ADVANCING FROM THE "WHAT WORKS" TO "HOW TO MAKE IT WORK": APPLICATIONS OF IMPLEMENTATION SCIENCE TO JUSTICE SUPERVISION
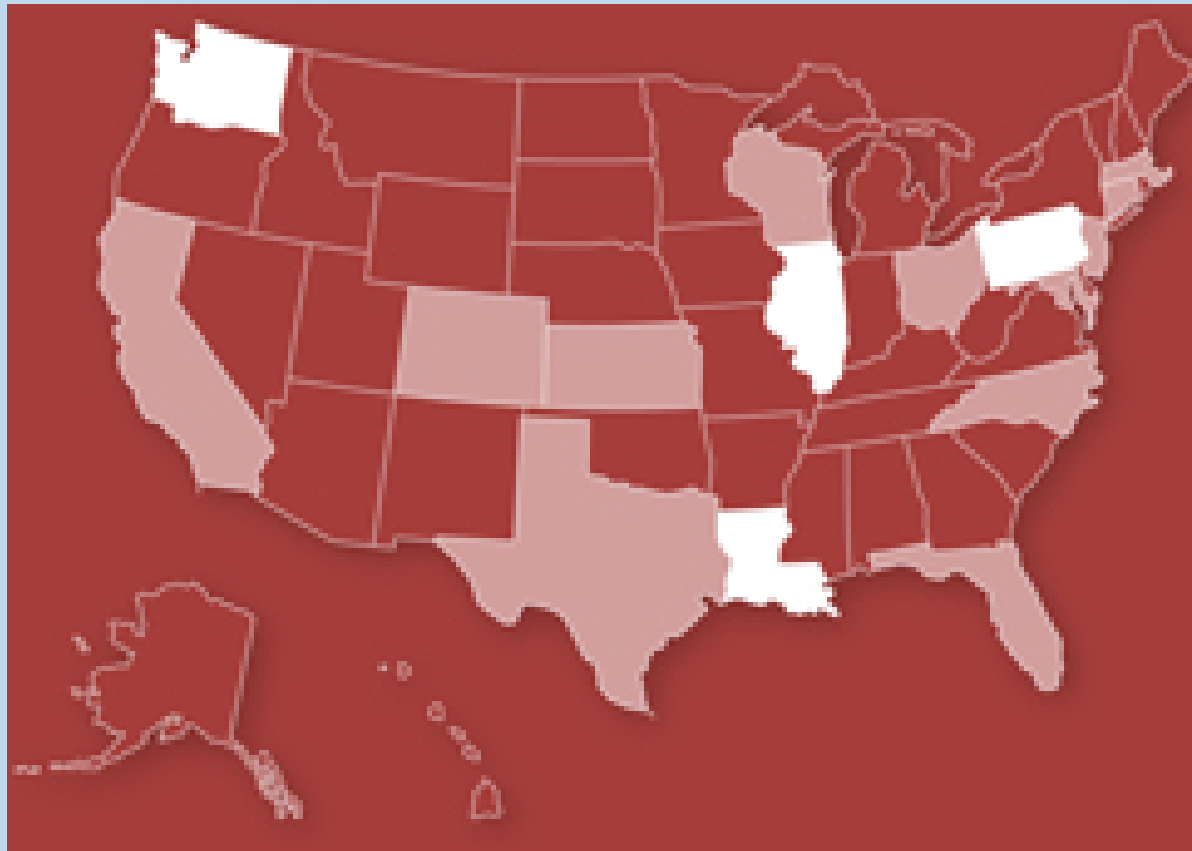
Gina M. Vincent, PhD

Associate Professor, Co-Director Law & Psychiatry Program

University of Massachusetts Medical School

U.S. Juvenile Justice Systems Reform Models for Change Initiative (2006-2016)
John D. and Catherine T. MacArthur Foundation

-4 primary states
-12 network states

Assisted by a "national resource bank" of technical assistance centers

National Youth Screening & Assessment Project (NYSAP)

Risk Assessment Instruments in Juvenile Justice

Terrific idea! But is adoption of risk instruments actually leading to any change in the way youth are handled?

Outline

- What is Implementation Science?

- How Can This Apply to Our Work and Our Research in Forensic Settings?
  - *Example: Risk Assessment & Risk-Need-Responsivity in Juvenile Probation Studies*

- Three Key Recommendations for Researchers

WHAT IS IMPLEMENTATION SCIENCE?

