

Alterable Predictors of Educational Attainment, Income, and Crime

Suh-Ruu Ou
Joshua Mersky
Erin Cowell
Kristy Kohler
Arthur Reynolds

University of Wisconsin-Madison

Preparation of this paper was supported by the National Institute of Child Health and Human Development (R01HD034294) and the Doris Duke Charitable Foundation (No. 20030035).

Background

- Significance of Young Adulthood
- Successful Adaptation Across Multiple Outcomes
- Antecedents of Functioning

Research Questions

- What are the rates of educational attainment, crime, and income status for the study sample?
- How are they correlated with each other?
- What common explanatory factors are associated with the outcomes?

The Present Study

- Prospective longitudinal data
- Comprehensive predictor framework
- Multiple outcomes across domains

Exploratory Model

- Sociodemographic factors
- Early childhood program participation
- Early adjustment and family functioning
- School commitment factors
- School-based functioning
- High school experiences

Characteristics of the Original and Study Samples in the CLS

Characteristics	Original sample (N= 1,539)	Education/ Income Sample (N =1,389)	Educational Attainment Sample (N =1,368)	Income sample (N = 1,249)	Adult crime sample (N = 1,418)
Percent black	93.0	93.2	93.4	93.0	93.2
Percent female	50.2	50.8	51.0	54.4* (+)	51.0* (+)
Percent eligible for free lunch	83.0	83.0	83.0*	83.0	83.0
Percent mother did not complete HS by child's age 3	54.0	54.0	54.0	54.0	54.0
Percent single parent by child's age 3	76.0	76.0	76.0	75.0	76.0
Percent 4 or more children in household by child's age 3	17.0	18.0	17.0	18.0	18.0
Percent mother was teen (<18) at child's birth	17.0	17.0	17.0	17.0	17.0
Percent mother unemployed by child's age 3	63.0	63.0	64.0* (+)	63.0	63.0
Percent TANF/AFDC participation	62.0	62.0	63.0	61.0* (-)	62.0
Percent any child welfare case histories by child's age 3	4.1	4.0	3.9	4.1	4.1
ITBS word analysis in K ¹	63.75	63.68	63.71	64.1* (+)	63.87

Note. 1. Test statistics are *F* statistics. Others are Pearson chi-square. Significant tests were conducted for each sample and its corresponding attrition sample.

* $p < .05$ (+) indicates mean is higher for sample group (-) indicates mean is lower for sample group

Outcomes

- Educational Attainment by Age 23
 - High school completion
 - Highest grade completed
 - Any college attendance
 - 4-year college attendance
- Employment and Income by Age 24
 - Quarterly income = \$3,000
 - Ever attended college or reported income for at least 4 quarters
- Crime
 - Any incarceration
 - Any arrest conviction

Explanatory Variables

Variables	Measures
Sociodemographic Factors	
Race	1=Black, 0=Others
Sex	1=Female, 0=Male
Eligible for free lunch	1=Yes, 0 =No
Mother not a HS completer	1=Yes, not completed HS
Single parent status	1=Yes, 0 =No
If had more than 4 children	1=Yes, 0 =No
Mother < 18 years at child's birth	1=Yes, 0 =No
Mother unemployment status	1=Yes, 0 =No
TANF/AFDC participation	1=Yes, 0 =No
Any child welfare history by age 4	1=Yes, 0 =No
If missing 5 or more variables	1=Yes, 0 =No
CPC Program Participation	
Preschool participation	1=Yes, 0 =No
Follow-on participation	1=Yes, 0 =No

Explanatory Variables

Early Adjustment and Family Functioning

Word analysis (age 6)	ITBS scores, range: 19-99
Classroom adjustment (ages 7-12)	Score, range: 7-30
Cognitive perceived competence (ages 9-12)	Z score, range: -3.03-1.86
Trouble making behavior (ages 9-12)	Z score, range: -1.73-2.65
Parent involvement (ages 7-12)	Times rating above average, range: 0-6
Any child abuse/neglect (ages 4-17)	1=Yes, 0=No
Peer social skills (ages 12-13)	Score, range: 5-25

School commitment

Parent expectation for child's education	Years of education, range: 10-16
If student expects to go to college	1=Yes, 0=No
Days of absence per year by age 12	Days, range: 2-17

