# POVERTY, DELINQUENCY, AND EDUCATIONAL ATTAINMENT: CUMULATIVE DISADVANTAGE OR DISADVANTAGE SATURATION?

Lance Hannon, Ph.D.
Department of Sociology
Villanova University
Villanova, PA 19085
Lance.Hannon@Villanova.edu
(610) 519-4776

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## ABSTRACT

Data from the NLSY (National Longitudinal Survey of Youth) were analyzed to test two competing hypotheses regarding how poverty affects the relationship between delinquency and educational attainment. The cumulative disadvantage perspective argues that poor youth suffer greater consequences for their involvement in delinquency than middle and upper class youth in terms of their educational attainment. Contrary to this perspective, the disadvantage saturation thesis predicts that delinquency is less consequential for the educational attainment of poor youth than it is for non-poor youth. Results from OLS and logistic regression analyses support the latter hypothesis. Theoretical and policy implications are discussed.

## INTRODUCTION

Over the last decade, several scholars have worked to expand the types of questions criminologists ask (Hagan 1993, 1997; Jessor et al. 1993; Laub and Sampson 1993). In particular, there is a relatively new emphasis in criminology on investigating both the causes of crime and delinquency and the effects of such behavior on other important outcomes. This broader perspective includes questions regarding the impact of crime and delinquency on individual life trajectories.

Consistent with this view, researchers have examined the relationship between adolescent delinquency and educational and occupational attainment (Bushway 1998; De Li 1999; Freeman 1992, 1995; Gill and Michaels 1992; Hagan 1991, 1993, 1997; Jessor et al. 1993; Kaestner 1991; Monk-Turner 1989; Sampson and Laub 1997; Tanner, Davies and O'Grady 1999). Results from these analyses generally support the notion that adolescent delinquency is a significant factor in determining life outcomes such as number of years of school completed, and, at least indirectly through education, level of occupational prestige. While delinquency's important effect on educational attainment has received a moderate amount of research attention, very little attention has been directed at examining how this effect may vary for individuals from different socioeconomic backgrounds. Tanner, Davies and O'Grady (1999, p. 270) call for further research on this issue, speculating that the detrimental impact of delinquency on attainment may be most salient for disadvantaged youth:

> …We do not know whether it affects all rebels equally, or only those without protection from various forms of capital. These questions await further research.

The present study addresses this gap in the literature by examining whether socioeconomic status protects youth from the negative impact of delinquency on their educational future.

## CUMULATIVE DISADVANTAGE OR DISADVANTAGE SATURATION?

The Cumulative Disadvantage Perspective

The relationship between delinquency and educational outcome is thought to be so clear that Gottfredson and Hirschi (1990, p. 162) state without qualification:

> Offenders do not do well in school. They do not like school. They tend to be truant and to drop out an early age. As a result every 'school' variable correlates strongly with crime and delinquency.

Similarly, the importance of educational attainment for mediating the effects of adolescent misbehavior on future life events is plainly spelled out in Monk-Turner's (1989) study of delinquency and occupational prestige. She finds that controlling for educational attainment absorbs the negative effect of delinquency on occupational attainment. That is, if a delinquent can obtain as much education as his or her non-delinquent counterpart, he or she will not suffer an occupational penalty. Although different measures of occupational attainment yield somewhat different results, educational attainment has a consistently strong mediating effect (Tanner, Davies and O'Grady 1999). While delinquency's direct and indirect negative effects on attainment are well documented, only a few scholars have investigated whether these effects vary by socioeconomic group.

A prominent example of such a class-specific investigation, Hagan (1991, p. 579) analyzed longitudinal survey data for a sample of youth from the Toronto metropolitan area. He reported that while delinquency had negative effects on the occupational attainment of males from working class backgrounds (controlling for educational attainment), males from middle class backgrounds were shielded from the deleterious effects of involvement in delinquency. Thus, Hagan concluded that individuals from the lower classes are more likely to suffer attainment disadvantages for their delinquency than other youth because they have less of an

opportunity buffer. These youth face a type of cumulative disadvantage where earlier problems, hindrances, and setbacks amplify the importance of current ones. Put simply, there is less room for mistakes when opportunities are scarce. In line with Hagan's argument, Jessor et al. (1993, p. 289) concluded from their U.S.-based longitudinal study of delinquency and attainment that:

> Contexts of poverty and social disorganization are obviously less likely than middle class contexts to provide resources for overcoming a history of problem behavior, or to make 'second chances' available, that is, to be 'forgiving' in the sense of maintaining open opportunity despite previous problem behavior involvement.

