

Juvenile Justice Research: Implications for Intervention and Policy

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Today's Objectives

- **Current developmental focus in juvenile justice**
- **Some findings from the Pathways to Desistance study**
- **Some findings from work on what makes programs work**
- **Some discussion on implications for program and policy relevance**

*We are in the middle of a
“sea change” in the
orientation of juvenile
justice*

Developmental Science and Juvenile Justice

Neuroscience + Behavioral science



View of an extended period of adolescence

- United States Supreme Court decisions
 - *Roper*
 - *Graham*
 - *Miller*
- Policy and practice changes
 - Statutory changes in age boundaries for jurisdiction and services
 - Reduced number of adolescents entering the “front door” of the juvenile justice system.
 - Reduced reliance on institutional care
 - Promotion of interventions that promote developmental progress

General Framework

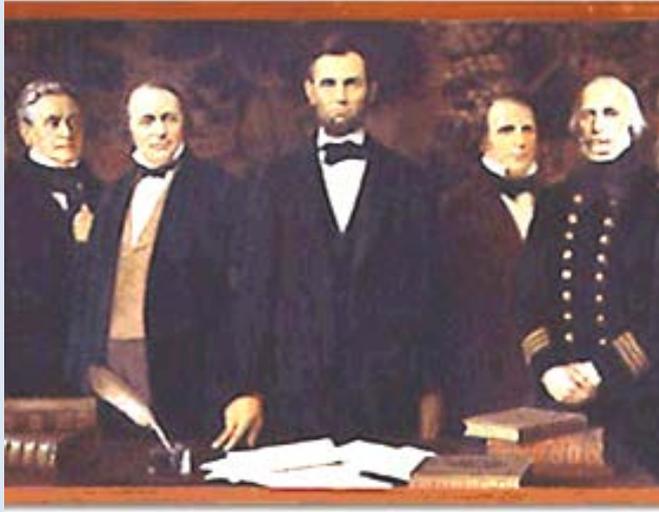
Recent Supreme Court Cases

- Adolescence
 - judgment limited in relevant ways
 - transitory
- Supports argument for diminished culpability of adolescent offenders (mitigation)
- Same factors make them less “deterable”
- Acts are less of an indication of fully formed and “depraved” character

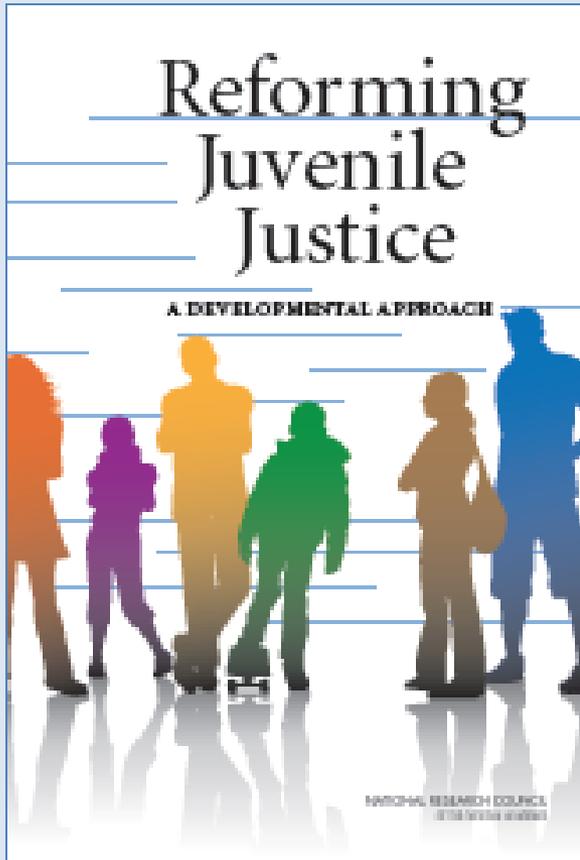
**“Incorrigibility is inconsistent
with youth.”**

- *Miller* majority opinion

National Academy of Sciences



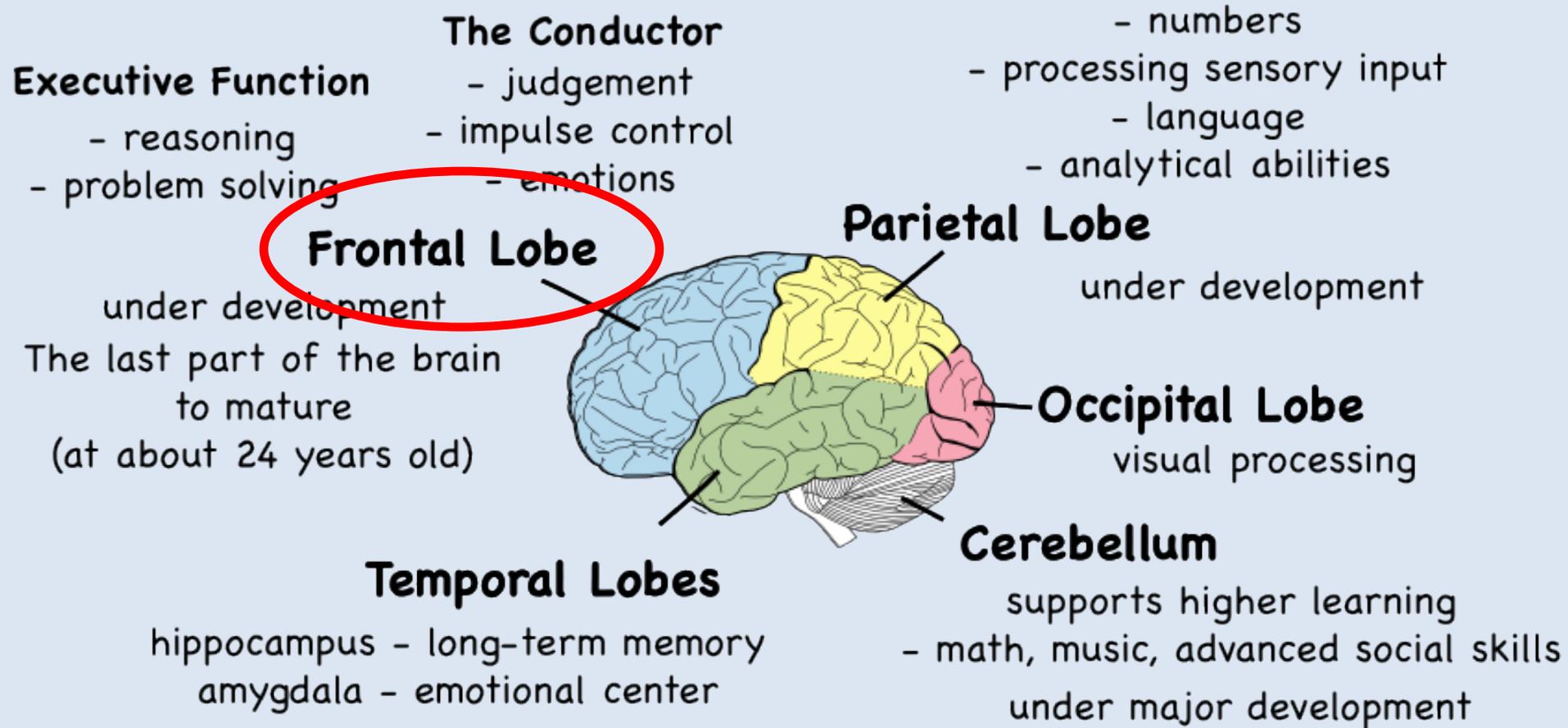
- Chartered by Congress in 1863
- Purpose: To advise the government and the nation on critical national issues through objective, scientific, and evidence-based research and analysis
- Designed to be independent, balanced, and objective; not an agency of the federal government



National Academy of Sciences
*Reforming Juvenile Justice:
A Developmental Approach*

Committee Charge: To assess the implications of advances in behavioral and neuroscience research for the field of juvenile justice and the implications of such knowledge for juvenile justice reform.

