES and those with scores in the top three quartiles will be coded as middle/high SES. Since I will be running separate models by SES type, I need to categorize this variable rather than leaving it as a continuous scale. Furthermore, most studies that divide SES up often create three categories (low, middle, high SES). I am unable to do that in my dissertation because I want my sample size of drug arrests to remain large enough to work with.

Other Variables (Education and Employment Models)

Several control variables will be included in all the regression models. Sex is measured with a dummy variable equal to 1 for females. Given the substantial literature on the relationship

between immigrant generation and academic performance, generation is also included. Respondents will be coded as first generation if they were foreign born, second generation if they have one or more foreign-born parent but the respondent was U.S. born, and third generation if both the respondent and his/her parents were U.S. born. Three measures of individual behavior predictors will also be included from Wave 1. The delinquency measure is included, created from adolescents' response to fourteen items that included subscales of delinquency. Mean scores were calculated with at least fourteen non-missing responses and recomputed to the original 0-3 scale with an alpha reliability score of .82. In addition, two measures of self-reported drug involvement will be included from wave 1. First, whether the respondent has ever used any illicit drug; and second, whether the respondent has ever sold illicit drugs. These behavior variables also represent variables that, according to propensity theories, would explain any relationship between drug arrest and life outcomes.

Measures of academic performance and expectations will also be included in the regression models, because they are strong predictors of educational attainment, which goes on to affect labor market attainment (Finn, 1989; Jimerson et al., 2002) as well as predictors for delinquency (Felson & Staff, 2006; Hirschi & Hindelang, 1977; McGloin, Pratt, & Maahs, 2004), and would further test the propensity theories. First, grade point averages in the 9^{th} grade will be included as a measure of early school performance. This measure was coded directly from the Add Health Educational Supplemental Data from Wave 3, which contains respondents' high school transcripts. A dummy variable for educational expectations is included in the model ('On a scale of 1 to 5, where 1 is low and 5 is high, how likely is it that you will go to college?). Respondents who reported a 4 or 5 on the scale were coded as "likely to attend college" (v. respondents who reported a 1, 2, or 3 and were coded as "unlikely to attend college").

A dummy variable indicating if respondents lived with two parents at wave one is also included as a measure of family background. Finally, I include measures of institutional sanctions. First, I create a dummy to indicate whether respondents' first time drug related arrests led to a conviction.[2] Second, I create a variable indicating if the respondents were arrested a second time after the age of 18 (this will no be used in high school completion models). This will control for respondents who continued to commit crimes, and may explain employment instability and forgoing college attendance. Next, three dummy variables measuring any suspension and/or expulsion at wave 1 will also be included in the regression model. These include a variable indicating the respondent had been suspended, but never expelled; a variable indicating expulsion but no suspension; and finally, a variable indicating both suspension and expulsion. These variables will be separated to distinguish the types of and severity of school discipline students receive.

For all outcomes except high school completion I also will include a set of dummies indicating whether respondents had ever been married, had ever had a child (or children), both, or neither were created based on self-reports from the wave 3 survey. Respondents were coded as married if they were previously or currently married. Job status at wave 3 will also be included as a dummy indicating respondents' employment status (part-time or full-time). Finally, I will include a dummy variable indicating whether respondents where arrested again after the age of 18.

Other Juvenile Arrest Types

[2] Drug conviction is controlled for, and not used as the main independent variable (rather than drug arrest) because the sample size is extremely small. Previous research also points out that it is important to see if arrest, regardless of conviction, has an effect on subsequent behaviors and outcomes since a large number of youth only experience arrest and not the severity of following sanctions that produce a presumed effect of an arrest (Huizinga & Henry, 2008). Also, previous research has found that arrest by itself may amplify future behavior, even without a conviction (Rios, 2011). However, only a few studies have addressed the impact of arrest while many studies have addressed the impact of convictions and various court imposed sactions/treatments.