Robert K. Merton (1973) described this phenomenon by emphasizing examples of its inverse: cumulative advantage. In particular, Merton noted how early success in one's career could increase the likelihood of future success even without sustained levels of effort and genuine merit. Those without early success, however, must work hard to avoid mistakes. Citing a verse from the Bible, Merton (1973: 445) referred to this as the "Matthew effect":

> For unto every one that hath shall be given, and he shall have abundance: but from him that hath not shall be taken away even that little which he hath.

Thus, according to Merton, the initially advantaged can expect more advantages to come their way, while the initially disadvantaged should expect their problems to multiply.

Besides having less room for mistakes, poor youth may also have less social capital with which to bargain their way out of stigmatization and 'delinquent tracking.' Labeling theorists consistently argue that one of the primary differences between the deviance of the upper class and that of the lower class is the degree to which society sanctions and stigmatizes their behavior (Heimer and Staffen 1995, Matsueda 1992). Middle and upper class parents of delinquents may be able to use their status and personal ties to offer protection against punishments such as suspension or expulsion from school and official sanctions from the criminal justice system (Chambliss 1969; Reiman 2000). Teachers and criminal justice officials may be more inclined to

believe that middle and upper class parents can effectively punish their own children; they may not have the same faith in lower class parents (Sullivan 1989). Formal punishment, in turn, greatly affects the likelihood that a juvenile will be labeled (or branded) a delinquent.

Unlike other youth, disadvantaged adolescents may not have the luxury of being able to drift in and out of delinquency (Hagan 1991, Matza 1964). Some labeling theorists have suggested that lower class youth are not only more likely to be formally punished for their misbehavior, but the punishment is also more likely to lead to the application and internalization of a permanent deviant label (Chambliss 1969). Once labeled a delinquent, these juveniles find it difficult to gain access to conventional social networks (e.g. good students and supportive teachers) and easy to fit in with 'the wrong crowd.' Laub and Sampson (1993, p. 317, 1997, p. 153) argue that the differential application and retention of negative labels depending on socioeconomic status is a key explanation for 'why some youth escape the long-term consequences of delinquent involvement while others do not.' They theorize that:

> Among the disadvantaged things seem to work differently…Perhaps most problematic, the process of cumulative disadvantage restricts future options in conventional domains that provide opportunities for social 'interdependence' (e.g. stable employment) while simultaneously encouraging options within subcultures that 'reject the rejecters.'

According to Sampson and Laub's (1997) version of the cumulative disadvantage perspective, for a lower class youth the acquisition of a deviant label not only limits access to opportunities for educational and occupational success, but also promotes opportunities for educational and occupational failure. Thus, for the lower class youth a deviant label does more than just create apathy and disinterest in the conventional activities of school and work, it actually inspires a resentment of these activities that is culturally supported in a rebellious subculture.

The Disadvantage Saturation Perspective

While it seems logical to expect that disadvantaged youth will have less access to "second chances" and a "forgiving environment" (Jessor et al. 1993, p. 289), it also seems logical to assume that disadvantaged youth will have few opportunities for social advancement regardless of their delinquent/non-delinquent status. In a sense, lower class youth may have less to gain from conformity because there are so many distinct forces (besides delinquency) acting to suppress their educational attainment. Poverty may leave youth isolated (or segregated) from an advantageous cultural milieu (Wilson 1987) and more direct economic opportunities (Massey and Denton 1993). Thus, the increased handicap of being involved in delinquency may be of little relevance considering a myriad of other possible constraints. At some point, the level of disadvantage could reach a point of saturation where the youth has little left to lose in terms of opportunities for the future. If there are many unique variables besides delinquency that affect whether or not a lower class youth goes on to higher levels of educational attainment, and fewer unique factors that affect middle and upper class attainment, then the delinquency of the lower class youth could prove less consequential.

Compared to the cumulative disadvantage viewpoint, the notion of disadvantage saturation has not been given as much attention by sociologists and criminologists. Consistent with the general idea of disadvantage saturation, two recent criminological studies have reported diminishing negative returns in poverty's effect on the spread of social disorganization. Krivo and Peterson (2000) and McNulty (2001) both found that when neighborhoods reach a certain level of economic deprivation, further deprivation makes little difference in terms of the level of violent crime. These authors suggest that there is a point of resource deprivation at which social institutions collapse and simply cannot be damaged further. In short, things get so bad in the

community that they cannot get much worse in terms of social disorganization.

