

The Pathways to Desistance Study: Implications for Intervention and Policy



**Edward P. Mulvey
Carol A. Schubert
University of Pittsburgh School of Medicine**

*Presentation to the Coordinating Council on Juvenile Justice and Delinquency Prevention
Quarterly Meeting
February 10, 2012*

Project Background

Supported by

- **Office of Juvenile Justice & Delinquency Prevention**
- **National Institute of Justice**
- **John D. & Catherine T. MacArthur Foundation**
- **National Institute on Drug Abuse**
- **Pennsylvania Commission on Crime & Delinquency**
- **Arizona Governor's Justice Commission**
- **Robert Wood Johnson Foundation**
- **William Penn Foundation**
- **William T. Grant Foundation**

Working Group Members

- **Edward Mulvey**
- **Laurence Steinberg**
- **Elizabeth Cauffman**
- **Laurie Chassin**
- **George Knight**
- **Carol Schubert**
- **Sandra Losoya**
- **Robert Brame**
- **Jeffrey Fagan**
- **Alex Piquero**

Reasons for the study

- **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

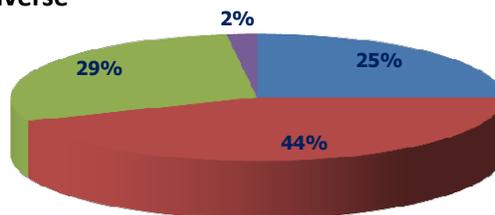
Study design

- **Two sites: Philadelphia and Phoenix**
- **Enroll serious adolescent offenders**
 - 1,354 felony offenders, aged 14 -18
 - Females and adult transfer cases
- **Regular interviews over eight 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

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
 - ✓ Majority of priors were for a person crime
- **Ethnically diverse**

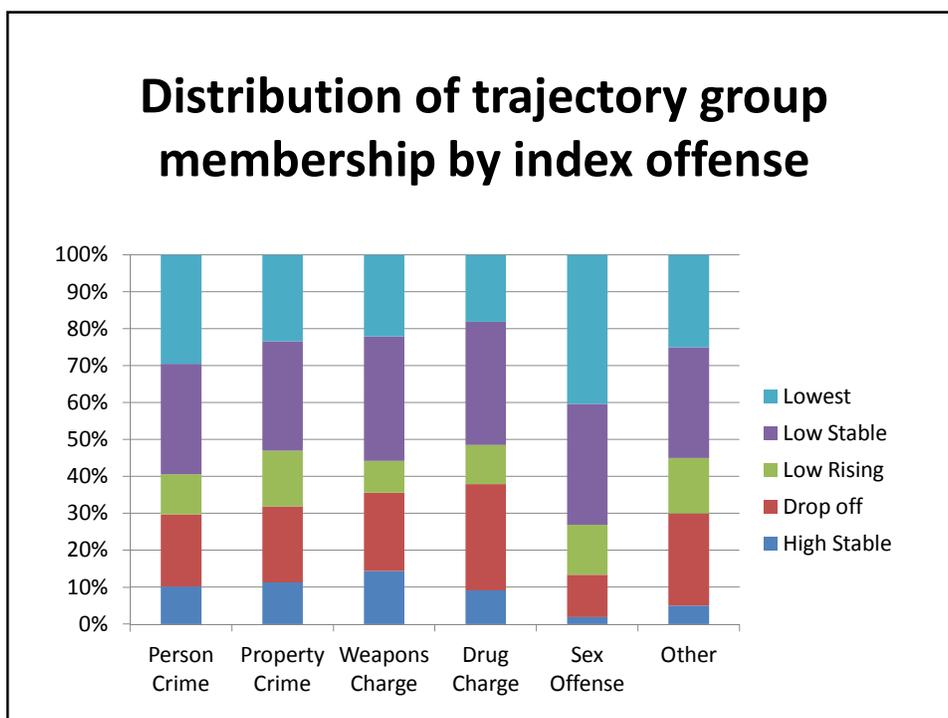
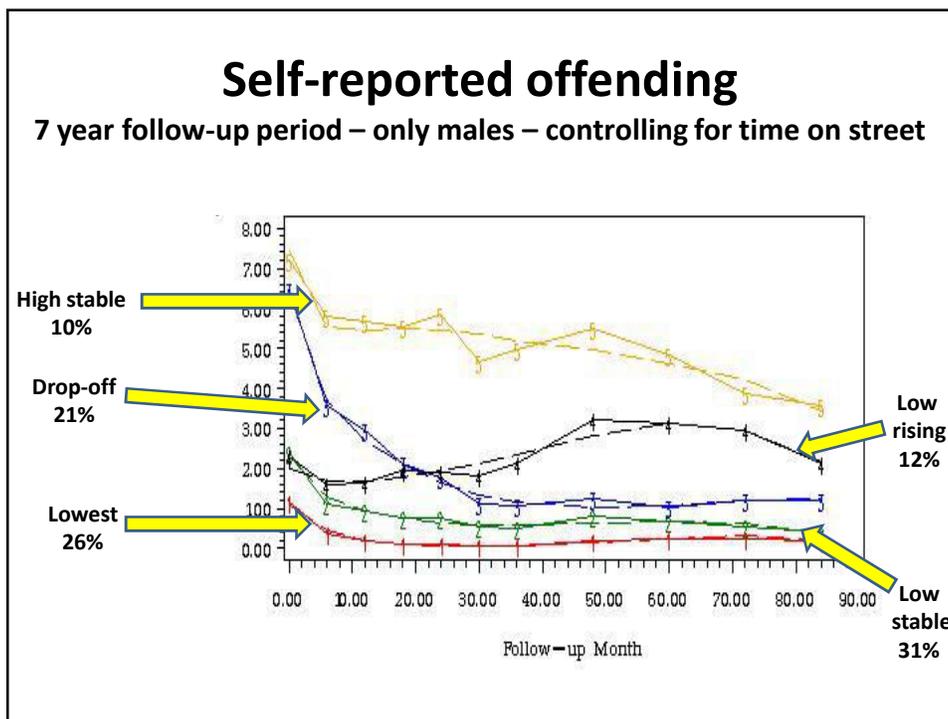


