



**COLLEGE OF CRIMINOLOGY  
AND CRIMINAL JUSTICE**

*Research Brought to Life.*

# **Educational Achievement, School Attendance, and Rearrest Among Incarcerated Youth**

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# Introduction

## Life Course Theory

- Prior studies have focused upon persistence and desistence in the criminal life course
- Studies of desistence have focused largely upon transition from criminal behavior during young adulthood such as:
  - Marriage and its associated experiences (Laub, Nagin and Sampson, 1998; Sampson and Laub, 1993; Laub and Sampson 2003; Warr, 1998)
  - Employment (Sampson and Laub, 1993; Farrington and West, 1995; Laub et al., 1998; Uggen, 2000)
- Future life course research should study potential life events and experiences occurring during adolescence that may lead to transition from delinquency (Sampson and Laub, 1993; Farrington, 2003)



# Prior Literature

## Educational Achievement and Delinquency

- **Despite delinquent youths' disproportionate educational deficiencies and histories of poor school achievement, school is potentially one of the more positive and influential institutions for adolescents (Clausen, 1986)**
- **Generally, educational success can lead to a decreased likelihood of delinquency (Arum and Beattie, 1999; Foley, 2001)**



- **More specifically, regarding the role of educational achievement on subsequent delinquent behavior, only a few narrowly conceived studies have been conducted**
  - **Most use small sample sizes from only a few institutions**
  - **Academic achievement is often measured by youth who earn a GED or high school diploma while incarcerated (Ambrose and Lester 1998; Brier, 1994)**
- **However, only 7% of youth graduate or earn a GED while incarcerated (JJEEP, 2005)**
- **As a result, studies that provide other measures of academic achievement during incarceration and that account for youth returning to school upon release are needed**



# Research Questions

- This study assesses the potential link between educational achievement while incarcerated, post-release school attendance, and rearrest
  1. Does above average educational achievement, as measured by the number and proportion of academic credits earned, increase the likelihood among incarcerated youth of returning to school following release?
  2. Are youths who attend school regularly following release less likely to be rearrested as compared to those youths who do not return to school or who return to school but attend school less regularly?
  3. Among those youths who are rearrested following release, do those who attend school regularly commit less serious offenses as compared to those who do not return to school or attend school less regularly?



# Methods

- **Cohort of 4,147 youths released from 115 juvenile institutions throughout Florida during FY 2000-2001**
- **Cohort data was gathered from the Florida Departments of Education and Law Enforcement**
- **Three years of data were used including the youths' year of release (2000-2001) and two follow-up years (2001-2002 & 2002-2003)**
- **Outcomes include return to school following release and rearrest within 12 and 24 months, and severity of first arrest within 12 and 24 months**
- **Interventions include academic achievement while incarcerated, attendance in school within 12 and 24 months following release**
- **Returning to school after release is considered not only a response to academic achievement while incarcerated, but an intervention for subsequent behavior**



- **Statistical procedures include**
  - **One-to-one nearest neighbor matching**
  - **Caliper matching**
  - **Propensity score matching**
  - **Logistic regression**
  - **Linear regression**
- **Matching procedures help frame the analysis as an evaluation of an intervention**
- **Results can be more robust than generalized linear modeling**
- **Do not depend on assumed functional forms linking the covariates to the response**



# Descriptive Findings

|  |                |
|--|----------------|
| Age at release   | 16.8           |
| Race (minority)  | 57%            |
| Female   | 14%            |
| Low socioeconomic status                               | 39%            |
| Length of incarceration                                | 8 months       |
| Number of prior arrests                                | 3.2            |
| Age at first arrest                                    | 14.1           |
| Learning, behavioral and cognitive disabilities        | 38%            |
| Below appropriate age/grade level                      | 84.6% / 2 yrs. |
| Return to school within one semester following release | 36%            |
| Number of school days in attendance following release  | 86             |
| Rearrest within 12 months following release            | 48%            |
| Rearrest within 24 months following release            | 64%            |





# Findings

## Research Question One

- **Strong balance was achieved on each of the matching methods, meaning that the control and experimental groups had about an equal distribution on all of the covariates**

### Academic Achievement While Incarcerated and Return to School

- **Matching results show that about 7% more of the youths with above average academic achievement returned to school within one semester following release when compared to youth with below average academic achievement**
- **Logistic regression results were also statistically significant**



# Findings

## Research Question Two

### Attendance in School and Rearrest Within 12 and 24 Months

- **Dividing at the mean of time in school following release produced mixed results across the three matching techniques, however, the distribution of time in school is highly skewed**
- **When dividing the groups at the upper quartile, all of the matching techniques and the logit results are significant and show substantial reductions in the proportion of rearrests for youth who returned to and attended school following their release (10% reduction at 12 months and 7% reduction at 24 months)**



# Findings

## Research Question Three

### School Attendance and Severity of Arrest within 12 and 24 Months

- **Because the crime severity scale was highly skewed, we did not subject it to the same methods applied to the other outcomes. However, because throughout this study matching and logistic regression gave about the same results, there is evidence that matching and covariance adjustments would give about the same results in this instance**
- **Regardless of a youth's propensity to re-offend, regular attendance in school following release significantly reduced the severity of the youths' first re-offense within both 12 and 24 months ( $B = -.021, p < .001$ , and  $B = -.006, p = .003$ )**



# Discussion of Theoretical Implications

- **While rearrest is not an uncommon occurrence for youths released from incarceration, the findings indicate that youths with high academic achievement while incarcerated disproportionately respond by returning to school following release, and regular attendance in school reduces both rearrest and the severity of the offenses**
- **These findings illustrate a potential developmental pathway and trajectory from delinquency involving academic achievement, school attendance following release, and transition from delinquency**
- **We are continuing to track this cohort including measures of post-release employment to determine if youths experience a “turning point” from delinquent behavior**
- **In summary, transition from criminal activity may occur not only for young adults, but for adolescents as well.**



# Discussion of Policy Implications

- **These findings provide a strong evaluation of the current and strongly debated 2002 No Child Left Behind (NCLB) federal education reform act**
- **NCLB requires that incarcerated youths receive the same high quality and accountable core academic educational services as those received by students in public schools**
- **Specifically, the act requires strong academic programming for incarcerated youth and transition services that assist youth in returning to school following release**
- **OJJDP census data estimates that over 102,000 youth were incarcerated on a particular day in 2002**
- **To the extent that states can successfully implement the requirements of NCLB, opportunities will expand for many delinquent youth to increase their academic achievement**
- **In 2005, we received congressional funding to assist states with the implementation of NCLB in their respective juvenile justice education systems**