Violent Crime Arrest: In wave 4, respondents are asked to report the number of times they have been arrested, the reason for each arrest, when the arrest took place, and whether or not they were convicted. Only information for *first arrest* will be used, and a dummy variable for violent crime arrest will be created if respondents report that their first arrest was for rape, robbery, simple assault, aggravated assault, manslaughter, or murder. Since all the educational and occupational outcomes are measured after age 18, except for high school completion (discussed earlier), violent crime arrests will consist of first time arrests that occurred before respondents were 18 years old except for the high school completion models. However, two measures will created for violent crime arrests with varying reference categories. In the first measure the reference category will be the respondents who have never had an arrest. In the second measure, the reference category will consist of the respondents who have had a first time drug arrest. This second measure will be used to test if any observed differences between arrest types are statistically significant.

Property Crime Arrest: From the same set of variables used to create drug and violent crime arrest measures I will create a dummy measure for first time arrests for property crimes. This will be created if respondents report that their first arrest was for theft, arson, or vandalism. Like the previous measures of arrest, this too will consist of first time arrests that occurred before respondents were 18 years old except for the high school completion models. There will also be two measures created for property crime arrests with varying reference categories. In the first measure the reference category will be the respondents who have never had an arrest. In the second measure, the reference category will consist of the respondents who have had a first time drug arrest. This second measure will be used to test if any observed differences between arrest types are statistically significant.

Results

Descriptive Statistics

The descriptive data in Figure A reveals that youth with a violent crime arrest have the highest rate of dropout (37%), followed by those who had property arrest (29%), and finally, youth with a drug arrest (27%). These figures are all three to four times higher then the dropout rate for those with no arrest (7%). The descriptive results for college attendance (Figure B) reveal a slightly different pattern. Those with a juvenile violent crime arrest have the lowest rate of college attendance (41%), followed by those with a drug arrest (44%) and finally those with a property arrest (51%). Youth with no arrest have a considerably higher rate of attending college (71%). These gaps support previous findings on the negative consequences of arrest on educational attainment, but they also suggest that the severity of those consequences may vary by arrest type.

(INSERT FIGURE A & FIGURE B ABOUT HERE)

Next, we break down these statistics by respondents' racial background. Figure C looks at racial differences by arrest type for high school dropout, and it is clearly evident where the largest racial disparities are – for drug arrest. The dropout rate for white youth with a drug arrest (40%) is lower than the dropout rate for Latino youth (51%) and significantly lower than the rate for Black youth (64%) with a drug arrest. These differences across racial background are not as stark for juveniles with property arrest – there is much less variation across the three groups. The dropout rate for White youth is around 39% (similar to the dropout rate for White youth with a drug arrest), while the dropout rate for Latino (43%) and Black (45%) is not much higher. For juvenile violent crime arrests the rates are not significantly different (White, 42%;

Latino, 43%; Black 43%). Interestingly, across all categories, Black youth who had a juvenile drug arrest had the highest dropout rate followed by Latino youth with a similar arrest.

(INSERT FIGURE C ABOUT HERE)

Figure D breaks down the same statistics, but for college enrollment. Again, the racial differences in enrollment rates are the most evident for youth who had a juvenile drug arrest. Where only 32% of Black youth with a juvenile drug arrest went onto college, 47% of Latino youth and 56% of white youth enrolled in college. Again, there is little variation across the three groups for property arrest and violent crime arrests, where the statistics were around 53% and 42%, respectively. Similar to the findings for high school completion, the lowest rates of college enrollment were for Black youth with a drug arrest.

(INSERT FIGURE D ABOUT HERE)

These findings tell us that the effect of a juvenile arrest on educational attainment varies by arrest type, but also by racial background. Next, we look to see what explains these relationships using logistic regression, interaction effects, and predicted probabilities.

Logistic Regressions

Results of the interaction model as well as the predicted probabilities of high school dropout status and juvenile arrest are summarized in Table 1. Table 1, Model 1 shows that all three types of juvenile arrest have a significant effect on dropout, with the highest odds of dropping out among those with violent crime arrests, followed by youth with property crime arrest, and finally drug arrests. After controlling for the control variables, behavioral variables, academic performance, and family background variables in Model 6, we see that the effect of a juvenile violent crime arrest disappears, suggesting that these variables explain the relationship.