■ Caucasian ■ African American ■ Latino ■ Other

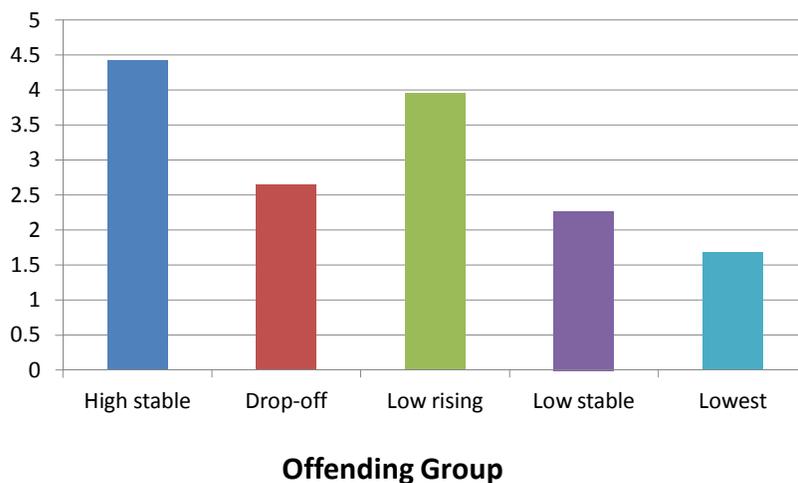
Progress so far

- **Average of 90% of interviews completed at each time point**
- **Over 21,000 interviews completed**
- **Archiving data at the Interuniversity Consortium for Political and Social Research (ICPSR). Initial data will be released for public access in June, 2012.**
- **Dissemination efforts**
 - 7 OJJDP bulletins published or under review
 - Over 50 academic papers in print or under review; book in progress
 - Over 100 presentations to academics, public officials, service providers

Patterns of Offending



Average number of risk markers above the sample mean by trajectory group



Range 1- 7

Policy statement #1

Serious juvenile offenders vary considerably in patterns of offending, risk factors, and life situations. Policies about placement or program eligibility which are based on criteria related to the presenting offense are a poor predictor of future recidivism or positive development.

