

The Influence of Mental Health Disorders on Education and Employment Outcomes For Serious Adolescent Offenders Transitioning to Adulthood

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Acknowledgements

The Learning & Working Center at Transitions RTC is a national effort that aims to improve the supports for youth and young adults, ages 14-30, with serious mental health conditions to successfully complete their schooling and training and move into rewarding work lives. We are located at the University of Massachusetts Medical School, Worcester, MA, Department of Psychiatry, Systems & Psychosocial Advances Research Center.

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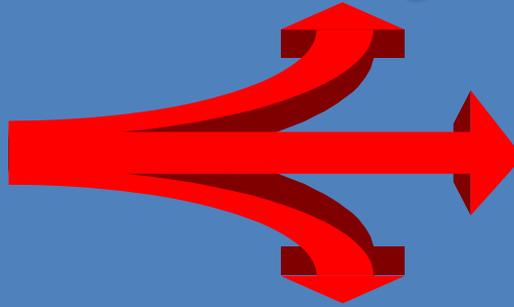
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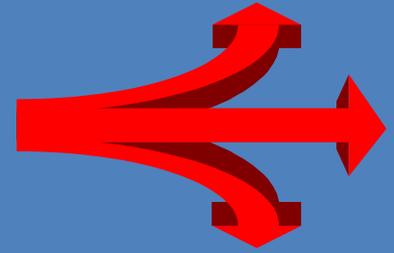
Research Context

- **Justice-involved youth have multiple risk factors for poor education and employment outcomes**
 - **6 times more likely to have learning disability compared to general population** (Sedlak & Bruce, 2010)
 - **50 - 70% of juvenile offenders have a diagnosable psychiatric disorder** (Meservey & Skowyra, 2015), **compared with 9 - 21% in the general adolescent population** (Merikangas et al, 2010)
 - **interruptions and/or deficits in skills or material possessions (human capital) or relationships (social capital) that could lead to later employment opportunities** (Mulvey & Schubert, 2011)
 - **stigma of the arrest leads to reduced employment opportunities** (Pager, 2003) **and the start of a process of cumulative disadvantage** (Sampson & Laub, 1997)
- **Juvenile offenders with mental health disorders may have a particular disadvantage**
- **Few studies have examined workforce participation for justice involved youth with and without mental health disorders**

Pathways to Desistance Study

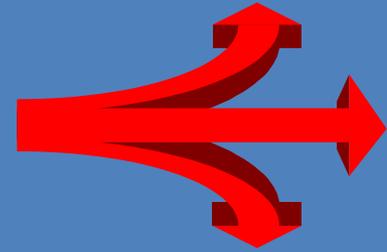


Pathways Study Goals



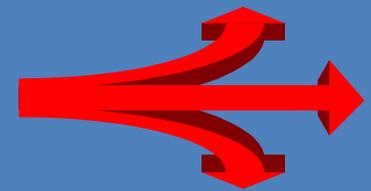
- Richer information about serious adolescent offenders
- Picture of the desistance process
 - Individual maturation
 - Life changes
 - Systems involvement
- Improved practice and policy in juvenile justice
 - Risk assessment
 - Targeted interventions and sanctions

Pathways Study Design



- Two sites: Philadelphia and Phoenix
- Enroll serious adolescent offenders
 - 1,354 felony offenders, aged 14 -18
 - Females and adult transfer cases
- Regular interviews over seven years
 - Initial interviews
 - Time point interviews (background characteristics, psychological mediators, family context, relationships, community context, life changes)
 - Release interviews
- Other sources of information
 - Collateral interviews
 - Official records

Interview Components



Background Characteristics

- Personal characteristics (e.g. family, marital relationships)
- Academic achievement and commitment
- Routine activities
- Offense history
- Alcohol and drug use/abuse
- Exposure to violence
- Psychopathy
- Emotional reactivity
- Acculturation
- Personality

Psychological Mediators

- Psychological development
- Mental health symptoms/threat control
- Head injury
- Use of social services
- Perceptions of opportunity
- Perceptions of procedural justice
- Perceived thrill of doing crime
- Moral disengagement
- Religious orientation
- Costs and rewards of offending