Streeter and Franklin's (1991) cross-sectional research on a local sample of high school dropouts is one of the few studies focused on educational attainment that addresses the disadvantage saturation viewpoint. Using discriminant analysis procedures, they found a higher proportion of adolescents with behavioral problems among middle class dropouts than lower class dropouts. They reported that the problems of low-income dropouts were "mainly socioeconomic and academic in nature" (1991, p. 211). Thus, their analysis lends support to the idea that individual behavior and/or misbehavior is less consequential for the poor because structural constraints often leave them 'damned if they do, and damned if they don't.' Although acknowledging the limits of generalizability of their small sample, Streeter and Franklin argued that their findings call for intervention policies which better suit the differing problems and needs of at-risk lower and middle class youth. Citing Streeter and Franklin's work in his research on how dropping out affects subsequent delinquency among the lower class, Jarjoura (1996, p. 234) concurred with their reasoning noting that regardless of delinquency, "dropping out of school is often an inescapable outcome" for disadvantaged youth.

In MacLeod's (1987) classic ethnography, Ain't No Makin' It, the author suggests that playing it straight often does little to help the social advancement of low income youth. Comparing delinquent and more "bookwormish" youth in a northeastern housing project, MacLeod found few real differences in terms of later educational and occupational attainment. He further noted that this lack of pay off for conventional behavior did not go unnoticed by low-income youth. Many of the youth that MacLeod interviewed expressed regret about wasting their time playing by the rules in school. MacLeod's qualitative evidence suggests some important questions. Do disadvantaged conformists do appreciably better than their delinquent

counterparts in terms of their attainment as young adults? Does adding delinquency to a wide assortment of poverty associated constraints have much of an effect on the educational outcomes of disadvantaged youth?

The disadvantage saturation perspective argues that because lower income youth face many structural barriers to achieving, they have 'little to lose' from delinquent behavior since their fate may be largely determined by factors beyond their immediate control. Thus compared to middle and upper class youth, the delinquency of lower class youth will prove less consequential for their educational attainment. The cumulative disadvantage viewpoint, on the other hand, argues that lower income youth have few opportunities and lack a forgiving environment, thus they have little room to make mistakes. As such, they will suffer greater consequences for their involvement in delinquency in terms of their educational attainment. I empirically test these two opposing propositions by measuring the relative impact of adolescent misbehavior on the educational attainment of two groups of youth, those above and those below the poverty line.

## DATA, VARIABLES, AND METHODS

Data from the NLSY (National Longitudinal Survey of Youth) were used to examine class differences in the relationship between delinquency and educational attainment. The NLSY was first administered in 1979 under a Department of Labor contract with the Center for Human Resources Research at Ohio State University[1]. The central goal of the survey was to provide information on the life transitions and labor market experiences of young people, but the questionnaire covers a broad range of topics. The survey began in 1979 with a national household probability sample of 6,111 youth between the ages of 14 and 21 and two

supplementary samples: an over-sample of racial and ethnic minorities and low income youth and an additional sample of youth in the military. For the current study, I use both the national household probability sample and the over-sample of disadvantaged youth[2].

Because the present study focuses on delinquency's effect on later educational attainment, a subset of individuals between the ages of 14 and 17 enrolled in school in 1979 was selected from the main sample. Youth already outside of school in 1979 were excluded from the sample because their educational attainment is often largely determined at this point and their reported levels of delinquency could be seen as an effect rather than a cause of their educational attainment (Tanner, Davies and O'Grady 1999). Sample attrition for the 1990 survey and list-wise deletion of missing values reduced the subset by approximately twenty percent. Univariate analyses of missing cases from sample attrition suggested that the final sample was not significantly different from the base sample in regard to the distribution of key variables.

Three measures of self-reported misbehavior in 1980 were used in the analyses. Delinquency was first defined by a variety scale of thirteen items related to a wide range of adolescent deviance ($\alpha$=.78). Each item was coded such that an individual scored 1 if a specific delinquent act was reported one or more times and 0 otherwise (scale range: 0-13). Hindelang et al. (1981) have noted the general merits of this type of scale, not only with regard to skew and other diagnostics, but also in terms of theoretical validity (also see Caspi et al. 1994). The spectrum of behaviors examined in this measure is in the tradition of many delinquency studies that use self-reported items:

1. Hit or seriously threatened to hit someone
2. Taken something from a store without paying
3. Gotten into a physical fight at school or work
4. Other than from a store, taken something not belonging to you worth less than than $50
5. Purposely destroyed or damaged property

6. Sold marijuana or hashish
7. Attacked someone with the idea of seriously hurting or killing them
8. Taken a vehicle for a ride without the owner's permission
9. Broken into a building or vehicle to steal something or to just look around
10. Other than from a store, taken something not belonging to you worth $50 or more
11. Used strong-arm methods to get money or things
12. Sold hard drugs such as heroine, cocaine, or LSD
13. Knowingly sold or held stolen goods for money

(All items refer to behavior in the past year).