“Different parts at different times”



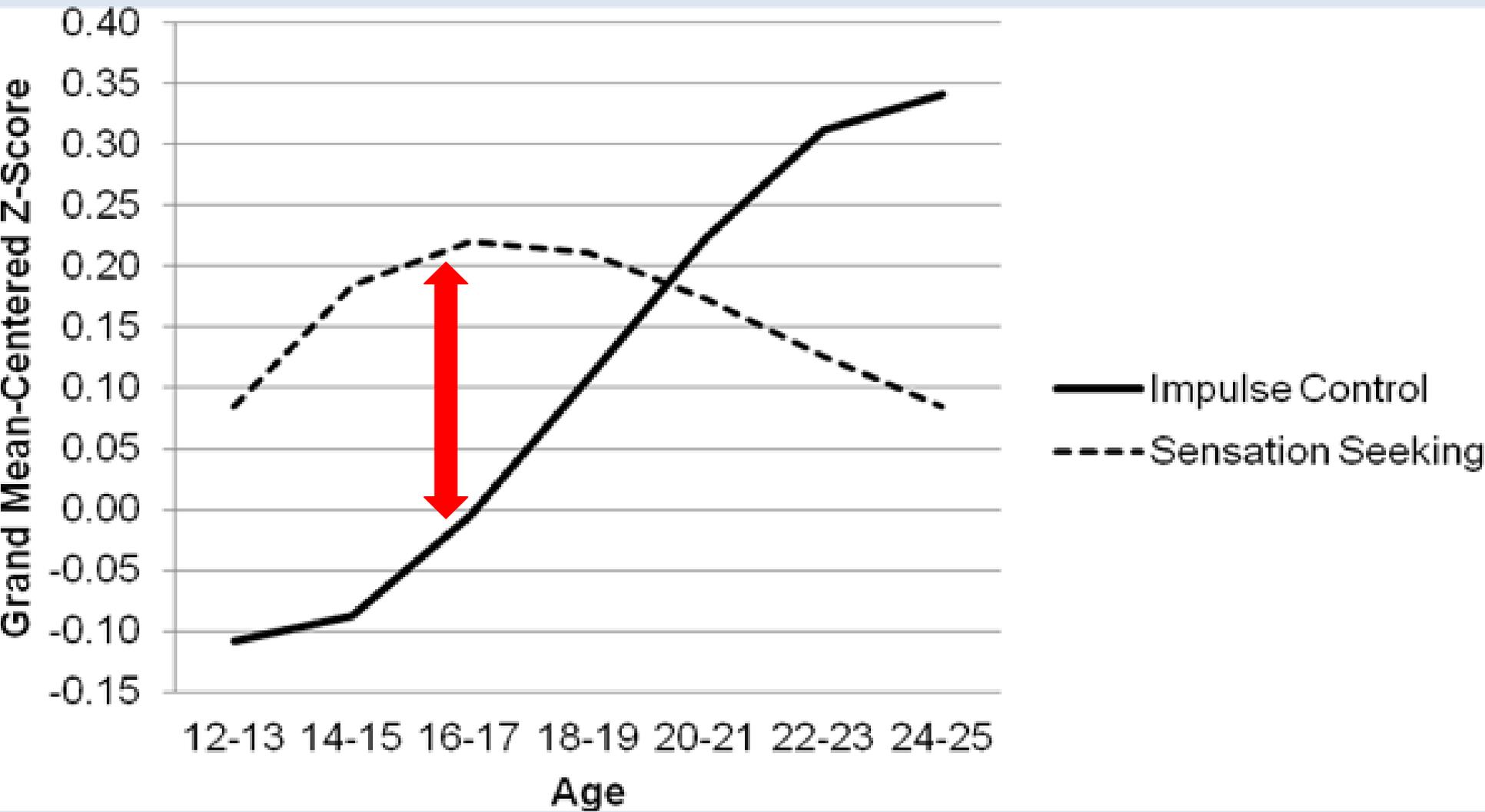


Figure 4 from Steinberg, L. (2013). The influence of neuroscience on U.S. Supreme Court decisions involving adolescents' criminal culpability. *Nature Reviews Neuroscience*, 14, 513-518

National Academy of Sciences Panel on Juvenile Justice: Findings

- Adolescents differ from adults and/or children in three important ways:
 - lack mature capacity for *self-regulation* in emotionally charged contexts
 - have a *heightened sensitivity* to proximal influences such as peer pressure and immediate incentives
 - show less ability to make judgments and decisions that require *future orientation*
- Behavioral findings line up with biological findings

Major Conclusions

- **Being held accountable for wrongdoing and accepting responsibility in a fair process (perceived and real) promotes healthy moral development and legal socialization.**
- **Being held accountable and punished in an unfair process (perceived or real) reinforces social disaffection and antisocial behavior.**
- **Predominantly punitive policies and programs do not foster prosocial development or reduce recidivism.**
- **No convincing evidence that confinement of juvenile offenders beyond a minimum amount required to provide intense services reduces likelihood of subsequent offending.**
- **Pattern of racial disparities impede efforts to provide equitable services and contribute to perceptions of unfairness.**

Proposed Goals of the System

Promoting Accountability

Ensuring Fairness

Preventing Re-offending

A developmental perspective is NOT

- Exculpatory reason for adolescent antisocial behavior
- Refutation of deterrence as a goal of juvenile justice
- A general justification for any “new” intervention or practice

Other Key Research

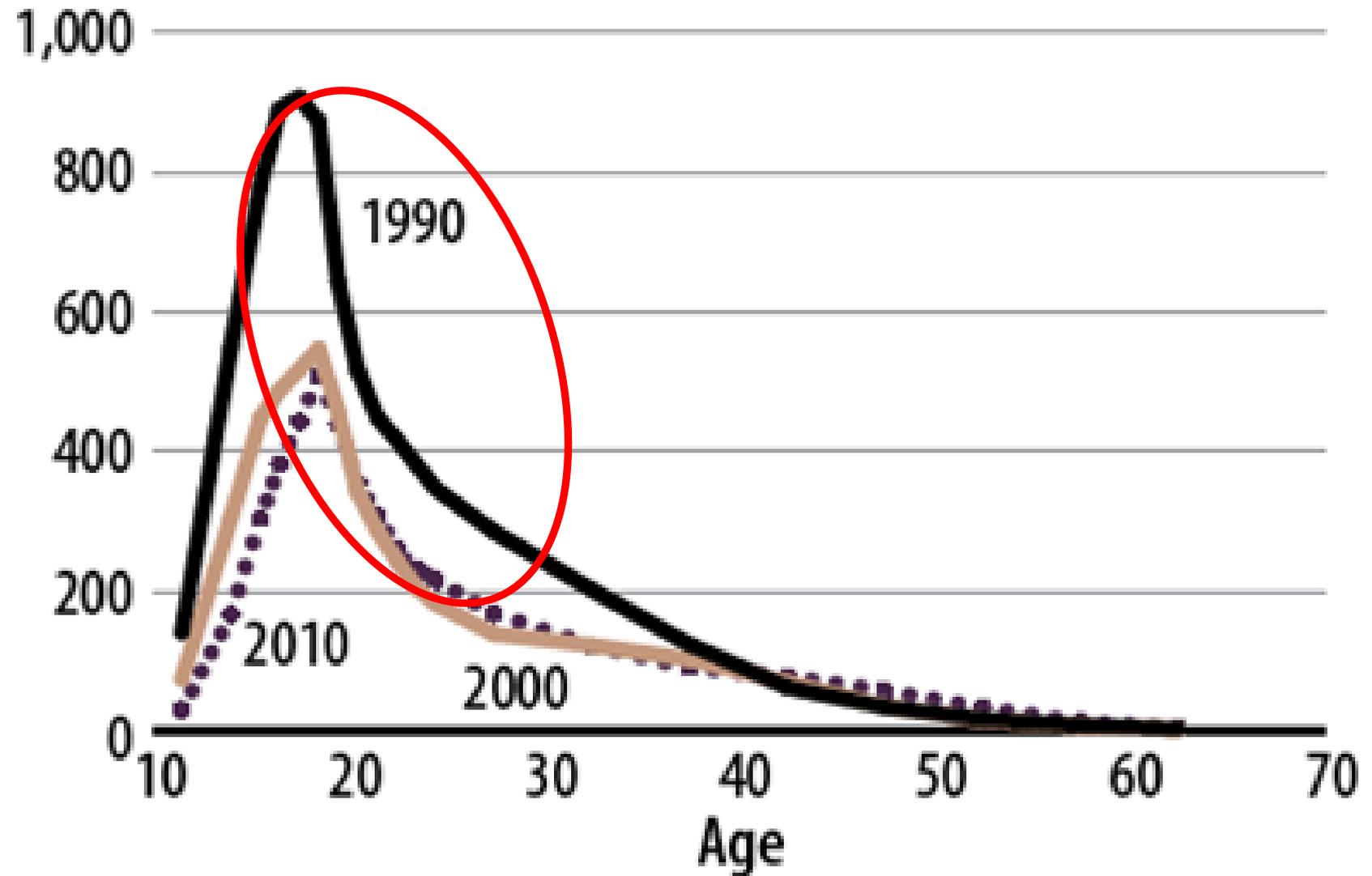
Pathways to Desistance

About the study: Multi-site study that follows 1,354 serious adolescent offenders as they make the transition from adolescence into early adulthood through regular interviews over a seven year period.