Family Context

- Parental Monitoring
- Parental Relationships
- Parent orientation

Personal Relationships

- Relationships with romantic partner & friends
- Peer delinquency and gang involvement
- Contact with caring adult

Community Context

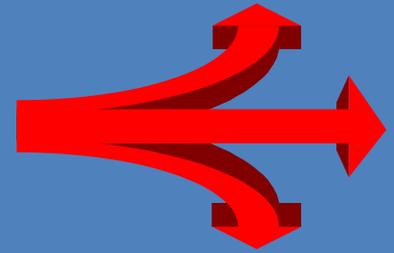
- Neighborhood conditions
- Community involvement
- Personal capital and social ties

Life Changes

Monthly data available regarding:

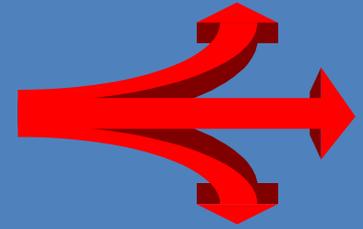
- Living arrangements
- School involvement
- Legal involvement
- Work
- Romantic relationships
- Social service involvement/sanctions

Living situation calendar

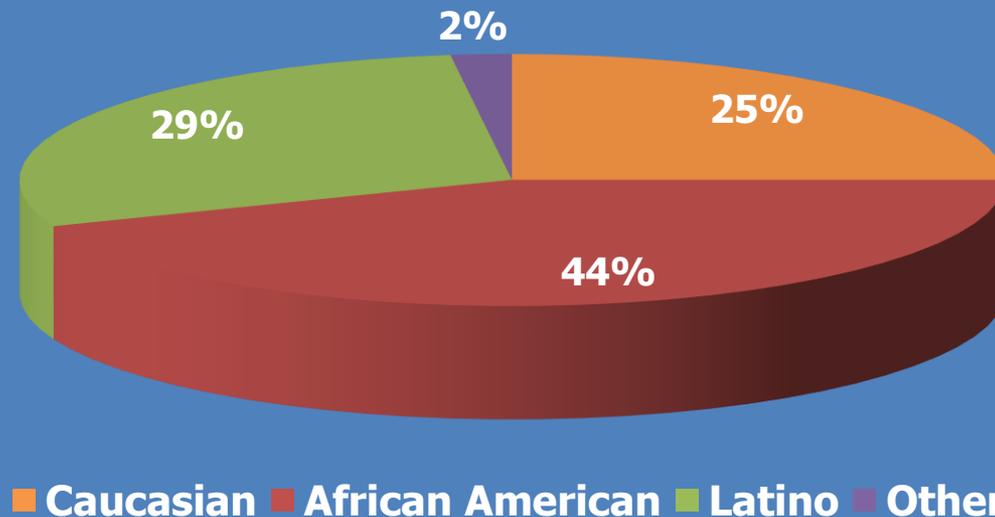


	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6
Subject 1	900 West Huntington	St Gabe's Hall	900 West Huntington	St Gabe's Hall	Vision Quest	Youth Forestry Camp
Subject 2	2429 W. Augusta	Madison Street Jail	1808 S. Wilmot	1808 S. Wilmot	1808 S. Wilmot	Tucson Prison
Subject 3	5050 Master	4th and Norris	4th and Norris	4th and Norris	House of Corrections	House of Corrections

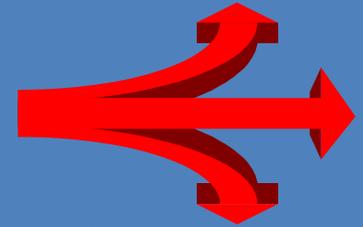
Who are these adolescents?