To increase the impact of investments in justice interventions, it is important to promote decision frameworks or statutes that

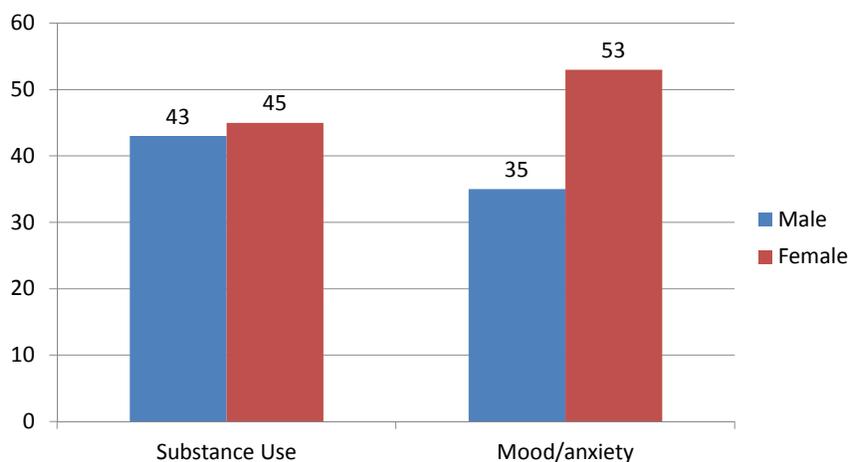
- a) consider cumulative risk and addressable needs, and
- b) target services to the highest risk offenders.

Substance Abuse Disorders/ Substance Use

Schubert, CA, Mulvey, EP, Glasheen, C. (2011). The influence of mental health and substance use problems and criminogenic risk on outcomes in serious juvenile offenders. *The Journal of the American Academy of Child and Adolescent Psychiatry*, 50(9), 925-937

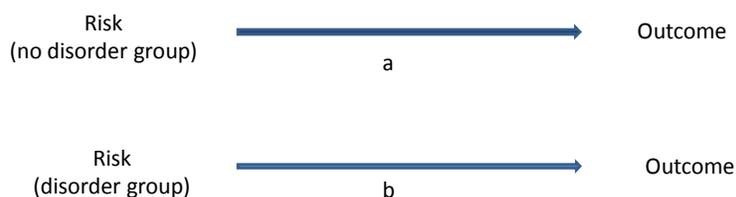
Chassin, L., Knight, G., Vargas-Chanes, D., Losoya, S., Naranjo, D. (2009). Substance Use Treatment Outcomes in a Sample of Serious Juvenile Offenders, *Journal of Substance Abuse Treatment*, 36(2), 183-194

Prevalence of disorders by gender



Does having a substance use or mood/anxiety disorder matter for long term outcomes?

Approach: Moderation Analyses



Does a equal b?

The role of substance use and mood/anxiety disorders on outcomes

Findings

- The mental health disorders alone **do not** affect the relationship between risk markers and outcomes. Given a certain risk, adolescents with disorders have no greater or lesser chance of either positive or negative outcomes (holds for males and females).
- A substance use disorder **does** change the relationship between risk markers and both gainful activity and re-arrest over 6 years. It makes things significantly worse.

Do changes over time in levels of substance use affect offending?

▪ **Approach:**

- Look at within individual changes at each time and see if they raise level of offending
- See whether these effects are different, depending on the trajectory groups
- Consider substance use, having an antisocial partner, being a parent, and level of gainful activity (school and work) all at the same time - also consider time out of community.

▪ **Findings:**

- Across all groups, level of substance use and having an antisocial partner increase offending significantly and independently
 - 1.2 to 12 times more offending for substance use
 - 1.2 to 4 time more offending for antisocial partner

Are these adolescents getting substance use services?