Burglary age-arrest curves

Arrests/100,000



Study design

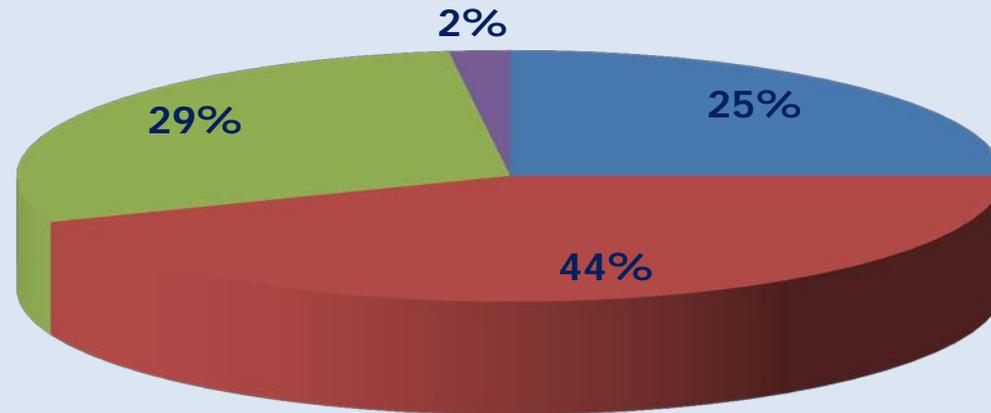
- **Two sites: Philadelphia and Phoenix**
- **Enroll serious adolescent offenders**
 - 1,354 felony offenders, aged 14 -18
 - Females and adult transfer cases
- **Regular interviews over eight years**
 - Initial interviews
 - Time point interviews (background characteristics, psychological mediators, 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% males
 - Average of two prior court appearances
 - ✓ 32% had no prior petitions to court
 - ✓ Most of priors were for a person crime
- Ethnically diverse