- At Enrollment
 - 16 years old on average
 - 86% male
 - Average of two prior court appearances
 - ✓ 32% had no prior petitions to court
 - ✓ Most of priors were for a person crime
- Ethnically diverse



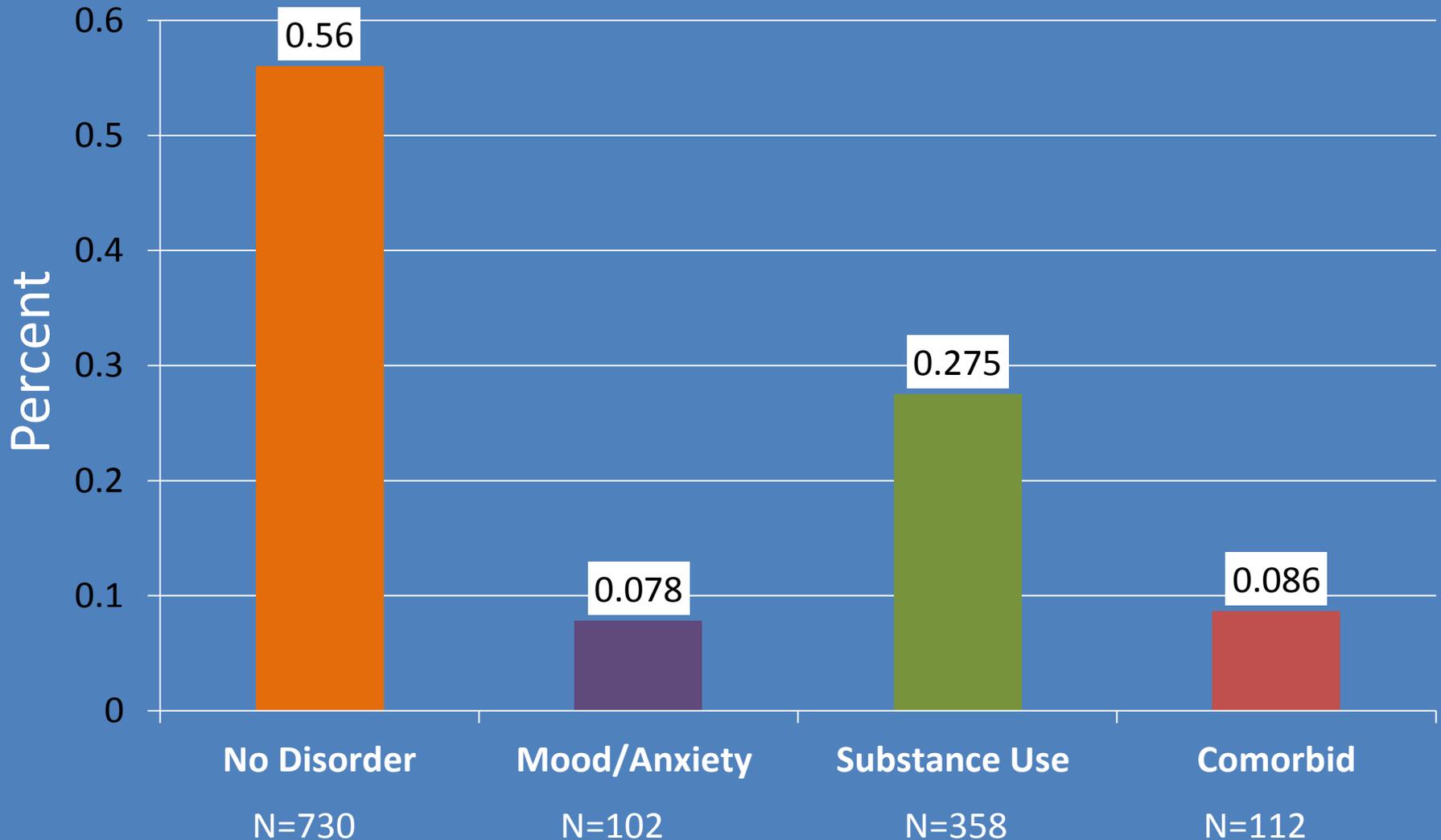
Assessing Mental Health



- Mental Health Disorders were assessed for the year prior to the baseline interview
 - Major Depression
 - Dysthymia
 - Mania
 - PTSD
 - ADHD
 - Alcohol/Drug abuse and dependence
- Assessment methods
 - Composite International Diagnostic Interview (CIDI; 1990)
 - Disruptive Behavior Disorders scale (Pelham, 1992)