Looking at those adolescents with a diagnosed substance use problem

	Adult Setting	Juvenile Setting	Community
% with service	45%	67%	14%
Average intensity of sessions	1 every 10 days	1 every 5 days	1 every 50 days

Does substance use treatment work if given to these adolescents?

▪ **Approach:**

- Within individual, does treatment involvement in one time period affect substance use and offending in the next time period?
- Test of treatment as actually provided
- Controlling for “street time”, drug testing, and characteristics predicting who gets treatment

▪ **Findings:**

- Family involvement and duration of treatment necessary
- Significant short term (6-month) effects of treatment on
 - Marijuana use
 - Offending
 - Alcohol reductions (not dependent on family involvement)
- Not a one-shot “inoculation”

Policy statement #2

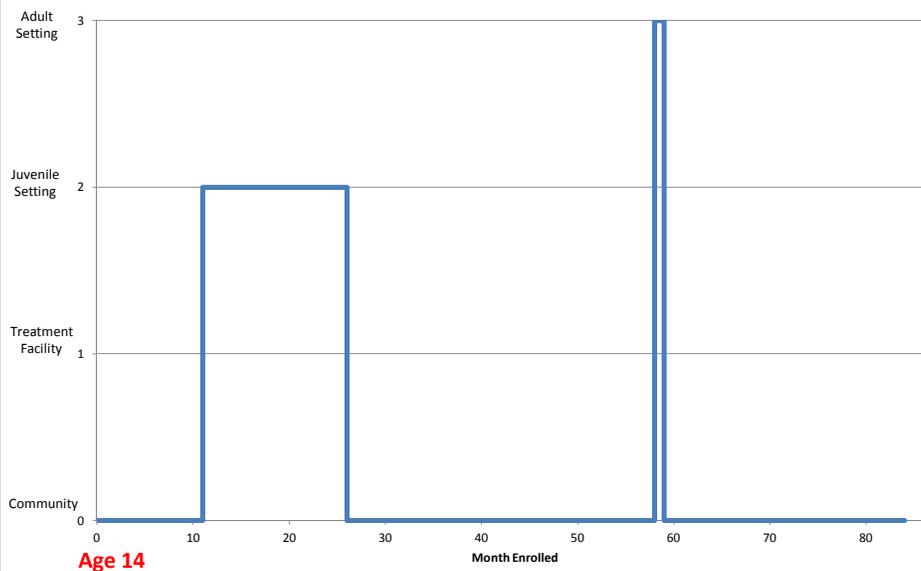
Increase the provision of substance abuse services to serious adolescent offenders in both institutions and in the community, making sure that they are of adequate intensity (e.g., meet NIDA standards for enrollment time) and preferably involve family members. Youth who are supported by family members have better outcomes.