Because labeling and cumulative disadvantage theorists emphasize the importance of official reactions to adolescent deviance, a separate set of analyses included measures of misconduct drawing official response from the criminal justice system or resulting in disciplinary action from the school. Specifically, these measures are the number of times an individual has been arrested or officially charged with criminal activity other than a minor traffic offense and the number of times an individual has been suspended from school (coded 0 for never, 1 for once, 2 for twice, 3 for three times, and 4 for more than three times).

While self-reported data on delinquent activity has been criticized on the basis that juveniles might be unwilling to accurately report their behavior, the overwhelming majority of delinquency studies use self-reported information in their analyses (Jackson 1990). Moreover, the administrators of the NLSY were aware of this potential problem and made special efforts to ensure confidentiality for the delinquency and drug use section of the survey (The Center for Human Resources Research 1994).

Socioeconomic disadvantage was operationalized using a dummy variable indicating whether a respondent's family income in 1978 was above or below the federal poverty line, taking into account variation in family size[3]. While most previous studies use measures of social

class derived from data on parents' (usually father's) occupational prestige, measures of occupational status appear to be better suited for explaining variation among individuals in the higher classes (Farnworth et al. 1994; Jarjoura 1996). Since the present study is focused on discerning differences between the lower class and the rest of society, an indicator of poverty status seemed most appropriate.

Two measures of educational attainment were examined in the analyses: the raw number of years of school completed and a dummy variable for high school dropout status in 1990. Nineteen-ninety was selected as the time-2 period because this year allows for the creation of measures that are congruent with the U.S. Census Bureau and Department of Education's operationaliztion of educational attainment (U.S. Bureau of the Census 2001, Kaufman et al. 2001) while minimizing the potential impact of sample attrition. Respondents were classified as high school dropouts if by May of 1990, when the respondents were between the ages of 25 and 28, they did not complete high school or earn a GED. Since all respondents were in school in 1979, the analyses are structured such that youth have 11 years to complete high school or obtain a GED in order to avoid classification as a dropout. Logistic regression was used to analyze the dropout status dependent variable. Ordinary least squares regression (OLS) was used to examine variation in the number of years of school completed.

In a footnote, Tanner, Davies and O'Grady (1999, p. 261) report testing for an interaction between socioeconomic status (SES) and delinquency on educational attainment. They found little evidence of an interaction but call for alternate tests and further attention to this issue. One possibility for their failure to find a conditioning effect may be their use of a continuous SES measure. The true difference in effect may be linked to a poor/non-poor distinction rather than the full range of variation in social and economic capital. If the SES/delinquency interaction is

nonlinear, as predicted by both the cumulative disadvantage and the disadvantage saturation perspectives, a test using a continuous measure of SES would be biased toward finding no significant interaction (Aiken and West 1991).

The theoretical predictions of both the cumulative disadvantage and disadvantage saturation perspectives suggest a conditioning effect (or interaction effect) of poverty status on the relationship between delinquency and educational attainment. Both perspectives argue that attainment processes work differently in the lower class than in all other social classes. Therefore, the equations were estimated separately for those in poverty and those not in poverty to compare the strength of the effects of delinquency on educational attainment for both groups. In order to determine whether or not differences in coefficients were statistically significant, a Z-statistic was calculated using the following formula:

$$Z = \frac{b_1 - b_2}{\sqrt{SEb_1^2 + SEb_2^2}}$$

Thus for the present analyses, $b_1$ is the delinquency coefficient for the non-poverty sample, $b_2$ is the delinquency coefficient for the poverty sample, $SEb_1$ is the standard error for the delinquency coefficient in the non-poverty sample, and $SEb_2$ is the standard error for the delinquency coefficient in the poverty sample. While researchers often employ a less conservative test for significant differences between coefficients, the Z-test is the most statistically sound (Paternoster et al. 1998).

All models included the standard demographic controls for family structure (a dummy variable for both father and mother present at age 14), number of siblings, sex (a dummy variable for female), age, and ethnicity and race (dummy variables for Hispanic and African American). In addition, statistical controls were added for two frequently used powerful predictors of

educational attainment: educational aspirations and academic ability (Tanner, Davies and O'Grady 1999; Villemez and Beggs 1994). Educational aspirations in 1979 were measured by asking respondents about the highest level of education desired (in years). Academic aptitude was operationalized using respondents' percentile score on the Armed Forces Qualifying Test (AFQT) which was administered to 94% of the NLSY respondents in 1981 (The Center for Human Resources 1994). AFQT percentile scores were derived from the sum of several instruments designed to test knowledge in the areas of paragraph comprehension, word knowledge, arithmetic reasoning and numerical operations.