What is Implementation Science?

- **Implementation** = a specified set of activities designed to put into practice an activity or program of known dimensions (Fixsen et al., 2005)

- **Implementation science** = research that supports the use of innovations; studies of how well a new practice or activity was implemented. Examples (Proctor et al., 2011):

  - *Implementation outcomes – acceptability, feasibility, implementation & intervention/ instrument fidelity, costs, & sustainability*

  - *Service outcomes (efficacy or impact)– effectiveness, efficiency, equity*

  - *Client outcomes (efficacy or impact) – functioning, symptoms, satisfaction*

Implementation Frameworks:
Many exist

Active Implementation Frameworks
Fixsen, Blasé, & Van Dyke (2019)

Foundational Issues

■ It requires about **2 to 4 full years** for adoption of a new practice to become fully operational and have an impact on the recipient of services (e.g., Barrett, Bradshaw, & Lewis-Palmer, 2008; Fixsen et al., 2005; Goldstein, 2011)

■ Training is necessary, but alone is insufficient. It increases knowledge but, in isolation, it does nothing to change practice.

■ Decades of evidence from studies in human service areas shows that only about 5-15% of attempts to use new innovations (or EBPs) will succeed in the absence of purposeful implementation supports.

Active Implementation Frameworks

HOW DO WE APPLY IT TO OUR WORK?

Example from Juvenile Justice Reform: Implementation of Risk/Needs Assessment and Risk-Need-Responsivity

Recommendations For Juvenile Justice Reform & Preventing Youth Reoffending

National Research Council of the National Academy of Sciences (2013). *Reforming Juvenile Justice: A Developmental Approach*

- Use structured risk and need assessment instruments to identify low-risk youths who can be handled less formally in community-based settings, to match youths with specialized treatment, and to target more intensive and expensive interventions toward high-risk youths.
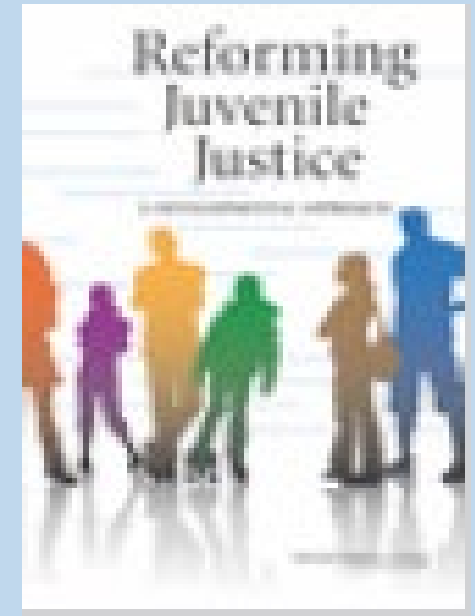
Risk-Need-Responsivity

Risk Assessment Must be Paired With Practices that Promote Risk-Needs-Responsivity (RNR)

The "Who"

Risk Principle

Match the intensity of the intervention with one's level of risk for re-offending

The "What"

Need Principle

Target dynamic or changeable risk factors and only those factors (*criminogenic needs*)

The "How"

Responsivity Principle

Match the mode & strategies of services with the individual

'How much to do'

''What to do'

'How to do it'