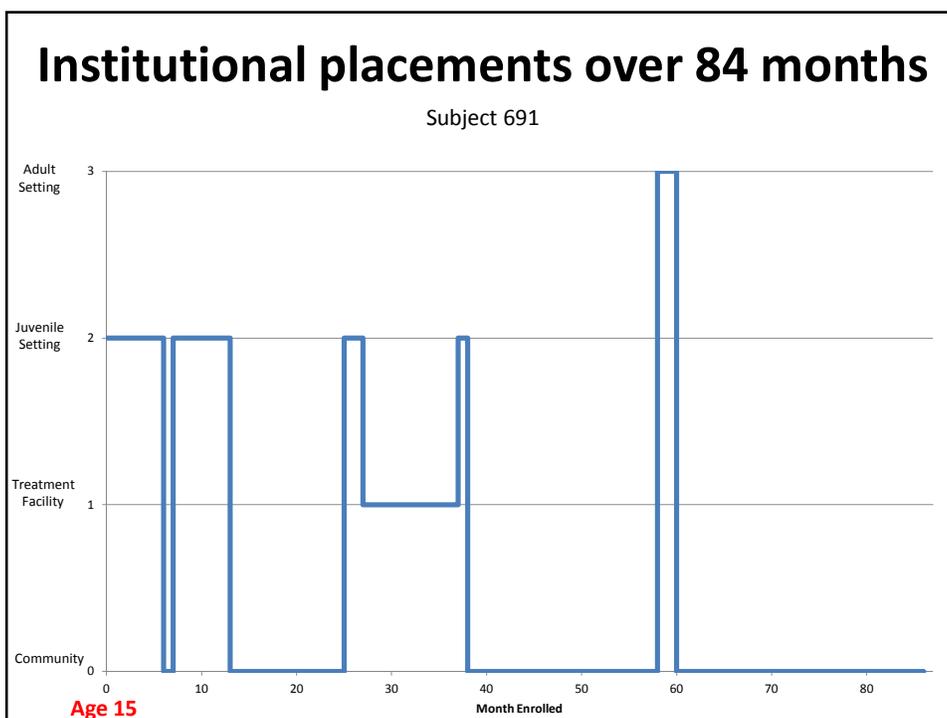
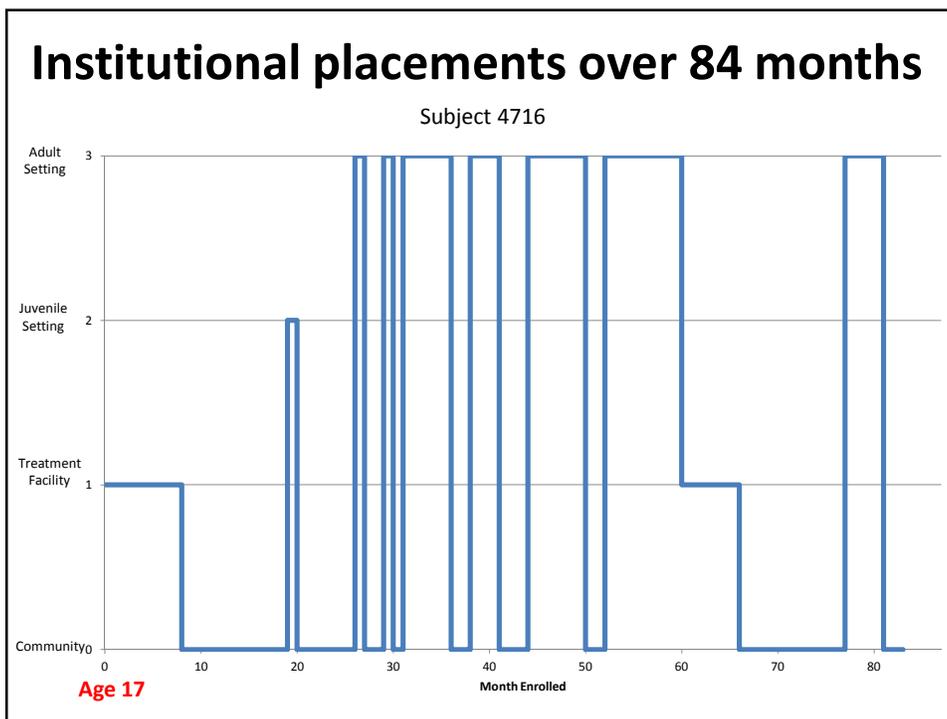
Institutional Placement

Loughran, T., Mulvey, E., Schubert, C., Fagan, J., Losoya, S., Piquero, A. (2009). Estimating a dose-response relationship between length of stay and future recidivism in serious juvenile offenders. *Criminology*, 47, 699-740.