Means and standard deviations for all the variables used in the analyses for both the poverty and non-poverty samples are provided in Table 1. As expected, the poverty sample had noticeably higher average levels of dropping out, lower educational aspirations, lower scores on the academic aptitude test, fewer two-parent families, a larger average family size, and a greater proportion of African-American and Hispanic youth. Interestingly, particularly in the context of labeling theory and the constructionist view of deviant behavior, average rates of suspension and charge/arrest history were higher in the poverty sample while the mean level of adolescent misbehavior according to the global delinquency scale was roughly equal for the two groups.

(INSERT TABLE 1 ABOUT HERE)

## RESULTS

Results of the multivariate analyses of dropout status and years of school completed are summarized in Tables 2 and 3. Table 2 illustrates the effects of the delinquency measures on high school dropout status separately for youth from poverty backgrounds and youth not from

poverty backgrounds. Logistic regression analyses revealed that the effect of the delinquency scale on the log odds of dropping out was statistically significant and positive in the non-poverty sample (0.118, $p<.05$) and practically zero for the poverty group. Likewise, the effect of the number of times charged/arrested on dropout status was positive and significant for the non-poor group (0.533, $p<.05$) but statistically unrelated for the poverty sample. The effect of the number of times suspended from school was positive and significant for both groups, but was much more pronounced in the non-poverty sample (.505, $p<.05$) than in poverty sample (.198, $p<.05$). A Z-test for equality of regression coefficients showed that the apparent social class differences in the effects of the number of times suspended and number of times charged/arrested are statistically significant ($p<.05$). In other words, the differences between the suspension and charge/arrest coefficients for the poverty and non-poverty groups are, in all likelihood, more than just a product of random variation. While the effect of the delinquency scale on dropout for the non-poverty group appeared greater than that of the poverty group, the Z-test suggested that the apparent difference in the effect of the delinquency scale could simply be due to chance.

(INSERT TABLE 2 ABOUT HERE)

Table 3 displays the results of OLS regression analyses of variation in the number of years of school completed. Similar to the logistic regression coefficients for the dropout status dependent variable, the parameter estimates for the delinquency scale, the number of times suspended, and the number of times charged/arrested appeared to be larger in the non-poverty sample. However, again the test for equality of regression coefficients suggested that while the social class differences in the effect of suspension and arrest/charge history on years of schooling

were significant (-0.281 and -0.286 for the non-poverty group vs. -0.132 and -0.106 for the poverty group, $p<.05$ for difference), the apparent gap between the two groups in the effect of the delinquency scale could simply be statistical noise (-0.075 for the non-poverty sample vs. –0.072 for the poverty sample).

(INSERT TABLE 3 ABOUT HERE)

Overall, the results offer moderate support for the disadvantage saturation thesis and are inconsistent with the cumulative disadvantage perspective. Getting in trouble at school for misconduct or getting in trouble with the law for criminal behavior have stronger detrimental effects on the educational attainment of middle and upper class youth than they do for adolescents from poverty backgrounds. It appears that poverty and its multitude of associated setbacks makes school infractions and problems with the law less important for determining educational attainment. Put another way, the structural condition of poverty seems to make behavioral conformity (the opposite of delinquency) matter less for educational attainment.

In an alternate set of analyses, product terms were used to discern class differences in the effect of the various measures of adolescent problem behavior on educational attainment. Using the total sample (both poor and non-poor), the delinquency, suspension, and charge/arrest measures were multiplied by a dummy variable for poverty status and the resulting variable was entered into the equations along with its components. While the interpretation of the coefficients is not as straightforward as with the split-sample method, this type of analysis has the advantage of utilizing information from all cases in determining effects for subgroups. The results from the product term analyses were nearly identical to those from the split sample method. In particular,

the number of times suspended and number of times charged/arrested had significantly greater effects on both the probability of dropping out of high school and the total years of school completed for non-poor youth.

In other alternative analyses, I examined the robustness of the findings for different operationalizations of dropping out of high school. First, I performed the analyses with GED recipients entirely excluded from the sample[4]. The key findings regarding the differential effects of delinquency, suspension, and charge/arrest on dropout by poverty status were replicated with this sampling strategy (compared to the results for the full sample, class differences were slightly more pronounced). Second, I performed the analyses with GED recipients lumped in with dropouts rather than high school graduates. Again, the central findings were fundamentally unaffected by this new operationalization. Utilizing the product term method of illustrating the interactions, I report the results of this supplemental analysis in the Appendix.

Because the labeling component of the cumulative disadvantage perspective emphasizes the importance of formal punishment for determining a class-specific negative impact of adolescent misbehavior on educational attainment, the effects of frequency of suspension and arrest or criminal charges were examined with the global delinquency scale included in the equations. These equations can be interpreted as estimations of the class-specific effects of getting in trouble, regardless of general levels of misbehavior (whether or not one is caught or punished). The results for the poverty/suspension and poverty/charged interactions were very similar to those found without the control for the general measure of delinquency. Thus, consistent with expectations from labeling theory, formal punishment appears to have a stigmatizing effect that varies by class, but contrary to the expectations of labeling theory this effect is most damaging to the educational attainment of middle and upper class youth.