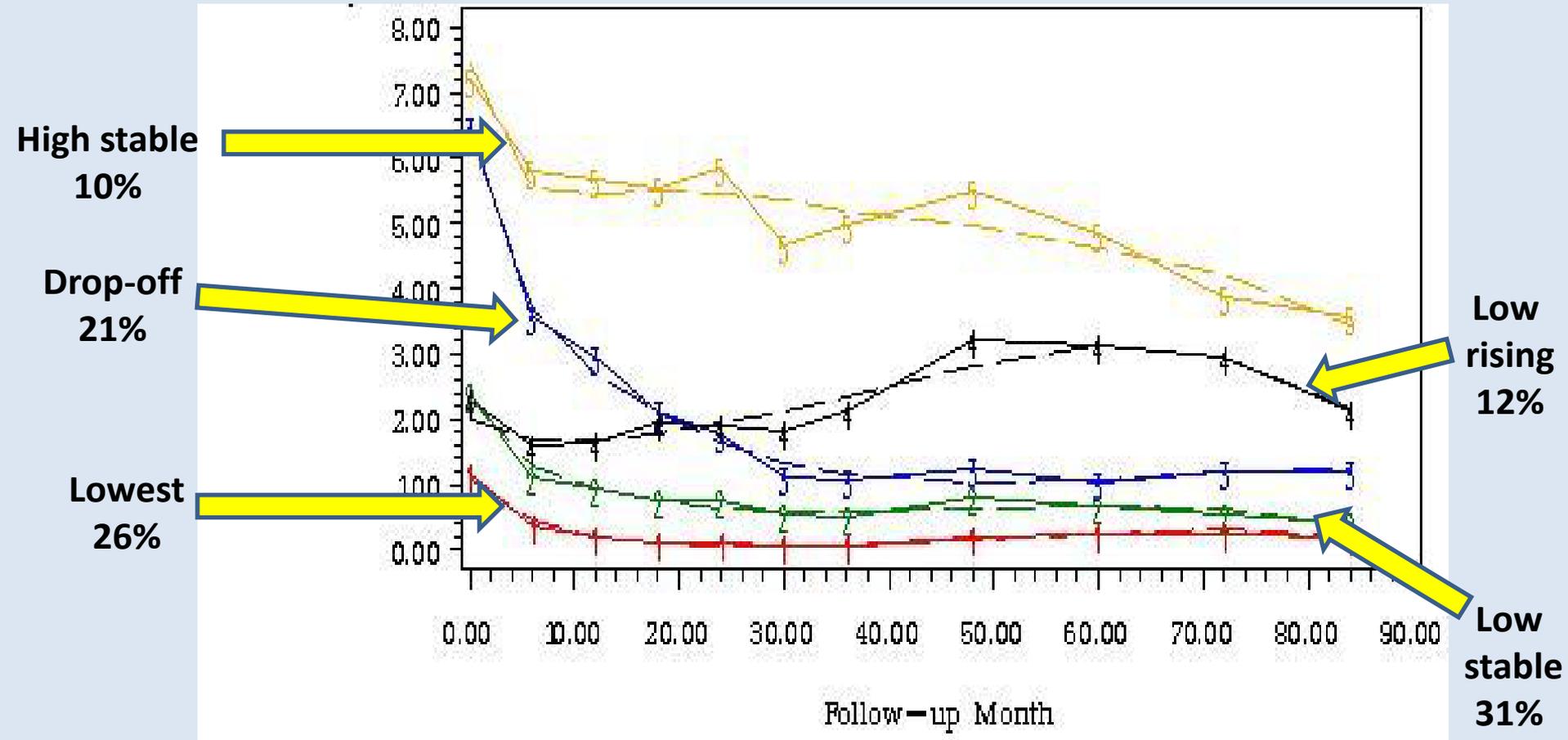


■ Caucasian ■ African American ■ Latino ■ Other

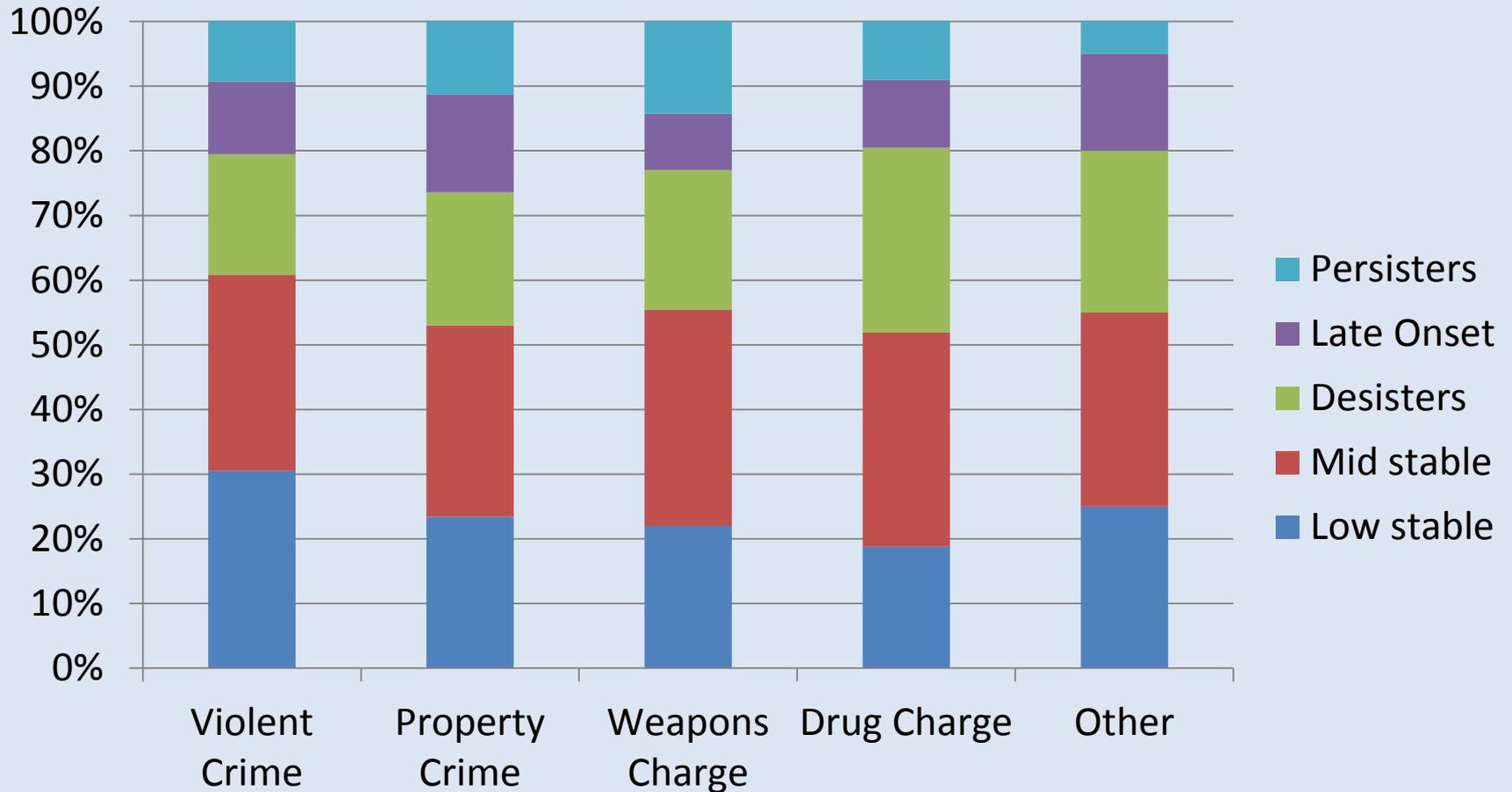
*The “natural course” for
juvenile offenders is toward
less crime*

Self-reported offending

7 year follow-up period – only males – controlling for time on street



Proportion of each offending pattern group in each crime group

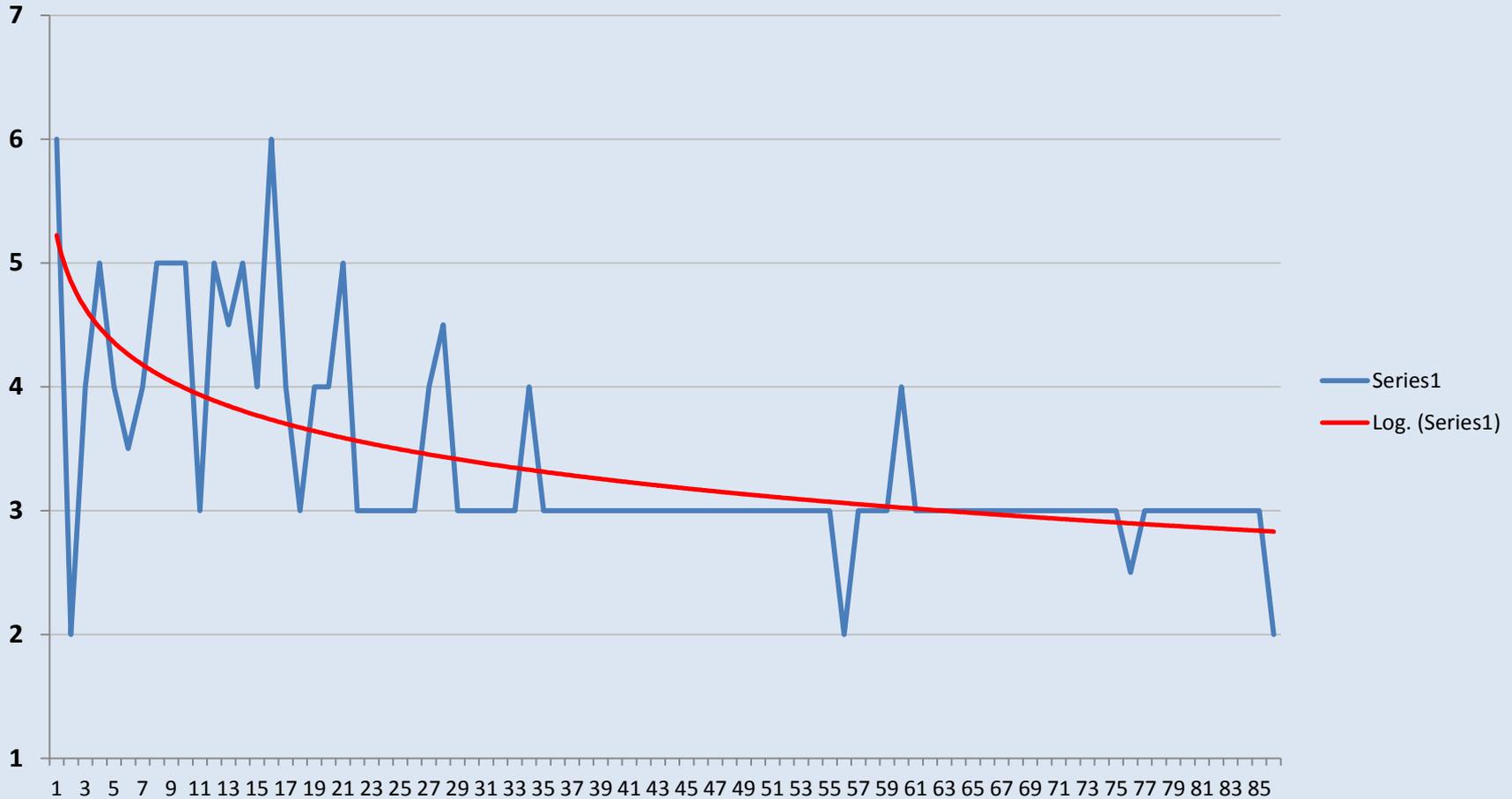


Mean rate of re-arrests in each wave



Number of arrests per days in the community. Ex: 1 arrest in 121 days in community = .008,
1 arrest in 65 days in the community = .015, 3 arrests in 183 days in community = .016

Median severity ranking for arrests across time (within month)



1 = status offense, 2=misdemeanor, 3 = possession of narcotics (excluding glue and marijuana), 4 = felony, not part 1, 5=major property felonies, 6=burglary, 7=drug felony, 2nd degree sex offense, 8 =felonious assault, felony w/ weapon 9 =murder, rape, arson

Patterns of Offending

- **Finding:** Adolescents who have committed serious offenses are not necessarily on track for adult criminal careers.
 - Even among serious adolescent offenders,
 - there is considerable variability
 - the pattern is reduced offending
- **Implications:** To increase the impact of investments in justice interventions, it is important to promote decision frameworks or statutes that:
 - consider cumulative risk and addressable needs, and
 - target services to the highest risk offenders