Institutional placements over 84 months

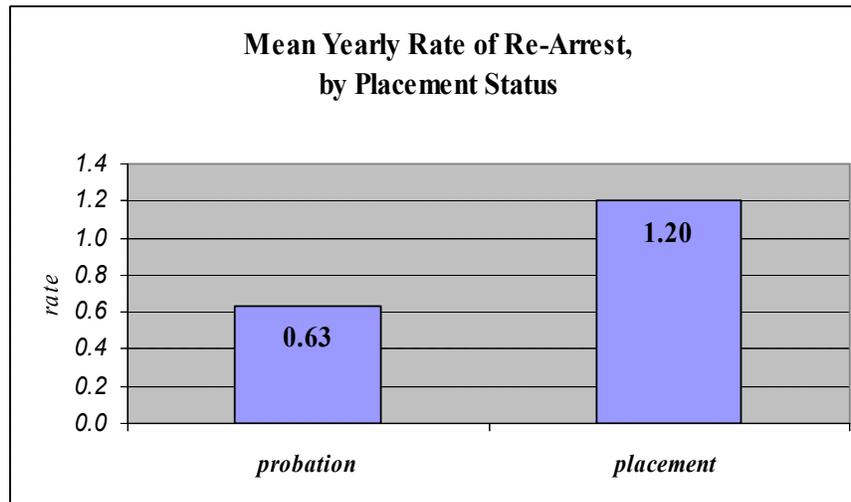
Subject 52928





Probation vs. placement

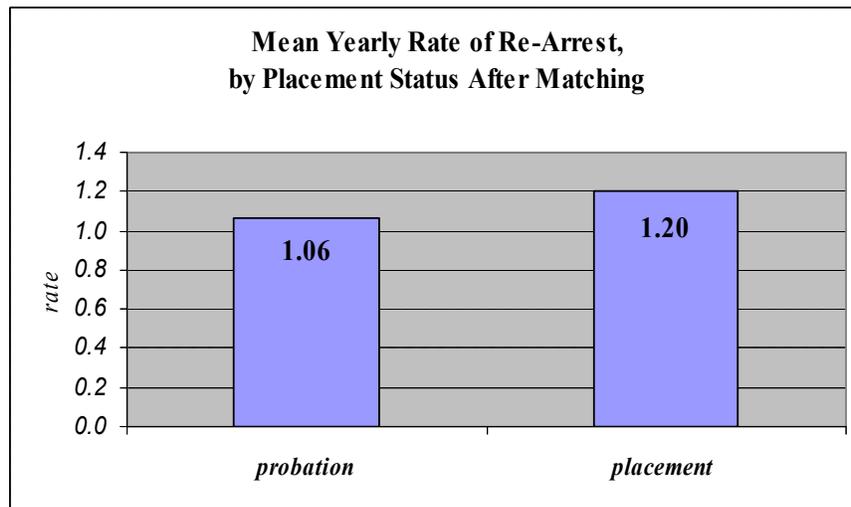
Unadjusted comparison of re-arrest rate



Propensity score matching

- **Two step process:**
 - A propensity score is calculated for each case. It is the predicted probability that you get placed given all of the background characteristics considered
 - Take each placed case and match it to one or more probation case with similar propensity score
- **We then can look to see if the placed group looks similar to the matched probation group on a variety of characteristics that might affect the outcome**
- **If the groups look alike, we can attribute any difference in the outcomes to the fact that they were placed**

Treatment effect of placement *Matched groups*



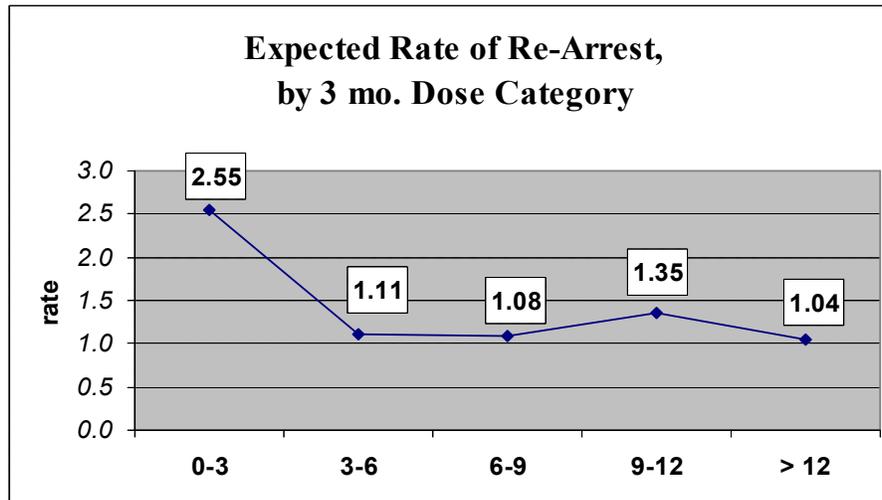
No significant differences between groups in rate of re-arrest

Do longer institutional stays reduce re-arrest?