Alternate analyses were also performed to discern the impact of the control variables on the class-specific effects of the delinquency variables on educational attainment. Not surprisingly, for both the poverty and non-poverty samples, educational aspirations and academic aptitude had the strongest relationships with the likelihood of dropping out and the total number of years of school completed. Both educational aspirations and academic ability are central variables in Duncan et al.'s (1972) classic model of educational and occupational attainment and both of these variables have been shown to be powerful predictors of educational success in the stratification literature (Villemez and Beggs 1994). Given the strength of the effects of educational aspirations and academic ability, it was important to see if the interactions noted in the current analyses were dependent on the inclusion of these control variables in the equations[5]. Sensitivity analyses revealed that the social class differences reported here were only slightly more pronounced when educational aspirations and academic aptitude were removed from the models. In fact, none of the demographic control variables seemed to substantially influence the strength of the poverty/misbehavior interactions.

## DISCUSSION AND CONCLUSION

The present study tested two competing hypotheses regarding how economic disadvantage conditions the relationship between delinquency and educational attainment. Proponents of the cumulative disadvantage perspective argue that disadvantaged youth can experience a spiral of decline where certain hindrances and setbacks amplify the magnitude of other problems. Moreover, cumulative disadvantage theorists suggest that lower class youth have less social capital with which to bargain their way out of stigmatization and delinquent tracking. Thus the cumulative disadvantage perspective hypothesizes that the deleterious effect

of deviant behavior on educational attainment is strongest among the lower class.

In contrast, the disadvantage saturation thesis hypothesizes that the harmful effects of adolescent misbehavior on educational attainment are most salient for middle and upper class youth since, realistically, their fate is more likely to be determined by what they choose to do, not structural circumstances. Disadvantaged youth may have few opportunities for social advancement regardless of their delinquent/non-delinquent status. Thus, lower class youth may have less to gain from playing by the rules because there are so many distinct forces (besides delinquency) acting to suppress their educational attainment.

Overall, the results of the present analyses are supportive of the disadvantage saturation thesis and are inconsistent with the cumulative disadvantage viewpoint. Delinquency, when defined as getting in trouble at school, had a stronger detrimental effect on the educational attainment of middle and upper class youth than it did for adolescents from poverty backgrounds. These results underscore the importance of social context for moderating the effect of adolescent misbehavior on educational attainment.

Consistent with the expectations of labeling theory, the results suggest that formal punishment has a stigmatizing effect that varies by class position, but contrary to the expectations of labeling theory this effect is most damaging to the educational attainment of middle and upper class youth. Still, the findings are not fully in opposition to the claim made by labeling theorists that the less powerful experience greater social retribution for their deviance. Lower class youth may experience greater punishment and stigmatization than middle class youth in certain school and community contexts. Moreover, the effect of misbehavior on educational outcomes might be less for disadvantaged youth despite a greater probability of receiving and internalizing a negative label. A deviant label may be of little practical consequence if achievement and

attainment levels are largely predetermined by structural constraints. Labeling theorists concerned with educational outcomes (a staple of the labeling perspective) need to not only ask, "Are disadvantaged youth more likely to be labeled?" but also "In what socioeconomic context does a negative label produce the most negative consequences?" Both questions deserve further empirical examination.

From a policy perspective, the results are pertinent for programs that target "at risk" juveniles in order to prevent high school dropout. For middle class juveniles, relevant school-based policies should emphasize preventing adolescent delinquency and experiment with different ways of formally reacting to deviant behavior in order to reduce dropout. Policy initiatives aimed at helping economically disadvantaged youth succeed in school, however, should target a multitude of risk factors other than delinquency. Minimally, the determination of success or failure of policies designed to increase educational attainment by reducing juvenile delinquency should be judged from different benchmarks based on the socioeconomic characteristics of the population served. In light of the popular conceit of an American meritocracy, it may simply be more palatable for people to believe that all dropouts failed to abide by the rules in school. However, the findings presented here suggest that the structural constraints of poverty can render general conformist behavior practically meaningless for important life outcomes like educational attainment.

## ENDNOTES

1. Ninety percent of the original group completed the questionnaire in 1990, a very strong retention rate for this type of comprehensive survey. The NLSY is well suited for the current analysis because: (1) the survey contains a broad range of delinquency questions (particularly in 1980); (2) family poverty status is determined for the vast majority of respondents; (3) the survey provides a rich set of variables related to educational attainment for all years; and (4) previous research on delinquency and attainment has utilized this data, thus facilitating comparison (Bushway 1998; Jarjoura 1996; Monk-Turner 1989; Tanner, Davies, and O'Grady 1999).