After adding the institutional sanction variables in Model 7, the effect of a property crime juvenile arrest is no longer significant. However, in the final model, we see that a drug arrest still significantly increases the odds of dropping out for juveniles (of any race) three fold (v. juveniles with no arrest). This addresses the first research question of whether the effects of juvenile arrest on the likelihood of dropping out of high school vary across arrest type.

(INSERT TABLE 1 ABOUT HERE)

To address the second question regarding racial differences in the effects of juvenile arrest, interaction terms for race and different types of arrest are added in Model 2. Here, the only statistically significant effects are for Black and Latino youth with a juvenile drug arrest, indicating that the effect of drug arrest is more pronounced for these two groups. To illustrate this further, predicted probabilities of dropping out for each racial/ethnic group were graphed. Figure E shows the predicted probabilities based on the full model (Model 7 of Table 1). Comparing this set of predicted probabilities to our base statistics (Figure C), we see that the control variables explain over half of the effect of property and violent crime arrests for all three racial groups, lowering the probability of dropping out from around 40% to roughly 20% with very little variation. Among juveniles with drug arrest, the variables also explained half of the effect of a drug arrest for Whites, lowering the probability of dropping out for that group (given a drug arrest) from 40% to 22%. For Latinos, the probability of dropping out (given a drug arrest) drops very little from 51% to 45% in the full model. Finally for Blacks, the dropout rate, which is the highest among all groups, only falls from 64% to 60%, suggesting once again that the processes differ for Blacks, and to some degree Latinos, than they do for whites. The results in Figure E not only show drug arrest to be a powerful predictor of high school dropout, but they

also support the previous findings in this study that these effects vary among racial/ethnic groups.

(INSERT FIGURE E ABOUT HERE)

We perform the same analyses for the college enrollment outcome and we come across similar findings. Results of the interaction model as well as the predicted probabilities of College enrollment status and juvenile arrest are summarized in Table 2. Table 1, Model 1 shows that all three types of juvenile arrest have a significant effect on college enrollment, with the lowest odds of college enrollment among those with violent crime arrests, followed by youth with property crime arrest, and finally drug arrests. After controlling for the control variables, behavioral variables, academic performance, and family background variables in Model 6, we see that the effect of a juvenile violent crime and property crime arrests disappear, suggesting that these variables explain these relationships. Again, in the final model, we see that a drug arrest still significantly decreases the odds of enrolling in college for juveniles

(INSERT TABLE 2 ABOUT HERE)

Next we look at racial differences in the effects of juvenile arrest, using interaction terms for race and different types of arrest (Model 2). Similar to the findings for high school dropout, the only statistically significant effects are for Black and Latino youth with a juvenile drug arrest, indicating that the effect of drug arrest is more pronounced for these two groups. To illustrate this further, predicted probabilities of college enrollment for each racial/ethnic group were graphed. Figure F shows the predicted probabilities based on the full model (Model 8 of Table 1). Comparing this set of predicted probabilities to our base statistics (Figure D), we see that the control variables explain roughly 20% of the effect of property and violent crime arrests for all three racial groups, increasing the probability of college enrollment from around 45% to roughly

60% with very little variation. Among juveniles with drug arrest, the variables also explained a small proportion of the effect of a drug arrest for Whites, increasing the probability of college enrollment for that group (given a drug arrest) from 56% to 63%. For Latinos, the probability of enrolling in college (given a drug arrest) increases from 47% to 51% in the full model. Finally for Blacks, the college enrollment rate, which is the lowest among all groups, actually decreases from 32% to 31% (difference not statistically significant), suggesting once again that the processes differ for Blacks, and to some degree Latinos, than they do for whites. The results in Figure F not only show drug arrest to be a powerful predictor of high school dropout, but they also support the previous findings in this study that these effects vary among racial/ethnic groups.

(INSERT FIGURE E ABOUT HERE)

DISCUSSION & CONCLUSION

The aims of this study were to 1) test whether the effect of a juvenile arrest on educational attainment varies by arrest type, comparing violent crime, property, and drug related juvenile arrests and 2) whether these effect differ for Black, White, and Latino juveniles. Consistent with previous research on the negative relationships between official sanctions and educational achievement, I find that every type of juvenile arrest significantly increases the likelihood of dropping out of high school, and subsequently decreases the likelihood of enrolling in college. Moreover, I find that drug arrests appear to have the most significant effect, even after controlling for a variety of variables. Furthermore, after introducing interaction terms for arrest type and racial background, I find that the effect of drug arrest is substantially stronger for Blacks than it is for Whites and Latinos, while the effects of other types of arrest do not vary by arrest type.