Mood/anxiety problems

Prevalence of Disorders



Percent of 1,302 (52 missing dx information)

Characteristics by Disorder

	Any Disorder (n=572)	SU only (n=358)	Mood/ Anxiety only (n=102)	Comorbid (n=112)	No Disorder (n=730)
Age	16.56 (1.08)	16.71 (1.05)	16.03 (1.05)	16.63 (1.05)	16.40 (1.10)
Gender (% male)	83.5	87.2	70.5	88.3	88.3
Ethnicity (% minority)	72.6	77.2	69.5	61.3	83.3
Site (% from AZ)	58.2	59.2	50.5	44.4	44.4

Potential Barriers to Education and Employment

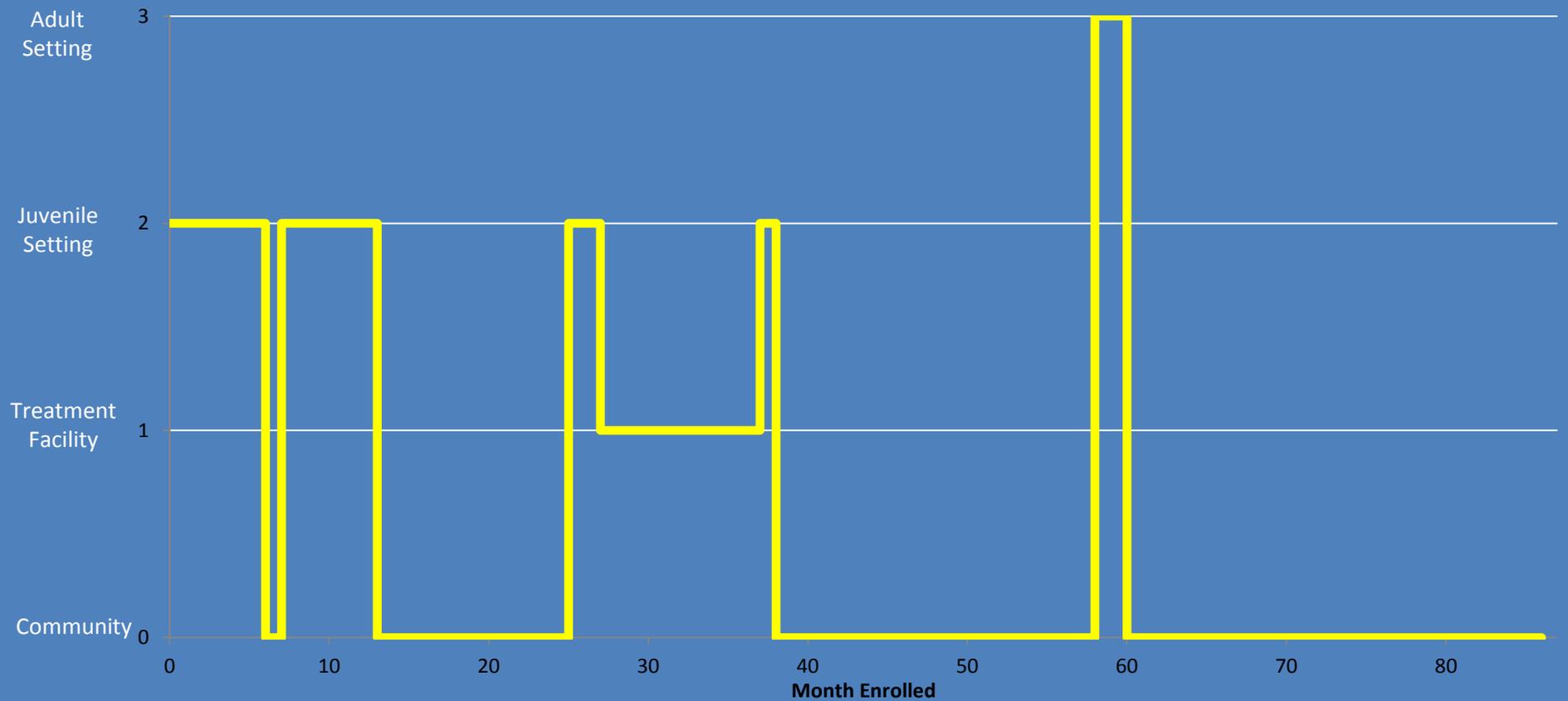
	Any Disorder (n=572)	No Disorder (n=730)
<i>At baseline...</i>		
# Priors Court Petitions	2.22	1.66
Age at First Prior	14.90	14.96
<i>Over 7 years...</i>		
% Rearrested	76.2	72.9
Average # of rearrests	3.58	3.04