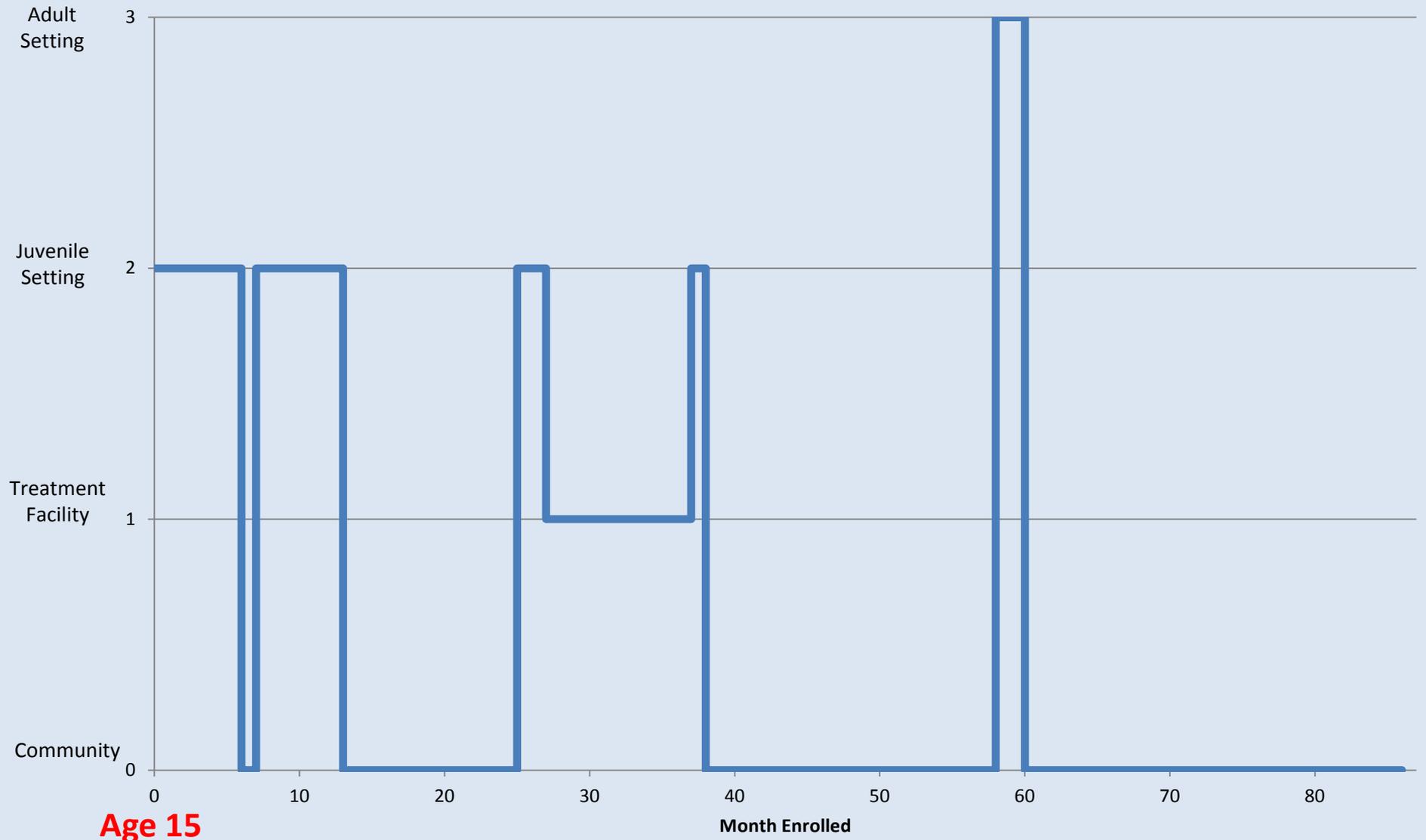
*Institutional stays don't do
much, if anything, to
reduce criminal offending*

Patterns of Institutional Placement

- About 50% of the Pathways adolescents have a juvenile institutional stay; on average 2-3 stays
- About 75% of the sample have an adult institutional stay; on average about 5 stays
- Sample spent 37% of their seven year follow-up period in institutional placement
 - 42 % of juvenile time in placement
 - 30 % of adult time in placement
- No significant site differences in the number of days in placement.

Institutional placements over 84 months

Subject 691



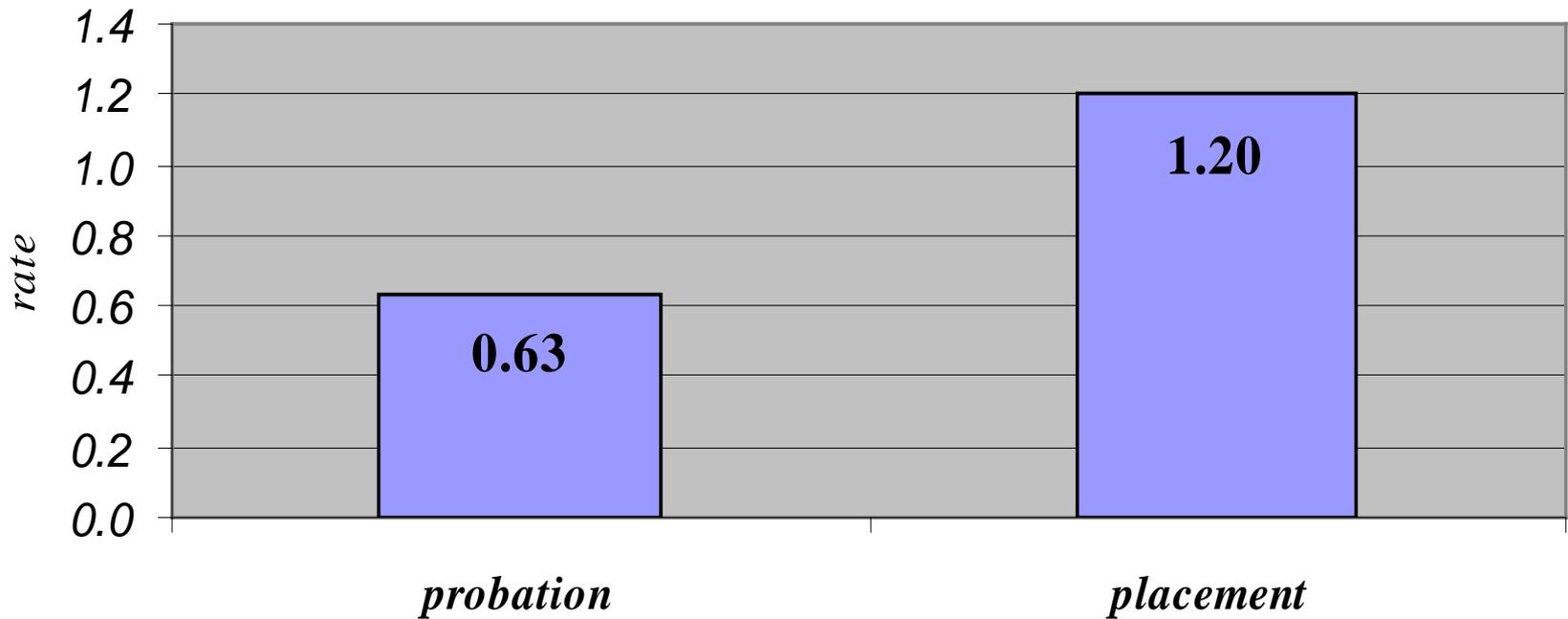
Question 1:

Does institutional placement reduce or increase offending?