2. I use the over-sample of disadvantaged youth to help ensure a reliable statistical comparison with middle and upper class youth. However, the central findings of this study were also replicated with just the national probability sample.

3. Official definitions of poverty have been criticized for both over-representing and under-representing the extent of economic hardship in the U.S. However, lacking a consensus alternative, official definitions of poverty continue to be the most widely used indicators of economic deprivation in social science research.

4. A number of studies have noted that GED recipients do not fare as well as high school graduates on the job market and thus it may be inappropriate to lump the two together (Ensminger et al. 1996).

5. This is important because despite the analytic usefulness of multiple regression analyses, in the real world social phenomenon do not exist 'net of other factors.'

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Table 1. Means and Standard Deviations for Samples

| *Variables* | Non-Poverty (N=1,897) | | Poverty (N=1,163) | | Probability for T-test |
|---|---|---|---|---|---|
| | Mean | SD | Mean | SD | |
| Dropout Status | 0.08 | 0.27 | 0.24 | 0.43 | .001 |
| Educational Attainment | 13.42 | 2.24 | 12.08 | 1.92 | .001 |
| Delinquency Scale | 2.16 | 2.40 | 2.09 | 2.34 | .411 |
| # of Times Suspended | 0.33 | 0.88 | 0.68 | 1.20 | .001 |
| # of Times Charged/Arrested | 0.10 | 0.49 | 0.19 | 0.91 | .001 |
| Educational Aspirations | 14.67 | 2.11 | 13.75 | 2.13 | .001 |
| Academic Aptitude | 49.66 | 27.12 | 23.67 | 21.76 | .001 |
| Female | 0.50 | 0.50 | 0.50 | 0.50 | .789 |
| Age | 15.59 | 1.06 | 15.51 | 1.03 | .035 |
| African American | 0.08 | 0.27 | 0.42 | 0.49 | .001 |
| Hispanic | 0.05 | 0.22 | 0.22 | 0.42 | .001 |
| Two-parent Family | 0.79 | 0.40 | 0.45 | 0.50 | .001 |
| # of Siblings | 2.91 | 1.91 | 4.90 | 2.94 | .001 |

Table 2. Logistic Regression Estimates for Dropout Status by Poverty Background

| *Independent Variables* | Non-Poor | Poor | Z | Non-Poor | Poor | Z | Non-Poor | Poor | Z |
|---|---|---|---|---|---|---|---|---|---|
| # of Times Suspended | .505 * (.075) | .198 * (.060) | 3.20 * | ------ | ------ | | ------ | ------ | |
| Delinquency Scale | ------ | ------ | | .118 * (.038) | .046 (.033) | 1.44 | ------ | ------ | |
| # of Times Charged/Arrested | ------ | ------ | | ------ | ------ | | .533 * (.147) | .110 (.080) | 2.53 * |
| Educational Aspirations | -.224 * (.057) | -.193 * (.044) | | -.250 * (.058) | -.211 * (.046) | | -.246 * (.056) | -.203 * (.044) | |
| Academic Aptitude | -.063 * (.007) | -.079 * (.008) | | -.068 * (.007) | -.085 * (.008) | | -.064 * (.007) | -.080 * (.008) | |
| Female | -.176 (.204) | -.151 (.158) | | -.176 (.210) | -.169 (.166) | | -.332 (.199) | -.201 (.157) | |
| Age | -.185 (.096) | -.217 * (.076) | | -.147 (.096) | -.189 * (.078) | | -.147 (.094) | -.202 * (.076) | |
| African American | -1.03 * (.327) | -1.34 * (.202) | | -.731 * (.327) | -1.23 * (.207) | | -.803 * (.317) | -1.27 * (.203) | |
| Hispanic | -.172 (.380) | -.167 (.208) | | -.105 (.376) | -.174 (.214) | | -.154 (.376) | -.181 (.208) | |
| Two-parent Family | -.590 * (.209) | -.324 (.163) | | -.489 * (.213) | -.331 (.167) | | -.518 * (.208) | -.345 * (.163) | |
| # of Siblings | .070 (.044) | .046 (.027) | | .059 (.045) | .041 (.027) | | .067 (.044) | .046 (.027) | |
| Intercept | 5.53 | 6.41 | | 5.38 | 6.40 | | 5.51 | 6.50 | |
| Model $\chi^2$ | 354 | 236 | | 275 | 220 | | 300 | 228 | |
| Sample Size | 1965 | 1228 | | 1898 | 1163 | | 1964 | 1230 | |