Potential Barriers to Education and Employment

	Any Disorder (N=572)	No Disorder (N=730)
<i>At baseline...</i>		
Neighborhood Disadvantage	.55	.70
<i>Over 7 years...</i>		
% Placed	90.7	83.8
Average # of Placements	5.91	4.62
% Homeless at Some Point	24.8	14.7
Average # of Distinct Addresses	14.52 (22.77)	11.77 (27.91)

Institutional placements over 84 months

Subject 691



Age 15

Potential Barriers to Education and Employment

	Any Disorder (N=572)	No Disorder (N=730)
<i>At baseline...</i>		
Ever Suspended	93.7%	89.5%
Ever Expelled	46.0%	33.6%
Average IQ	86.3 (12.91)	83.7 (13.21)
<i>Over 7 years...</i>		
Number of Distinct Schools	5.19 (3.06)	5.43 (3.20)
% Completing HSD or Post Secondary Ed	33.7	42.1

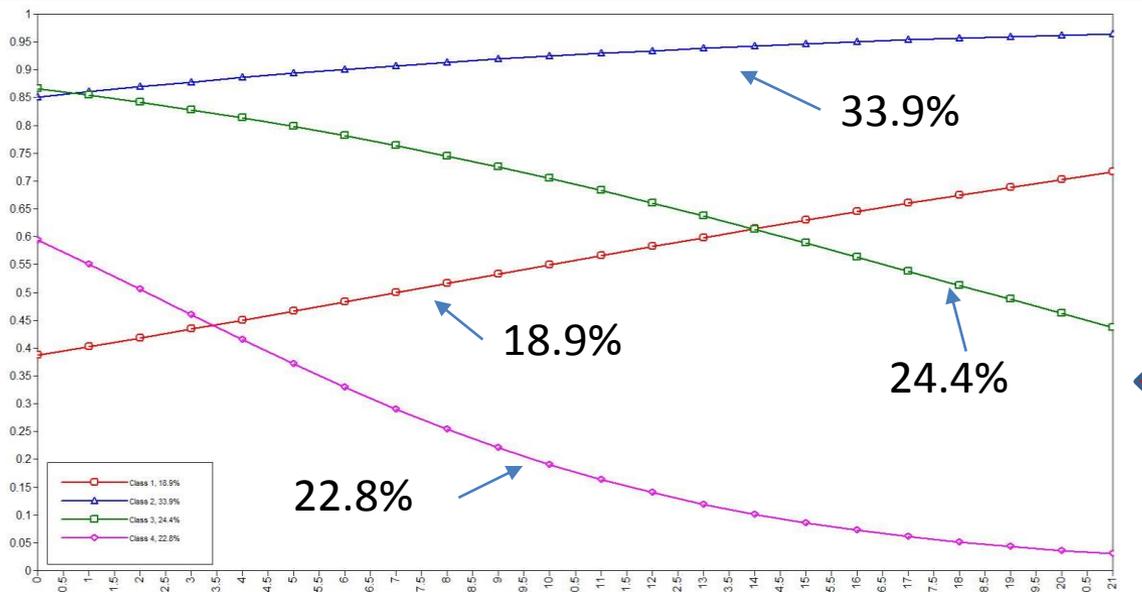
Potential Barriers to Education and Employment

	Any Disorder (N=572)	No Disorder (N=730)
<i>At baseline...</i>		
Ever worked (%)	71.1	62.7
Ever fired (%)	21.5	12.9
<i>Over 7 years...</i>		
# of Distinct Jobs	5.52 (4.16)	5.00 (3.81)

Conclusion #1

Youth involved in the juvenile justice system - with or without MH disorders - have multiple risk factors that are related to education and employment outcomes.