Probation vs. placement

Unadjusted comparison of re-arrest rate

**Mean Yearly Rate of Re-Arrest,
by Placement Status**



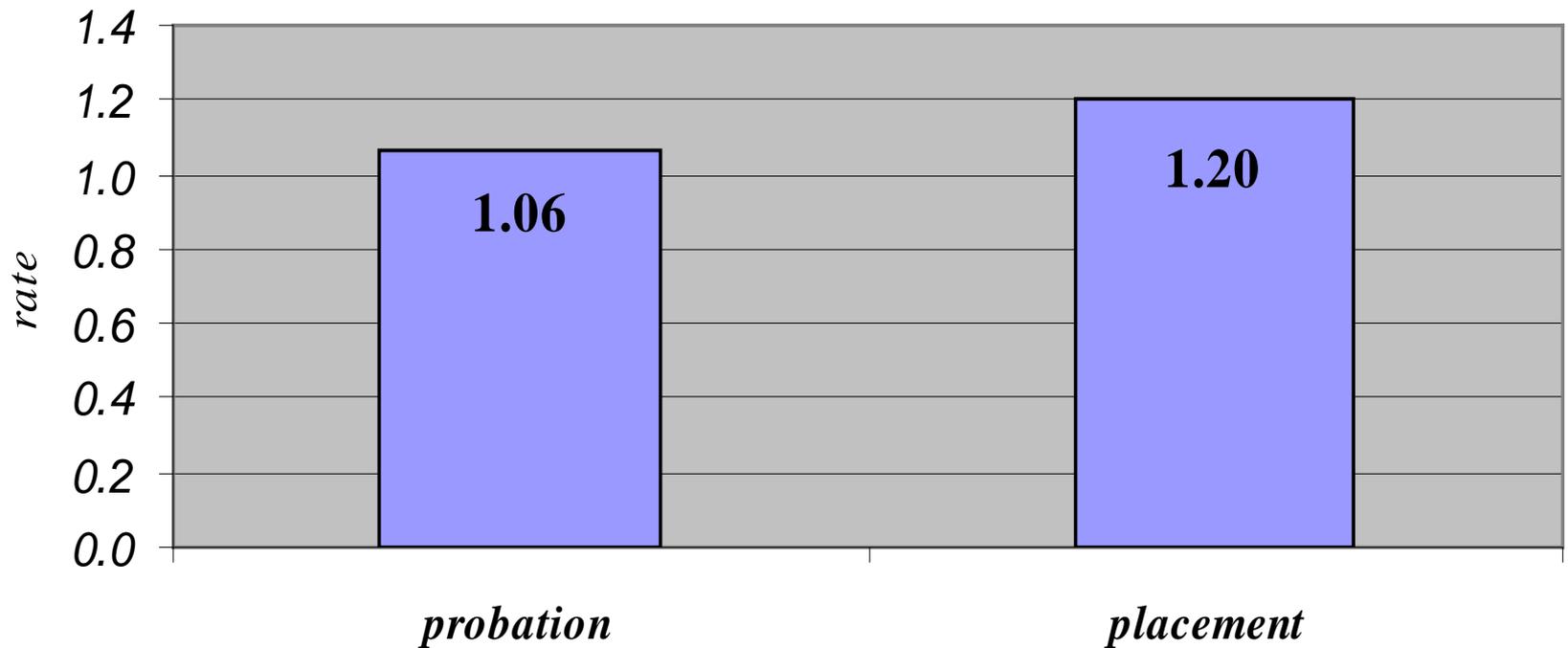
Propensity score matching

- 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

Mean Yearly Rate of Re-Arrest,
by Placement Status After Matching



No significant differences between groups in rate of re-arrest

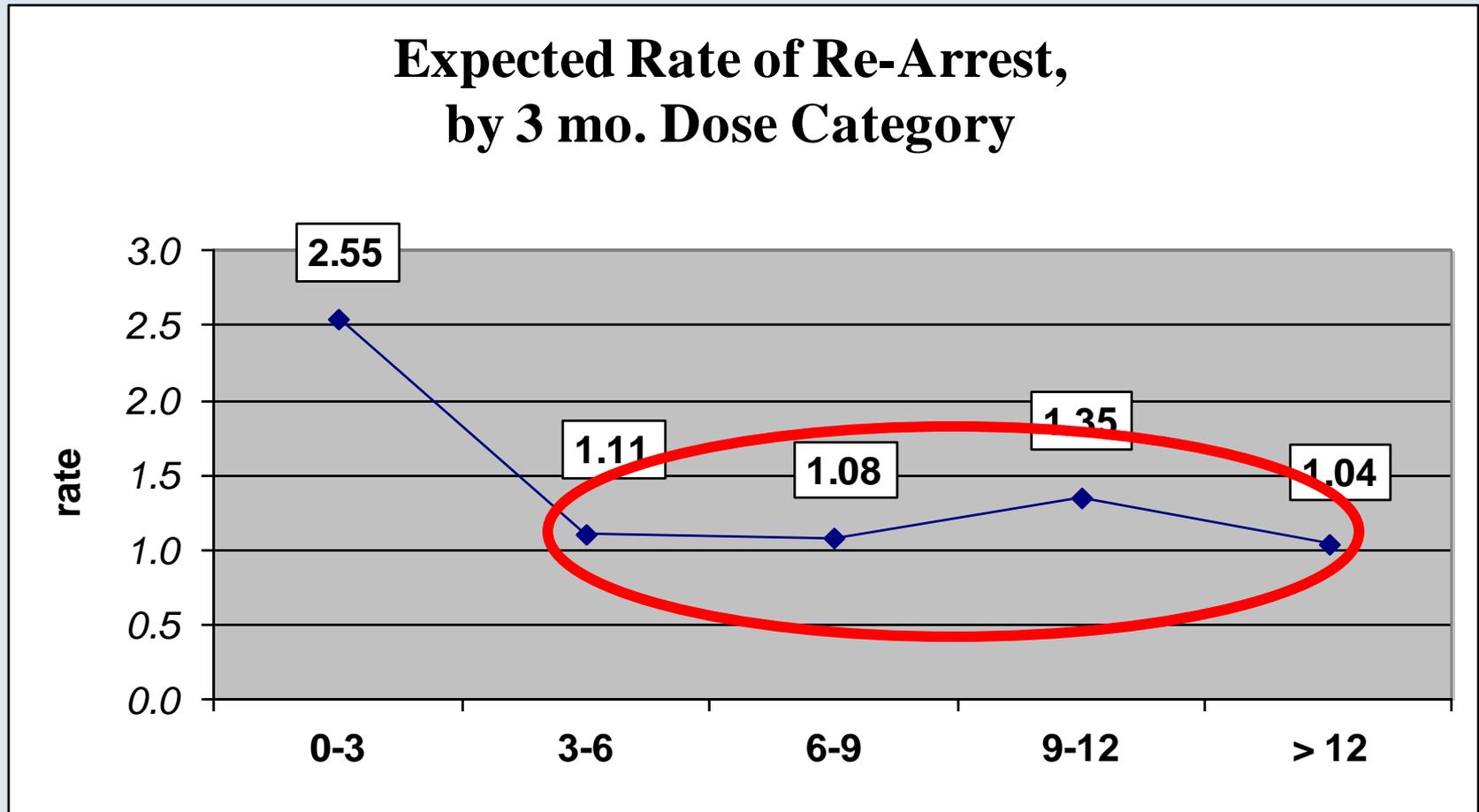
Question 2:

*Do longer stays in institutional placement
reduce reoffending?*

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

Effect of length of stay on re-arrest



Finding: For intermediate lengths of stay (i.e., 3-13 months), there appears to be no marginal benefit in terms of re-arrest for longer lengths of stay.

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

*A large proportion of serious
adolescent offenders do not
receive appropriate community
based services*

Are these adolescents getting substance use services?

Looking at those adolescents with a diagnosed substance use problem*

	Adult Setting	Juvenile Setting	Community
% with service	55%	61%	30%
Average intensity of sessions	1 every 13 days	1 every 3 days	1 every 47 days

* Diagnosed at baseline as present in the past year

*Adolescents' perceptions of
the institutional environment
matter a great deal*

Do institutional environments matter?

Approach

- Examine release interviews
- Data:
 - Adolescent reports about a particular institutional experience
 - n = 1,158 interviews
- Ratings were about a recent residential stay
 - 33% contracted residential placements
 - 32% jail/prison settings
 - 21% state-run juvenile correctional facilities
 - 8% contracted residential placements with a MH focus
 - 5% drug/alcohol-focused placements
 - 1% other (psychiatric hospital, detention center)

Do institutional environments matter?

Approach

- Perceptions along eight dimensions of the institutional stay
- Assess if differences in these dimensions relate to subsequent community outcomes *in the year after release*
 - System involvement
 - Self reported antisocial activity
- Control for risk factors related to offending

Question 1:

Do institutional environments influence a youth's adjustment upon release?

Do institutional environments matter?