To help explain my findings, I turn to two competing theories. Proponents of the labeling theories argue that official sanctions negatively affect educational outcomes by either inducing a deviant self-concept or reducing conventional opportunities, which in turn increase delinquent behavior and decrease school engagement. Conversely, propensity theories point to stable individual traits that account for both arrest and high school dropout, and suggest that any apparent link between the two outcomes is spurious. It appears, based on the variables explaining the relationships between different types of arrest and educational attainment, that propensity theory explains the effects of property and violent crime arrests, while labeling theory explains the relationship between drug arrest and educational attainment (MORE TO BE ADDED HERE).

Figure A. High School Dropout Rates by Juvenile Arrest Type

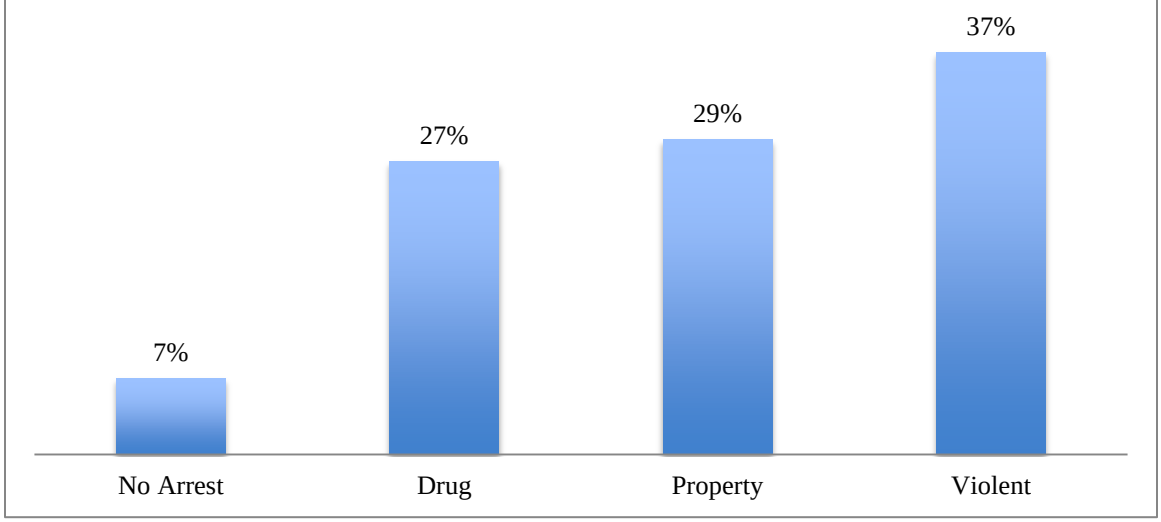

Figure B. College Enrollment by Juvenile Arrest Type

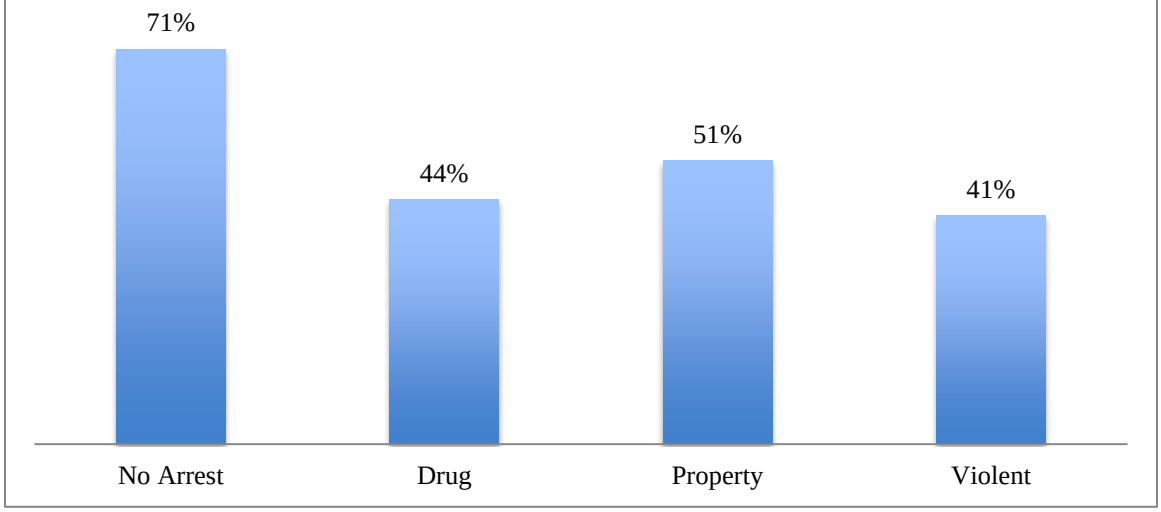

Figure C. High School Dropout Rates by Juvenile Arrest Type and Race

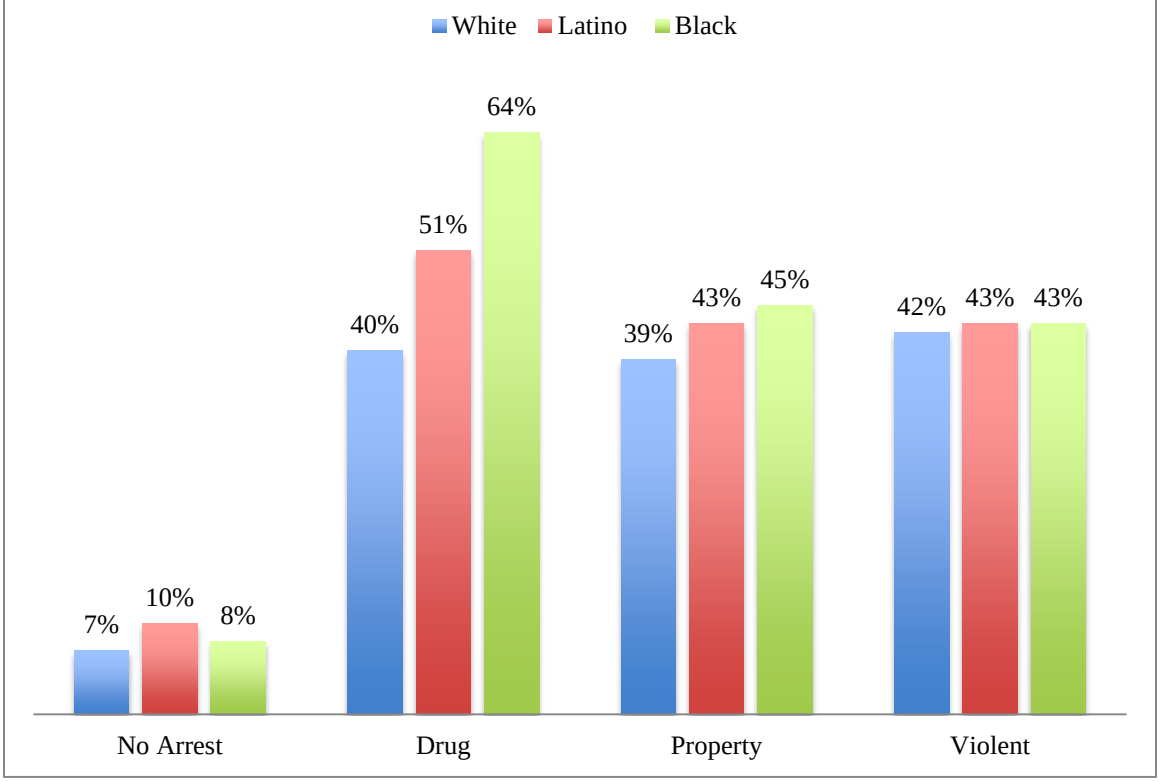

Figure D. College Enrollment by Juvenile Arrest Type and Race

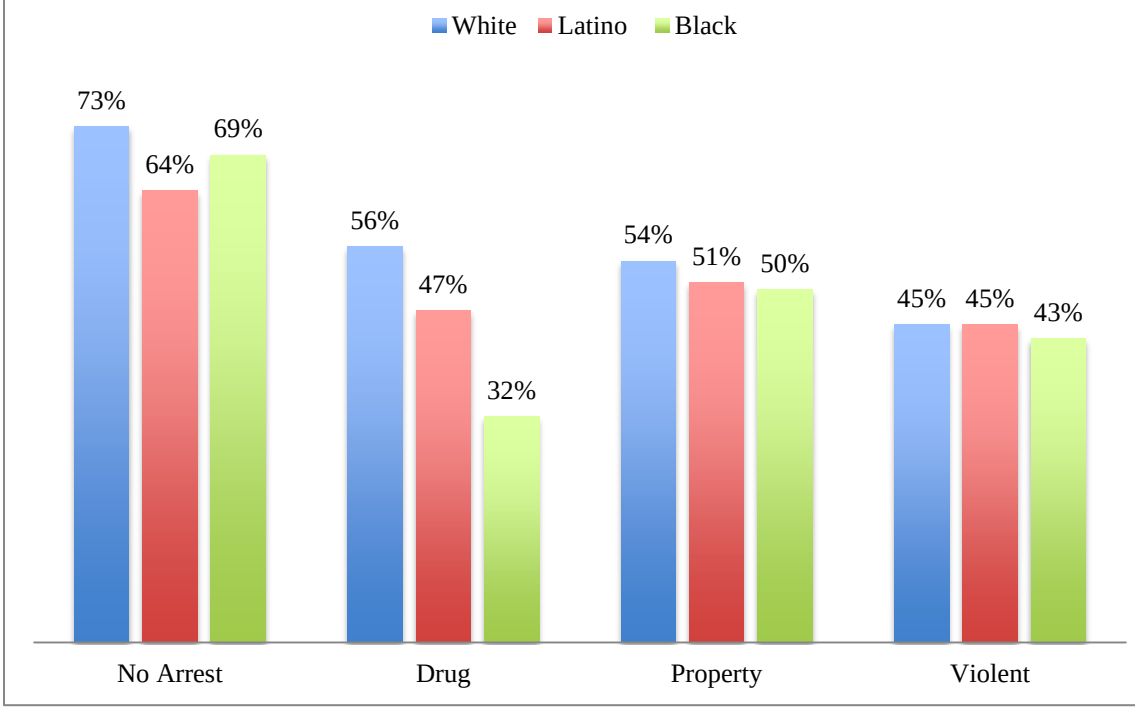

Figure E. High School Dropout Predicted Probabilites by Juvenile Arrest Type and Race, Full Model 7 Table 1