Explanatory Variables

School-Based Factors

Ever retained (ages 7-14)	1=Yes, 0=No
Ever placed in special education (ages 7-14)	1=Yes, 0=No
If moved once (ages 10-14) (1=yes)	1=Yes, 0=No
If moved twice (ages 10-14)	1=Yes, 0=No
If moved three times (ages 10-14)	1=Yes, 0=No
If ever enrolled in magnet schools (ages 10-14)	1=Yes, 0=No
ITBS reading scores (age 14)	ITBS score, range: 77-212

High School Experiences

Attended magnet high school (ages 15-18)	1=Yes, 0=No
Attended private high school (ages 15-18)	1=Yes, 0=No
Attended high school outside of Chicago	1=Yes, 0=No
Any juvenile arrest by age 18	1=Yes, 0=No

Data Analysis

- Linear regression
 - Highest grade completed
- Logistic regression
 - Dichotomous dependent variables

Results

Overall Rates

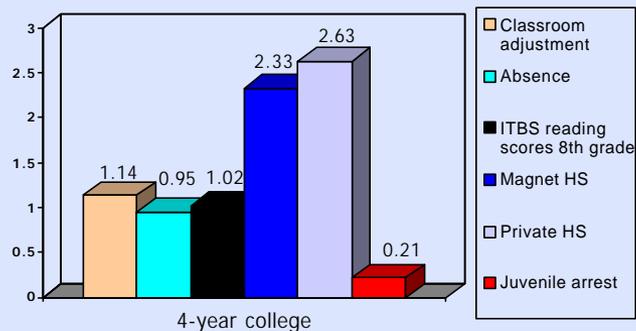
Outcomes	Mean or %
Highest grade completed by age 23	11.63
High school completion by age 23	67.0
Any college attendance by age 23	30.0
4-year college attendance by age 23	13.7
Attended college or employed at least 4 quarters since age 22	51.1
Quarterly income = \$3,000	44.6
Any incarceration by age 24	16.1
Any arrest conviction by age 24	22.6

Correlations

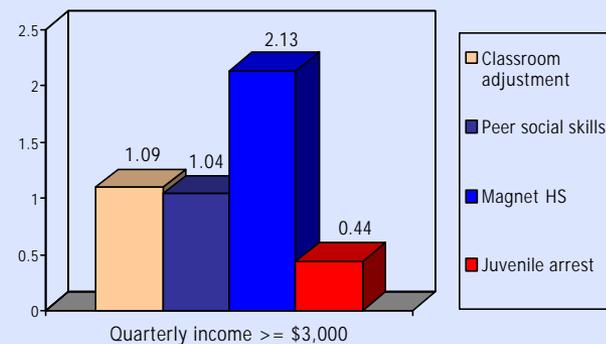
Variable	1	2	3
1. Ever attended 4-year college	--		
2. Highest grade completed	.532*	--	
3. Quarterly income greater/equal to \$3,000	.126*	.241*	--
4. Any incarceration	-.181*	-.363*	-.273*

* p < .001

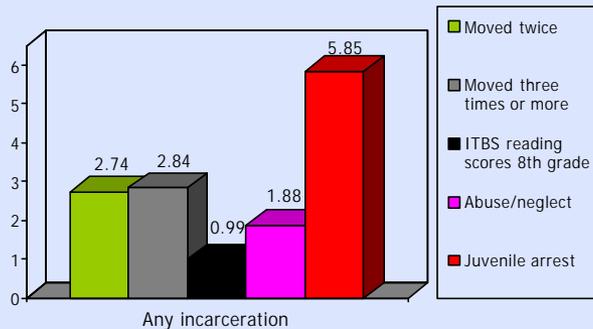
Selected Odds Ratio- Educational Attainment



Selected Odds Ratio-Income



Selected Odds Ratio-Crime



Summary of Findings

- Students' expectation of attending college
- ITBS reading scores at age 14
- Attendance in magnet high school
- Juvenile Arrest

Limitations

- Generalizability
- Variables not included in the model
- Hierarchical regressions

Implications

- Social Policy
 - Identification of factors related to 3 domains
 - Design of effective prevention or intervention program
- Educators and other professionals
 - Effective intervention factors

Acknowledgements

- Preparation of this paper was supported by the National Institute of Child Health and Human Development (R01HD034294) and the Doris Duke Charitable Foundation (No. 20030035).
- Thanks to the Cook County Juvenile Court, the Chapin Hall Center for Children at the University of Chicago, city colleges of Chicago, and Chicago Public Schools for their assistance in data collection.
- For more information about the Chicago Longitudinal Study, visit:
 - <http://www.waisman.wisc.edu/cls/>