(Standard Errors in Parentheses) *P< .05, DF=9

Table 3. OLS Regression Estimates for Years of School Completed by Poverty Background

| *Independent Variables* | Non-Poor | Poor | Z | Non-Poor | Poor | Z | Non-Poor | Poor | Z |
|---|---|---|---|---|---|---|---|---|---|
| # of Times Suspended | -.281 * | -.132 * | 2.61 * | ------ | ------ | | ------ | ------ | |
| | (.043) | (.038) | | | | | | | |
| Delinquency Scale | ------ | ------ | | -.075 * | -.072 * | 0.11 | ------ | ------ | |
| | | | | (.017) | (.020) | | | | |
| # of Times Charged/Arrested | ------ | ------ | | ------ | ------ | | -.286 * | -.106 * | 1.86 * |
| | | | | | | | (.083) | (.050) | |
| Educational Aspirations | .292 * | .202 * | | .302 * | .207 * | | .301 * | .208 * | |
| | (.020) | (.023) | | (.021) | (.024) | | (.020) | (.023) | |
| Academic Aptitude | .038 * | .037 * | | .039 * | .039 * | | .039 * | .038 * | |
| | (.002) | (.002) | | (.002) | (.002) | | (.002) | (.002) | |
| Female | .066 | .077 | | .027 | .021 | | .112 | .098 | |
| | (.074) | (.090) | | (.079) | (.095) | | (.074) | (.090) | |
| Age | -.008 | .119 * | | -.022 | .104 * | | -.018 | .110 * | |
| | (.035) | (.043) | | (.036) | (.045) | | (.035) | (.043) | |
| African American | .640 * | .837 * | | .516 * | .785 * | | .572 * | .800 * | |
| | (.143) | (.114) | | (.149) | (.118) | | (.144) | (.115) | |
| Hispanic | .051 | .176 | | .004 | .156 | | .049 | .177 | |
| | (.174) | (.126) | | (.177) | (.129) | | (.175) | (.126) | |
| Two-parent Family | .317 * | .049 | | .310 * | .045 | | .301 * | .053 | |
| | (.091) | (.092) | | (.094) | (.094) | | (.092) | (.092) | |
| # of Siblings | -.081 * | -.025 | | -.082 * | -.028 | | -.081 * | -.027 | |
| | (.020) | (.016) | | (.020) | (.016) | | (.020) | (.016) | |
| Intercept | 7.38 | 6.32 | | 7.50 | 6.60 | | 7.25 | 6.30 | |
| Model $R^2$ | 0.47 | 0.34 | | 0.47 | 0.35 | | 0.47 | 0.34 | |
| Sample Size | 1965 | 1228 | | 1898 | 1163 | | 1964 | 1230 | |

(Standard Errors in Parentheses) *P< .05

Appendix: Logistic Regression Estimates for Modified Dropout Status[1] with Product Terms[2]

| *Independent Variables* | Model 1 | Model 2 | Model 3 |
|---|---|---|---|
| # of Times Suspended | .600 (.066) * | ------ | ------ |
| Poverty X Suspended | -.234 (.086) * | ------ | ------ |
| Delinquency Scale | ------ | .155 (.030) * | ------ |
| Poverty X Delinquency | ------ | -.047 (.042) | ------ |
| # of Times Charged/Arrested | ------ | ------ | .702 (.135) * |
| Poverty X Charged/Arrested | ------ | ------ | -.462 (.165) * |
| Poverty Status | .583 (.142) * | .586 (.168) * | .491 (.129) * |
| Educational Aspirations | -.187 (.028) * | -.210 (.029) * | -.203 (.028) * |
| Academic Aptitude | -.042 (.003) * | -.047 (.003) * | -.044 (.003) * |
| Female | -.173 (.106) | -.121 (.110) | -.277 (.103) * |
| Age | -.277 (.051) * | -.237 (.052) * | -.231 (.050) * |
| African American | -1.09 (.149) * | -.897 (.150) * | -.923 (.146) * |
| Hispanic | -.015 (.161) | .059 (.162) | .013 (.159) |
| Two-parent Family | -.614 (.111) * | -.572 (.113) * | -.573 (.109) * |
| # of Siblings | .076 (.020) * | .070 (.021) * | .073 (.020) * |
| Intercept | 6.58 | 6.28 | 6.42 |
| Model $\chi^2$ | 851 | 729 | 753 |
| Sample Size | 3193 | 3061 | 3194 |

(Standard Errors in Parentheses) *P< .05, DF=11

[1] Dropout is defined here as not completing high school or only completing a GED.

[2] The product term (e.g. Poverty X Suspended) tests whether the effect of suspension/delinquency/arrest varies significantly by poverty status. The equation is structured such that a significant negative product term means that the effect of suspension/delinquency/arrest is substantially less for those below the poverty line.