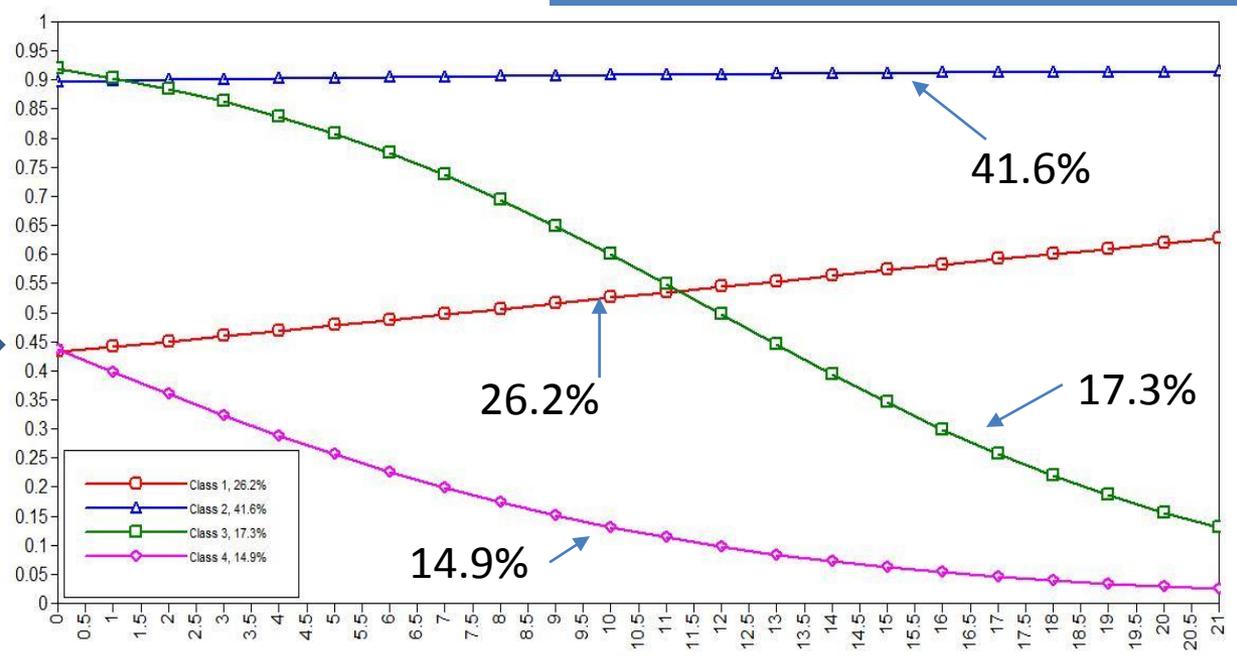
Patterns of Gainful Activity



Gainful activity month:
going to school without
missing more than 5 days
OR working at least part
time

Mental Health Group

No Disorder Group



Conclusion #2

The overall patterns of employment and education appear the same in the adolescent offenders with and without mental health diagnoses.

Group Comparisons of those with and without MH disorders

Employment

- Average hourly wage
- # of weeks kept job
- Overall job satisfaction
- Money made from illegal work
- # of distinct jobs

Education

- Number of months missed 5+ days
- Reason missed school
- Average School bonding
- Average School Attachment
- Age received GED / HSD
- Highest Academic Achievement

Education Achievement and MH Status

Three “levels” of education achievement:

- Advanced degree: HS diploma or some post secondary education
- GED
- Neither

	No Disorder (% of No disorder grp)	Disorder (% of Disorder grp)
Neither GED or “advanced degree”	34.3	35.1
GED	22.9	30.4
Advanced Degree	42.8	34.5