Evidence-Based Practice: RNR Effect Sizes k > 370

Recidivism from Human Service Programs for Probation Samples

Decrease

Recidivism Effect Sizes

40

30

20

10

0

-10

Increase

No RNR   1 Principle   2 Principles   All 3 Principles

# of RNR Principles Followed
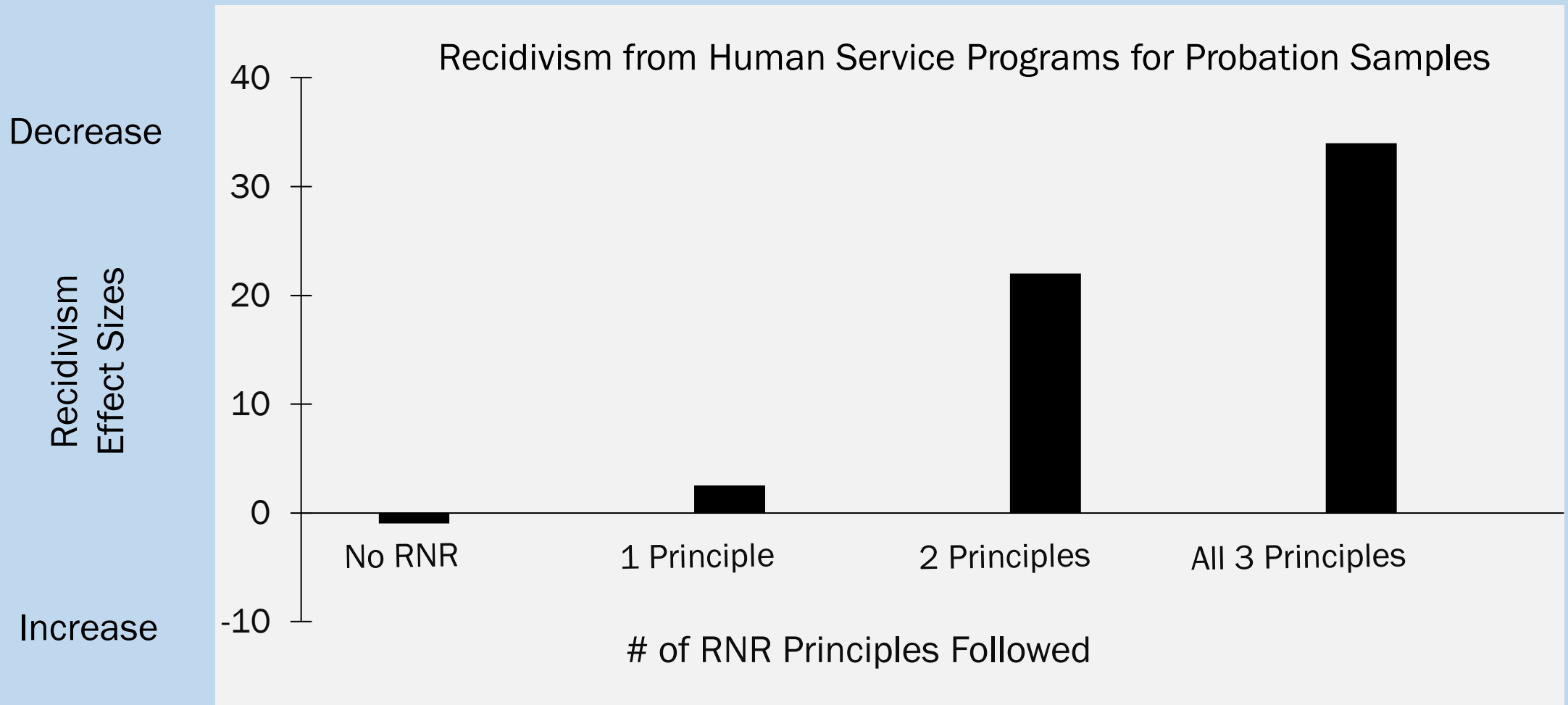
# of studies (k) = 374 ; ES = .56

(Andrews & Bonta, 2010)

IMPORTANCE OF QUALITY IMPLEMENTATION

Risk Assessment in Juvenile Justice: A Guidebook for Implementation

Gina M. Vincent, Ph.D.
Laura S. Guy, Ph.D.
Thomas Grisso, Ph.D.
National Youth Screening & Assessment Project