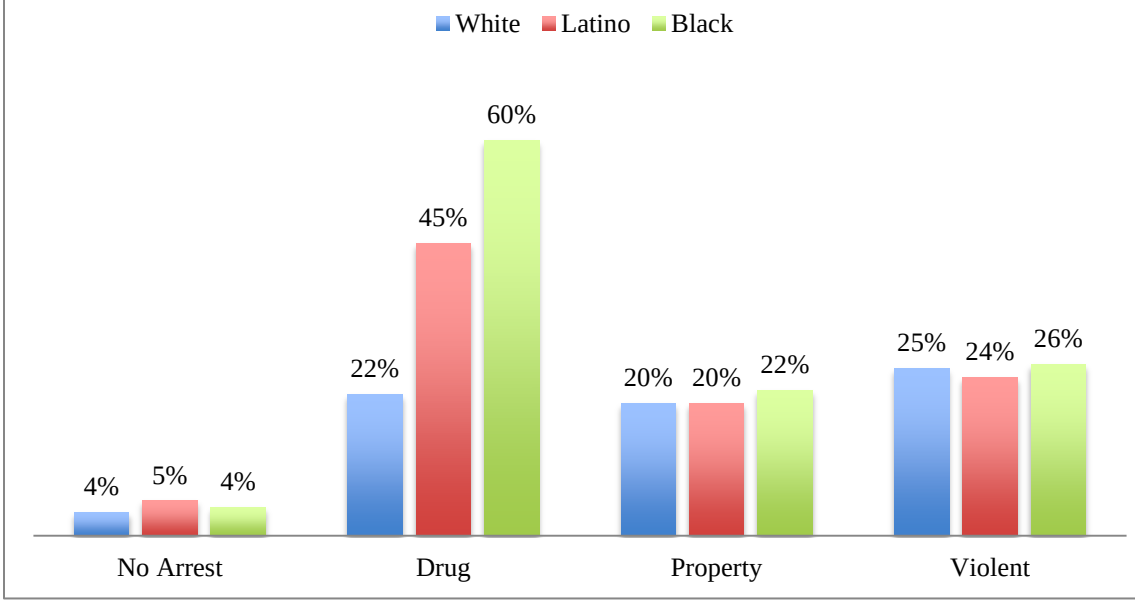

Figure F. College Enrollment Predicted Probabilities by Juvenile Arrest Type and Race, Full Model 8 Table 2

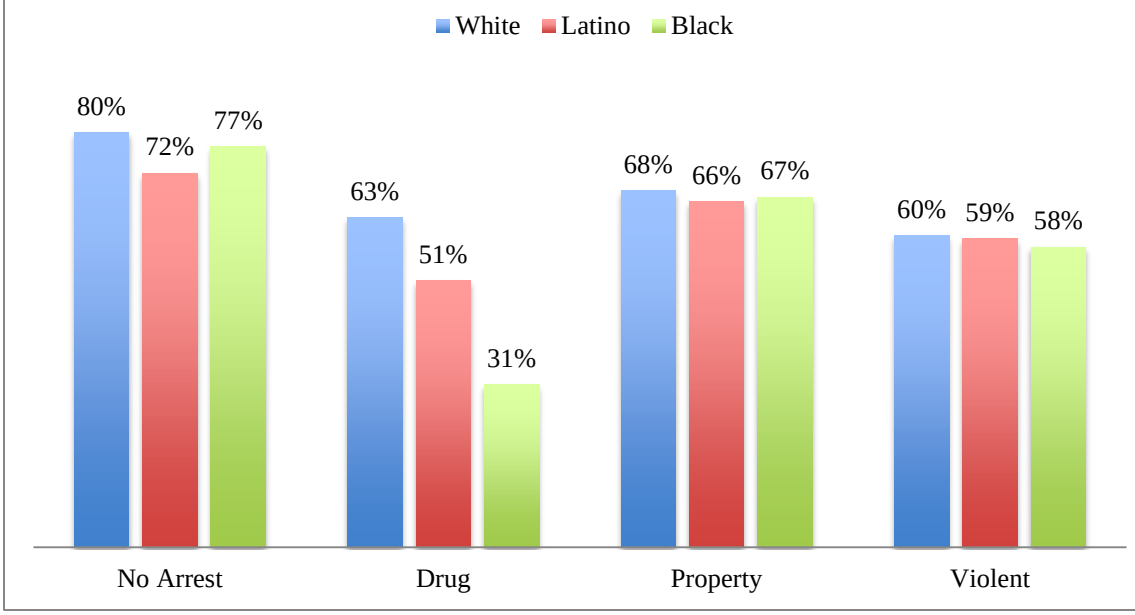

Table 1. Odds ratios from logistic regression of the effects of juvenile arrest on college enrollment, including interactions for race, class, and arrest type, 1995-2008