Findings

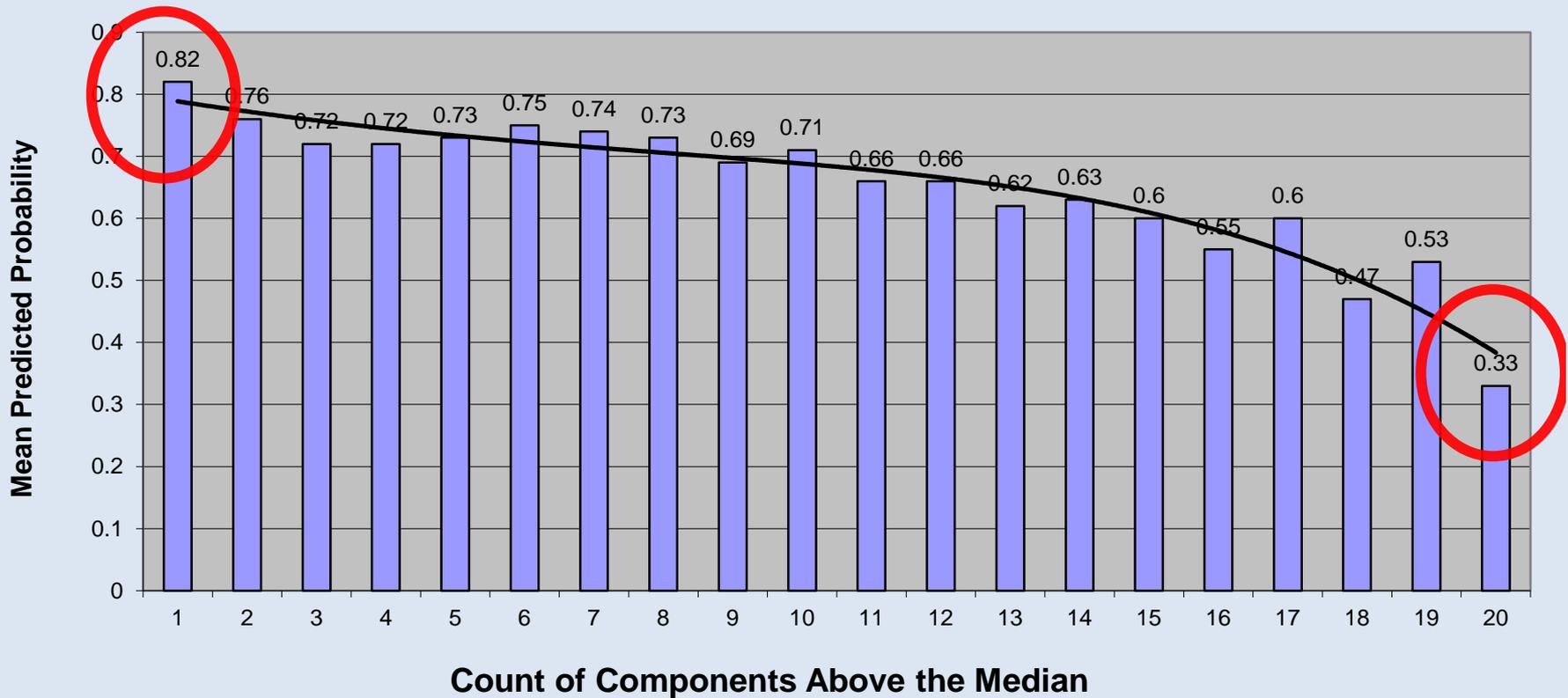
- Certain dimensions matter for certain outcomes
 - Services and re-entry planning significantly reduce the chances of later systems involvement.
 - Low harshness, fewer antisocial peers, and high institutional order decrease the probability of self-reported antisocial activity
- These relationships don't differ by facility type

Question 2:

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

Probability of outcome as number of overall positive perceptions increases

System Involvement Outcome



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

Conclusions regarding institutional environments

- Youth perceptions matter for outcomes in the subsequent year
- Areas with greatest payoff in terms of adolescent adjustment are addressable features of the institutional environment (e.g. staff behavior) and resource allocations (e.g. release counselor)
- Important to consider not only “what works” but the environment in which services are delivered

Pathways Findings: Take away messages

- Development happens and matters
- Drop off in offending is the common pattern
- Variability among even serious offenders
- Institutional placements
 - common
 - no significant reduction in re-arrest with placement itself or length of stay
 - individual perceptions of the experience matter
- Substance use treatment works but not accessed

Meeting the Juvenile Justice Challenge

Stolen from

Mark Lipsey, PhD
Vanderbilt University

Part 1.

Effective Use of Research to Meet the Juvenile Justice Challenge

The juvenile justice challenge

- A high proportion of adult offenders (70-80%) were prior juvenile offenders who appeared in the JJ system
- They were thus on a pathway to continued criminal behavior that effective JJ intervention might have interrupted

But, at the same time:

- A high proportion of the juveniles who come into the juvenile justice system (70-80%) are not on a path to adult crime; they are just afflicted with adolescence
- Over-involvement with the JJ system can make things worse for those juveniles

The juvenile justice challenge

So, the JJ system needs to be able to do three things—

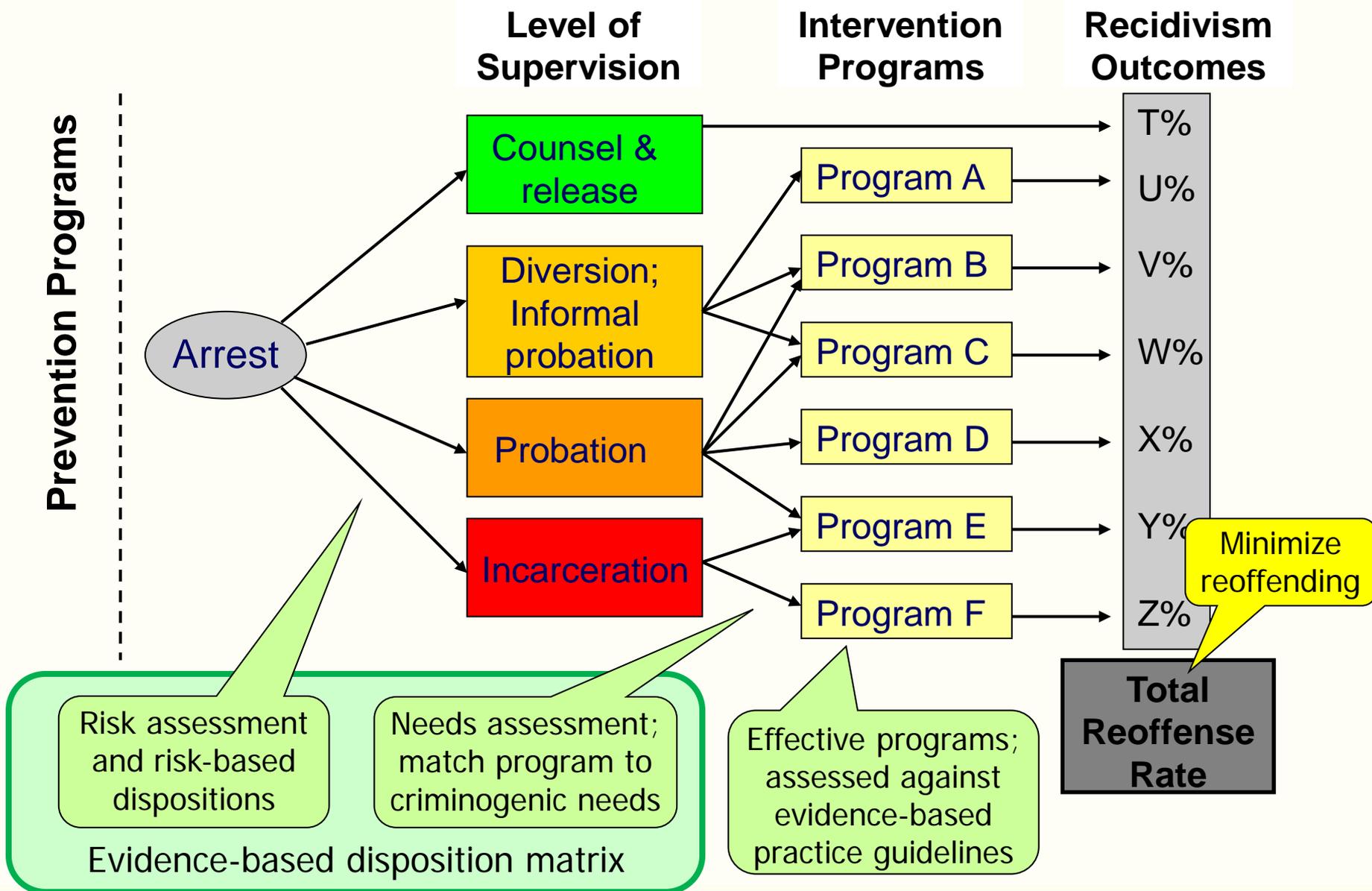
- *Distinguish youth at high risk for continued criminal behavior from those at low risk*
- *Administer supervision and treatment programs to the high risk youth that protect public safety and reduce their risk*
- *Do no harm to the youth at low risk*

And do all this in a consistent and sustained manner

Some research can help meet this challenge

- Longitudinal research on the developmental paths to criminality
 - Risk factors that predict the probability of criminal behavior
 - Static background factors & prior history
 - Dynamic factors that can be addressed to reduce the probability of criminal behavior (“criminogenic needs”)
- Evaluation research on the effects of intervention programs
 - Therapeutic programs that reduce reoffense rates
 - Programs that do not reduce reoffending and may increase it (punitive, disciplinary, deterrence oriented; transfer to CJ)

The evidence-based juvenile justice system



The essential platform for use of these tools: Well-developed data systems that track juvenile characteristics, service, and outcomes.

Part 2.