ModelsforChange
Systems Reform in Juvenile Justice
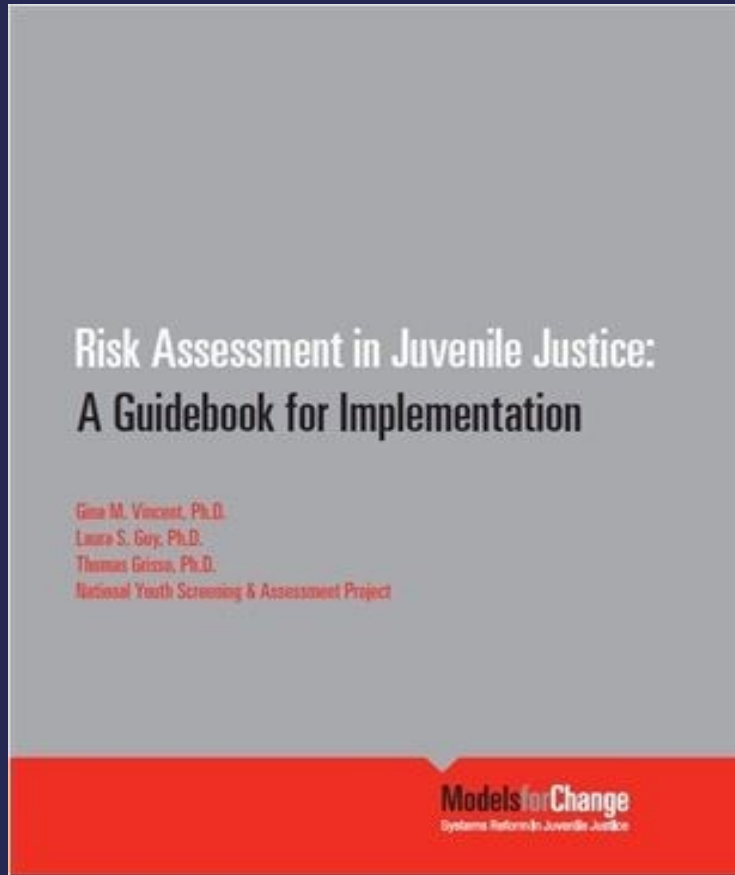
8 Steps to Implementation

1. Getting ready
2. Establish buy-in
3. Select tool
4. Develop policies
5. Training
6. Pilot test
7. Full implementation
8. Sustainability/Data

Vincent, Guy, & Grisso (2012) Funded by MacArthur Foundation

MacArthur Foundation

ModelsforChange
Systems Reform in Juvenile Justice

Four Studies
5 States & 12 "Experimental" Jurisdictions

- *Risk/Needs Assessment in Juvenile Probation: Implementation Study (PI: Vincent, Guy, & Grisso) – LA & PA; Pre-post quasi-experimental design*

Gui*de Validation Studies*

- *Risk Assessment and Mental health Screening Among Youth (RAMSAY; MacArthur & OJJDP) - MS; Matched control group design*
  - Guy, Perrault, Grisso, & Vincent (2015)
- *Risk Assessment and Behavioral health Screening (RABS; MacArthur & OJJDP) – AR & RI; Pre-post quasi-experimental design*
  - Vincent, Perrault, & Grisso (2018)

Sustainability over 7-years

- *Risk-Need-Responsivity Long-Term Sustainability and Cost-Effectiveness Study – PA & LA; Pre-post quasi-experimental design (OJJDP)*
  - Vincent, Drawbridge, & Perrault (2020)

Implementation Process

What was implemented?
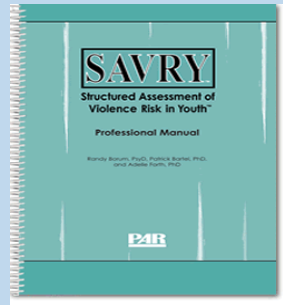
RNR-Based policies & case planning

Implementation Process

Policies & Procedures for Administration

Integration into Electronic
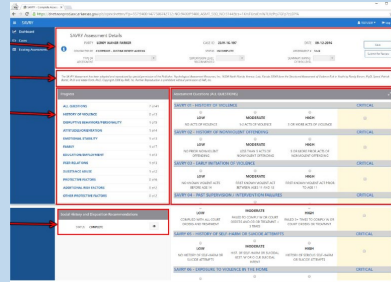
RNR-related Policies for Use in Disposition Recommendations & Case Planning

Staff Training on instrument policy & procedures
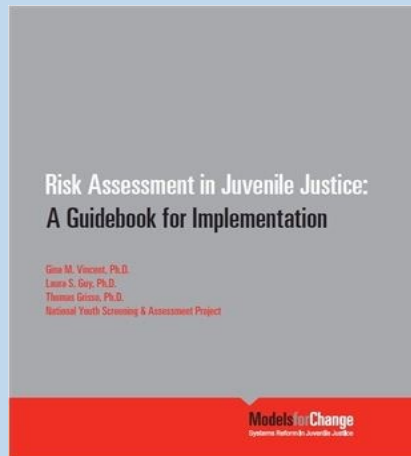
Training in RNR & Case Planning