	Model 1		Model 3		Model 4		Model 5		Model 6	
Juvenile Arrest Type (ref: no arrest)										
Drug Arrest (before age 18)	0.322	***	0.344	***	0.364	**	0.440	**	0.639	*
Property Arrest (before age 18)	0.432	***	0.381	***	0.386	***	0.438	**	0.591	
Violent Arrest (before age 18)	0.294	***	0.256	***	0.259	***	0.342	**	0.508	
Race: (ref: White)										
Latino			0.658	***			0.930	*	1.248	*
Black			0.829	**			1.138	*	1.155	
Race Interactions:										
Latino X drug arrest			0.545	*			0.401	*	0.389	
Latino X property arrest			0.638				0.564		0.611	
Latino X violent arrest			0.796				0.707		0.818	
Black X drug arrest			0.299	**			0.559	**	0.220	*
Black X property arrest			0.616				0.657		0.725	
Black X violent arrest			0.826				0.877		0.899	
Class Background (ref: Lower/Working)										
Middle					2.245	***	1.639	***	1.121	***
Upper					5.591	***	2.903	***	1.802	***
Class Background Interactions										
Middle X drug arrest					0.742		0.764		0.703	
Middle X property arrest					0.861		0.590		0.562	
Middle X violent arrest					0.793		0.545		0.554	

Upper X drug arrest	1.431	1.365	0.957	
Upper X property arrest	1.279	1.285	0.902	
Upper X violent arrest	1.414	1.312	0.881	
Control Variables:				
Age			1.066	**
Sex (female)			1.226	**
Behavior Variables				
Delinquency Scale			0.724	*
Drug Use			0.882	
Drug Sale			0.730	
Family/Home:				
Two Parents Home			1.432	*
Parents Education:				
Less than HS Diploma			0.862	**
HS Diploma/GED			0.861	***
Some College			1.710	***
BA Degree or more			2.730	***
Academic Performance:				
Expects College			3.051	***
GPA			1.238	***
Institutional Sanctions:				
Drug conviction			0.648	*
School Sanctions:				
Suspension(s) only			0.573	***
Expulsion(s) only			0.378	*
Suspension(s) and Expulsion(s)			0.446	***
Postsecondary Factors:				
Subsequent Arrest since age			0.361	*

18		
Job Status (Wave 3)	0.884	
Family Status:		
(ref: Not married, no children)		
Married, no child(ren)	1.094	
Not married, child(ren)	0.832	*
Married, child(ren)	0.602	**

Table 2. Odds ratios from logistic regression of the effects of juvenile arrest on high school dropout, including interactions for race and arrest type, 1995-2008

	Model 1		Model 3		Model 4		Model 5		Model 6		Model 7	
Juvenile Arrest Type (ref: no arrest)												
Drug Arrest (before age 16)	6.655	***	4.426	***	4.311	**	3.908	**	3.143	**	3.143	*
Property Arrest (before age 16)	7.221	***	4.869	***	5.321	***	4.173	*	3.516	*	2.523	
Violent Arrest (before age 16)	8.556	***	5.926	***	5.720	***	4.163	*	3.221		2.154	
Race: (ref: White)												
Latino			1.591	***	1.591	***	1.171	*	0.923		0.713	
Black			1.348	**	1.348	**	1.021	*	0.898		0.711	
Race Interactions:												
Latino X drug arrest			2.147	*	2.147	*	1.892	*	1.991		2.018	
Latino X property arrest			1.670		1.670		1.429		1.406		1.322	
Latino X violent arrest			1.274		1.274		1.317		1.763		1.990	
Black X drug arrest			5.753	**	5.753	**	5.448	**	4.802	**	4.311	**
Black X property arrest			1.289		1.289		1.576		1.404		1.380	
Black X violent arrest			1.213		1.213		1.015		1.222		1.541	
Control Variables:												
Age					0.601	***	0.671	***	0.703	**	0.753	*
Sex (female)					0.799	**	0.821	*	0.905		1.089	
Family/Home:												
Parents Income												
Two Parents Home							0.723		0.746	*	0.737	*
Parents Education:												
HS Diploma/GED							0.698		0.603	***	0.508	***
Some College							0.427		0.381	***	0.297	***

BA Degree or more	0.339	0.298	***	0.221	***
Academic Performance:					
Expects College	0.775	0.603	***	0.510	***
GPA	0.611	0.794	***	0.826	***
Behavior Variables					
Delinquency Scale		1.320	*	1.255	*
Drug Use		1.166		1.094	
Drug Sale		1.465	*	1.239	*
Institutional Sanctions:					
Drug conviction (before age 16)				1.445	*
School Sanctions:					
Suspension(s) only				2.828	***
Expulsion(s) only				4.905	***
Suspension(s) and Expulsion(s)				3.941	***

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