The Critical Component: Effective Evidence-Based Programs

The prevailing definition of an evidence-based program: A certified “model” program

The *program* part: A ‘brand name’ program,

- Functional Family Therapy (FFT)
- Multisystemic Therapy (MST)
- Big Brothers/Big Sisters mentoring
- Aggression Replacement Training (ART)

The *evidence-based* part: Credible, certified research supporting that specific program

- Blueprints for Violence Prevention
- OJJDP Model Programs Guide
- CrimeSolutions.gov
- NREPP (National Registry of EB Programs & Practices)

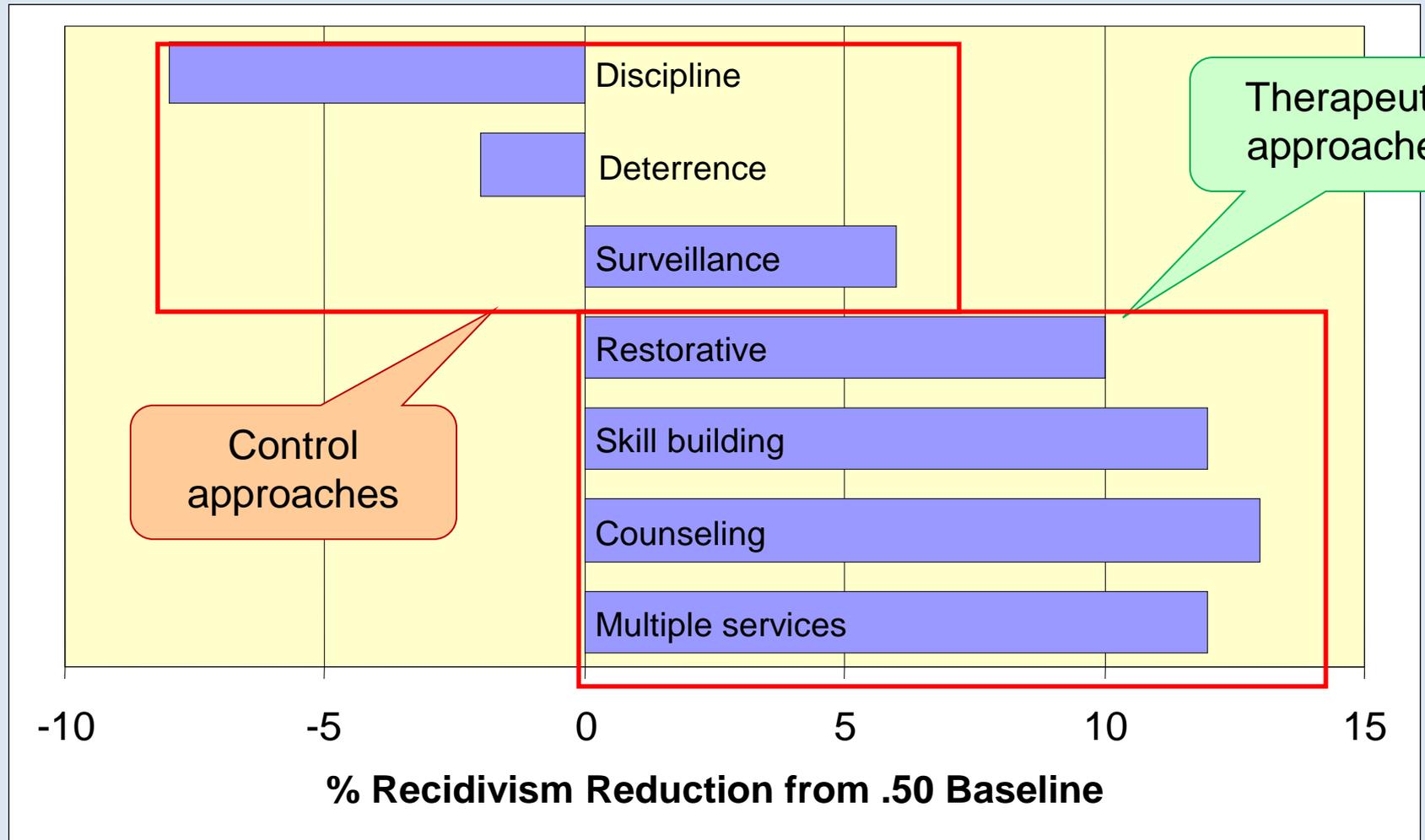
A broader perspective on EBPs: Evidence-based generic program “types”

- Interventions with research on effectiveness can be described by the types of programs they represent rather than their brand names, e.g.,
 - family therapy
 - mentoring
 - cognitive behavioral therapy
- These types include the brand name programs, but also many ‘home grown’ programs as well
- Viewed this way, there are many evidence-based program types familiar to practitioners

The evidence base

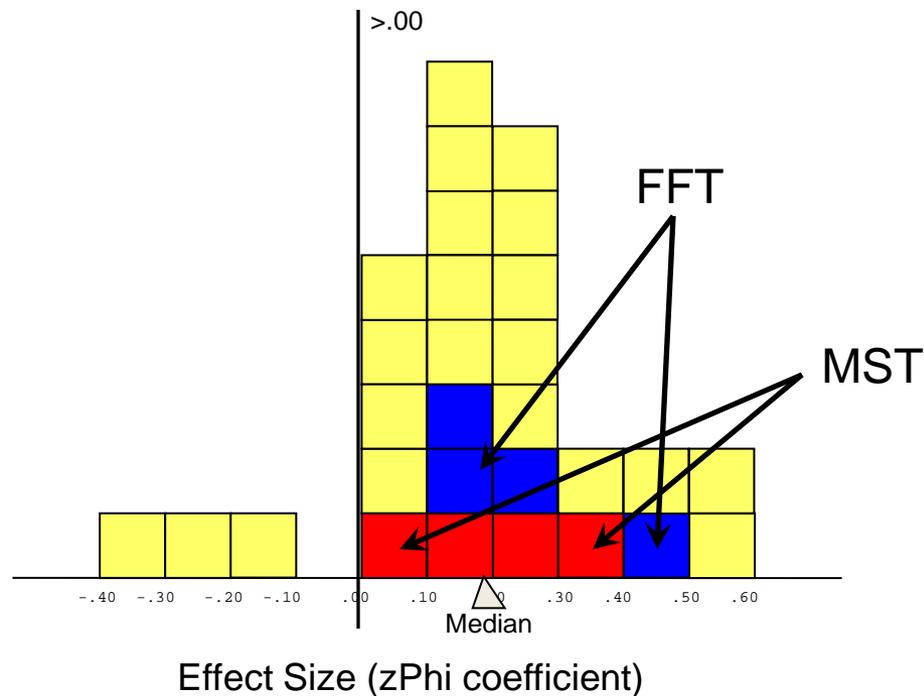
- A comprehensive collection of studies of interventions for juvenile offenders
 - 500+ controlled studies of interventions with juvenile offenders
- Meta-analyses of delinquency intervention research studies
 - Outcomes: Focus on the programs' effects on recidivism (reoffending)

Program types sorted by general approach: Average recidivism effect



Recidivism effects for generic and brand name family therapy programs

Family Interventions
Covariate-Adjusted Recidivism Effect Sizes (N=29)



Generic program types with sufficient research to support practice guidelines

- Cognitive-behavioral therapy
- Behavioral contracting; contingency management
- Social skills training
- Group counseling
- Family counseling; family crisis counseling
- Individual counseling
- Mentoring
- Challenge programs
- Victim-offender mediation
- Restitution; community service
- Remedial academic programs
- Job-related programs (vocational counseling, training)

Key characteristics of effective programs

- Use a “therapeutic” approach aimed at internalized behavior change (vs. external control, deterrence)
- Within a therapeutic category, some program types are more effective than others (e.g., CBT, mentoring, family therapy)
- For a given program type, service must be delivered in adequate amounts and quality (dose)
- The more effective programs have an explicit treatment protocol and procedures for monitoring adherence
- Effects are largest with high risk cases

Main takeaway points regarding program improvement

- **Limited amount of the available information for improving the performance of JJ systems is currently being used**
- **Structured assessment and decision-making tools are the vehicles for getting research evidence into routine sustained practice**
- **The critical component for reducing recidivism is evidence-based programs monitored for quality**
- **The evidence base for programs supports both name-brand model programs and no-name generic types of programs**

Thank You

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www.pathwaysstudy.pitt.edu