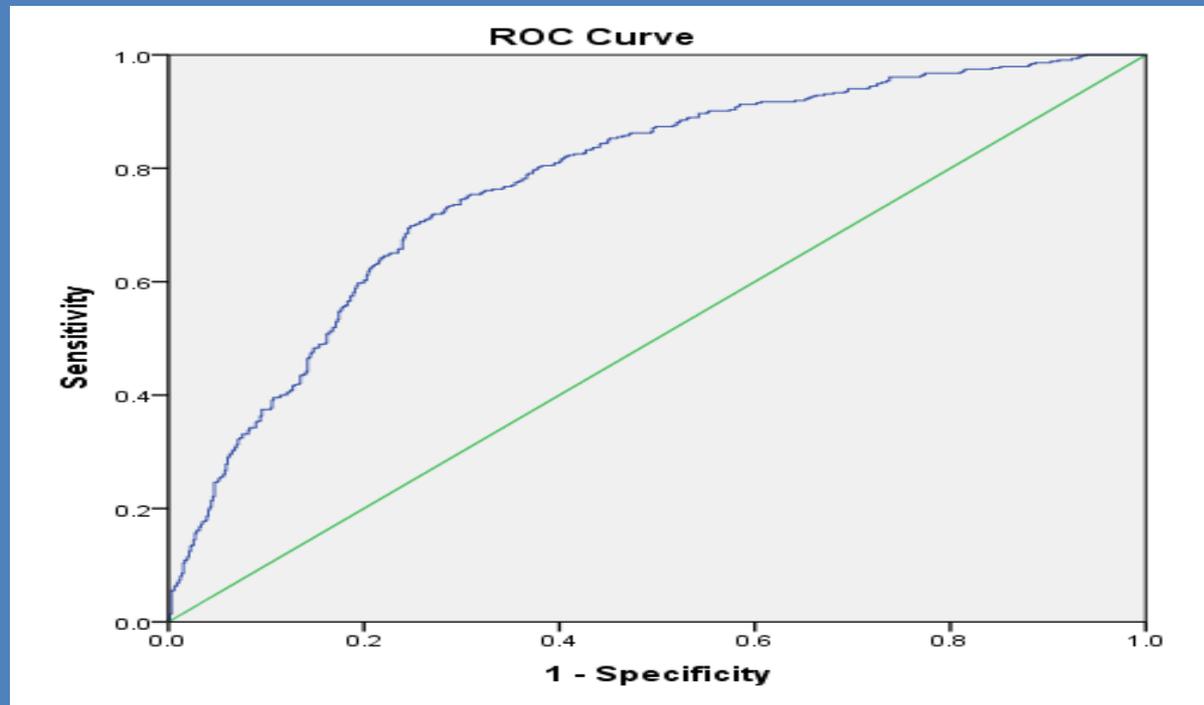
Chi square = 11.25(2); p<.005

**Does MH Status Influence
Employment Outcomes Over and
Above Educational Achievement?**

Methods – Step 1

- Generated a “propensity score “ for likelihood of obtaining an advanced degree
 - 53 background characteristics from the baseline interview
 - acceptable accuracy for propensity score

AUC: .78



Methods – Step 2

- A series of negative binomial regression analyses
- Academic achievement and propensity for advanced degree in as covariates
- Two employment outcomes (over follow up period)
 - wages
 - weeks worked

Results

- **Total Wages earned**

- Predicted by academic achievement ($p < .001$)
 - Even when controlling for predicted probability for getting an advanced degree
- No interaction with disorder status (disorder/no disorder)
 - Effect operates the same in both groups (no moderation)

- **Total Weeks worked**

- Predicted by academic achievement ($p < .001$)
 - Even when controlling for predicted probability for getting an advanced degree
- No interaction with disorder status (disorder/no disorder)
 - Effect operates the same in both groups (no moderation)

Conclusion #3

Having a mental health disorder was not independently linked to poorer employment outcomes. Educational achievement carries the weight.