Approach

- Length of stay is broken up into discrete “doses”
- Methods to get similar cases across different levels of the “dose”
 - 65 of 66 variables show no difference among the groups, meaning we can rule them out as causes of differences in outcomes
- *Response Curve* is estimated

Dose-response curve *3 month intervals as doses*



Findings

- Overall, *no effect* of placement on rate of re-arrest (if anything, it may increase re-arrest)
- For intermediate lengths of stay (i.e., 3-13 months), there appears to be *little or no marginal benefit* for longer lengths of stay

Policy statement #3

Reduce the rate of placement of serious adolescent offenders in institutions as well as the duration of these placements. Increase the level of community-based services to these adolescents.

Needs & Services in Institutions

Mulvey, E., Schubert, C.A., Chung, H. L. (2007). Service use after court involvement in a sample of serious adolescent offenders. *Children and Youth Services Review*, 29(4), 518-544. NIHMS154499, PMCID277728.

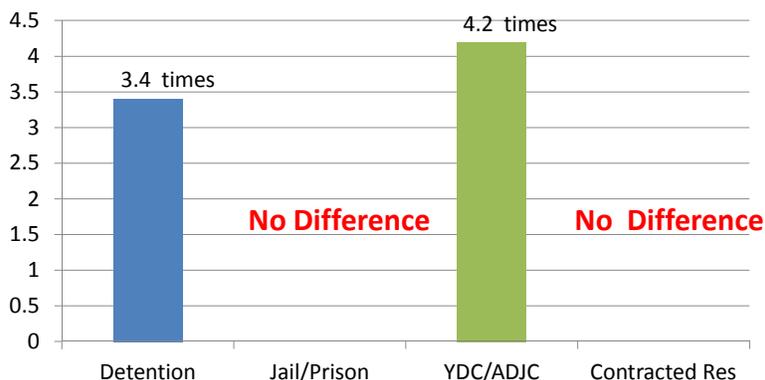
Schubert, CA; Mulvey, EP, Loughran, TA, Losoya, S. (2012) Perceptions of institutional experience and community outcomes for serious adolescent offenders. *Criminal Justice & Behavior*, 39(1), 71-93.

Do these adolescents get appropriate services?

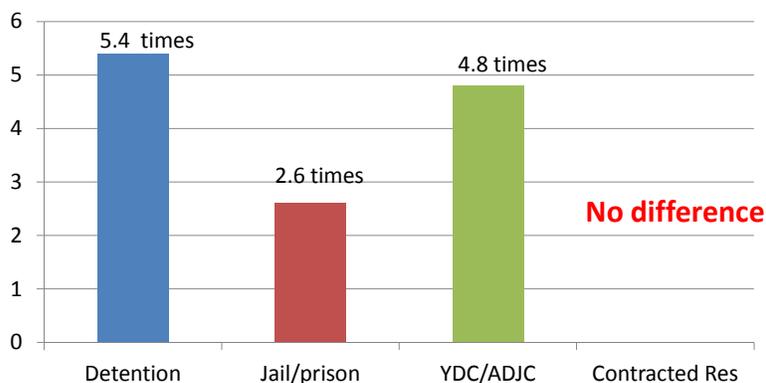
Approach

- Identified two “treatable” types of problems
 - Mood/anxiety problems
 - ✓ mental health-related treatment: individual sessions or treatment on a mental health unit
 - Substance use problems
 - ✓ drug and alcohol services
- Focus on four most comment settings
- Tested findings with and without controls for site, gender, ethnicity, days in setting

Increase in likelihood of receiving mental health treatment for those with a mood/anxiety problem compared to those without a mood/anxiety problem



Increase in likelihood of receiving substance use treatment for those with a substance use problem compared to those without a substance use problem



Do institutional environments matter?