Summary

- Obtaining a GED has no effect on employment outcomes
- The effect of getting an advanced degree is equally positive for justice-involved youth with and without a MH disorder
- Justice-involved youth with a MH disorder are less likely to get an advanced degree
- Efforts should be made to promote educational achievement beyond a GED, particularly for youth with a MH disorder

Pathways To Desistance

A study of serious adolescent offenders as they transition to adulthood and out of crime

Home About the Study People Funders Study Design Codebook Publications News & Events Contact Us



If using the Internet Explore browser to view this site you should use version 6.0 or greater.

The Pathways to Desistance study is a multi-site, longitudinal study of serious adolescent offenders as they transition from adolescence into early adulthood. Between November, 2000 and January, 2003, 1,354 adjudicated youths from the juvenile and adult court systems in Maricopa County (Phoenix), Arizona (N = 654) and Philadelphia County, Pennsylvania (N = 700) were enrolled into the study.

The enrolled youth were at least 14 years old and under 18 years old at the time of their committing offense and were found guilty of a serious offense (predominantly felonies, with a few exceptions for some misdemeanor property offenses, sexual assault, or weapons offenses).

Each study participant was followed for a period of seven years past enrollment with the end result a comprehensive picture of life changes in a wide array of areas over the course of this time.

Largest longitudinal study of serious adolescent offenders ever done.

Rich picture of change over time based on over 20,000 interviews

The study was designed to

- To identify distinct initial pathways out of juvenile justice system involvement and the characteristics of the adolescents who progress along each of these pathways.
- To describe the role of social context and developmental changes in promoting desistance or continuation of antisocial behavior.
- To compare the effects of sanctions and selected interventions in altering progression along the pathways out of juvenile justice system involvement.

This Web site is maintained by the [Center for Research on Health Care \(CRHC\) Data Center](#). Contact the webmaster at dwebb@pitt.edu. All rights reserved.

<http://www.pathwaysstudy.pitt.edu>

Data Archive - ICPSR

The screenshot shows a web browser window with the URL www.icpsr.umich.edu/icpsrweb/ICPSR/studies/29961. The page features a navigation bar with buttons for 'Find & Analyze Data', 'Membership in ICPSR', 'Deposit Data', 'ICPSR Summer Program', 'Resources for Instructors', and 'Data Management & Curation'. Below this is the ICPSR logo and the text 'Find & Analyze Data'. A secondary navigation bar includes links for 'Find Data', 'Search/Compare Variables', 'Find Publications', 'Resources for Students', and 'Get Help'. The main content area is titled 'Research on Pathways to Desistance [Maricopa County, AZ and Philadelphia County, PA]: Subject Measures, 2000-2010 (ICPSR 29961)'. To the left is a 'Quick Download' section with a 'Table of Contents' listing links for 'Top of page', 'Access Notes', 'Dataset(s)', 'Study Description', 'Citation', 'Funding', 'Scope of Study', 'Methodology', 'Version(s)', 'Related Publications', 'Variables', 'Utilities', and 'Metadata Exports'. To the right is a 'National Addiction & HIV Data Archive Program' box containing text about the study's maintenance and funding. The Windows taskbar at the bottom shows the time as 2:40 PM on 5/1/2015.

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Research on Pathways to Desistance [Maricopa County, AZ and Philadelphia County, PA]: Subject Measures, 2000-2010 (ICPSR 29961)

Alternate Title: Pathways to Desistance (Subjects)

Principal Investigator(s): Mulvey, Edward P., University of Pittsburgh

Summary:
The Pathways to Desistance study was a multi-site study that followed 1,354 serious juvenile offenders from adolescence to young adulthood in two locales between the years 2000 and 2010. Enrolled into the study were adjudicated youths from the juvenile and adult court systems in Maricopa County (Phoenix), Arizona (N=654) and Philadelphia County, Pennsylvania (N=700). Respondents were enrolled and baseline interviews conducted from November 2000 to January 2003. Follow-up interviews were then sche... ([more info](#))

National Addiction & HIV Data Archive Program

This study is maintained and distributed by the [National Addiction & HIV Data Archive Program](#) (NAHDAP). NAHDAP is supported by the [National Institute on Drug Abuse](#) (NIDA), part of the [National Institutes of Health](#) (NIH).

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