Approach

- **Examine release interviews**
- **Data:**
 - Adolescent reports about a particular institutional experience
 - n = 1,158 interviews
- **Calculate eight dimensions of the institutional stay**

-Safety	-Institutional Order
-Harshness	-Caring Adult
-Fairness	-Antisocial Peers
-Services	-Re-entry planning
- **Control for risk factors related to offending**
- **Assess if differences in these dimensions relate to subsequent community outcomes in year after release**
 - System involvement
 - Self reported antisocial activity

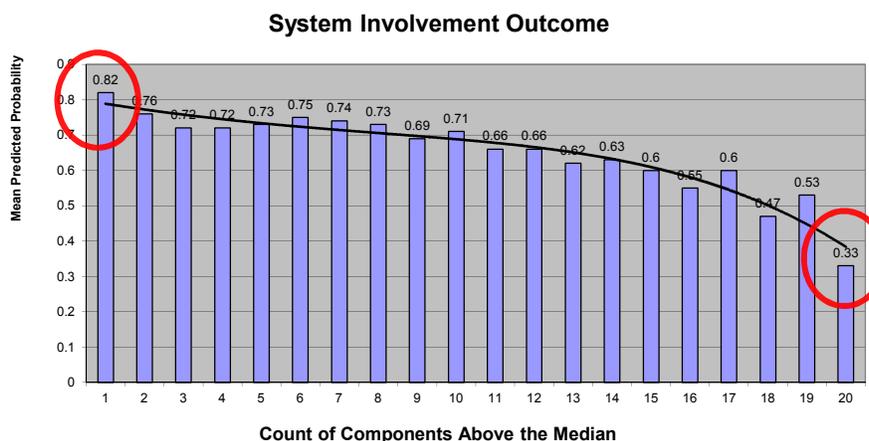
Do institutional environments matter?

Findings

- **Certain dimensions matter for certain outcomes**
 - Services and re-entry planning significantly reduce the chances of later systems involvement.
 - Low harshness, fewer antisocial peers, and high institutional order decrease the probability of self-reported antisocial activity

- **These relationships don't differ by facility type**

Is a generally more positive institutional experience related to better outcomes?



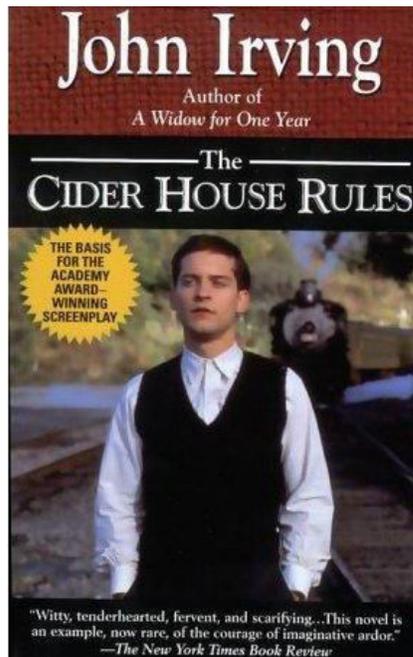
Even after controlling for background characteristics, there is a 35%-49% reduction in the probability of system involvement in the next year

Policy statement #4

Promote procedures, policies and assessment tools that review whether adolescent offenders are receiving services matched to their needs in institutional care and promote periodic assessments of institutional environments from the perspective of the adolescent in care.

Points to remember

- *This is a sample of serious adolescent offenders.* Results aren't applicable across the whole juvenile justice system.
- *Outcome measures rely on self reports,* but arrests and official records support the results so far.
- *The study was conducted in only two cities.* While there is considerable variability across cities, the outcomes regarding development over time appear consistent in each site.



“Be of use”

Contact Information

Edward P. Mulvey, Ph.D.
mulveyep@upmc.edu

Carol A. Schubert, M.P.H.
schubertca@upmc.edu

www.pathwaysstudy.pitt.edu