Service Matrix

Disposition recs template

Case plan aligned

General Designs: Pre-Post Quasi-Experimental Design
multiple probation offices per state, staggered start
Propensity-matched

Pre-RNA sample

Tracking (min 1yr)

MONTHS

-11 -9 -7 -5 -3 -1 X 1 3 5 7 9 11 13 15 17 19 21

No Data Collection

Post SAVRY/YLS sample

1 site in each state was selected based on having relatively low placement rates

Probation officer & administrator interviews

Tracking (min 1yr prospective)
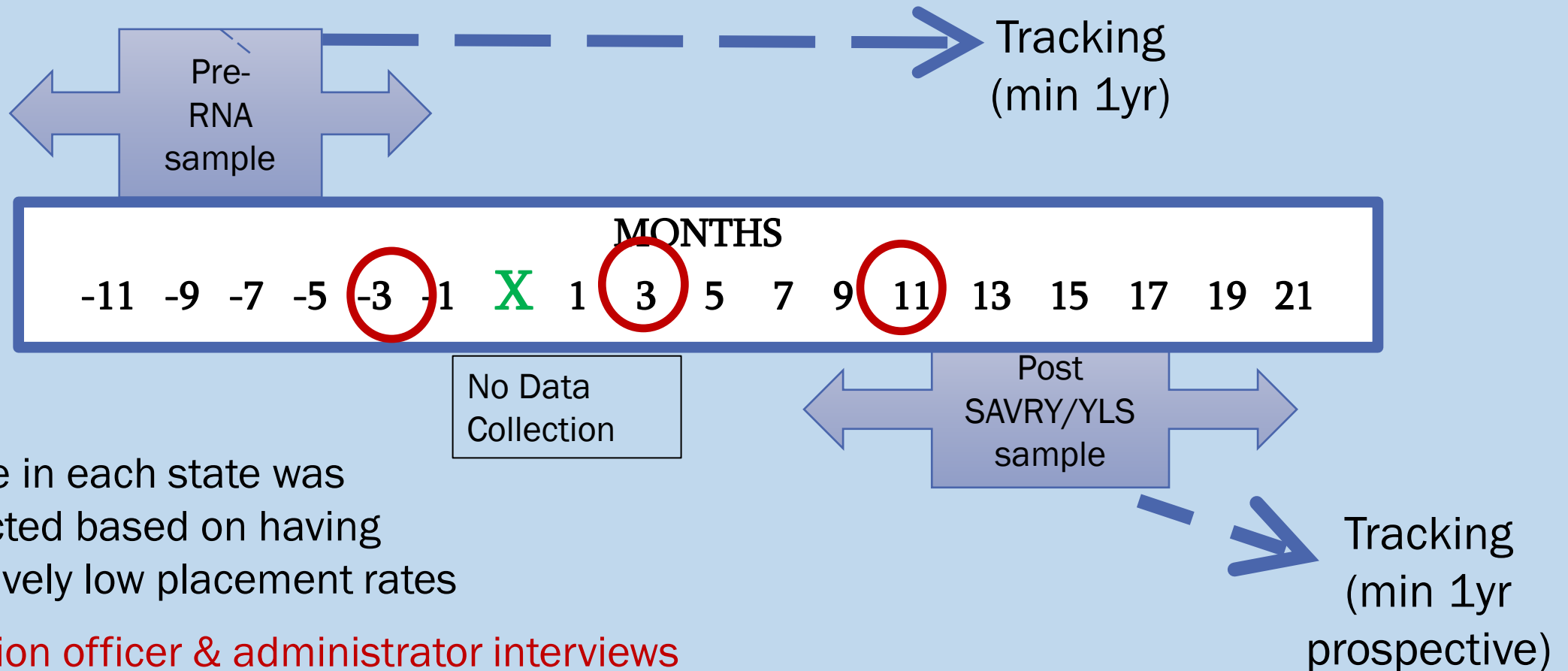
IMPLEMENTATION LEVEL OUTCOMES

Providing Data from Risk-Needs Assessment

in Juvenile Probation Study (1st Study;

Vincent et al., 2016)

Useability: Use of Risk Assessment in Decisions

Legend:
- Post 1 (n=72)
- Post 2 (n = 70)

Categories: Placements diff by risk, Services diff by risk, Risk for dispo, Risk for services, Risk for supervision
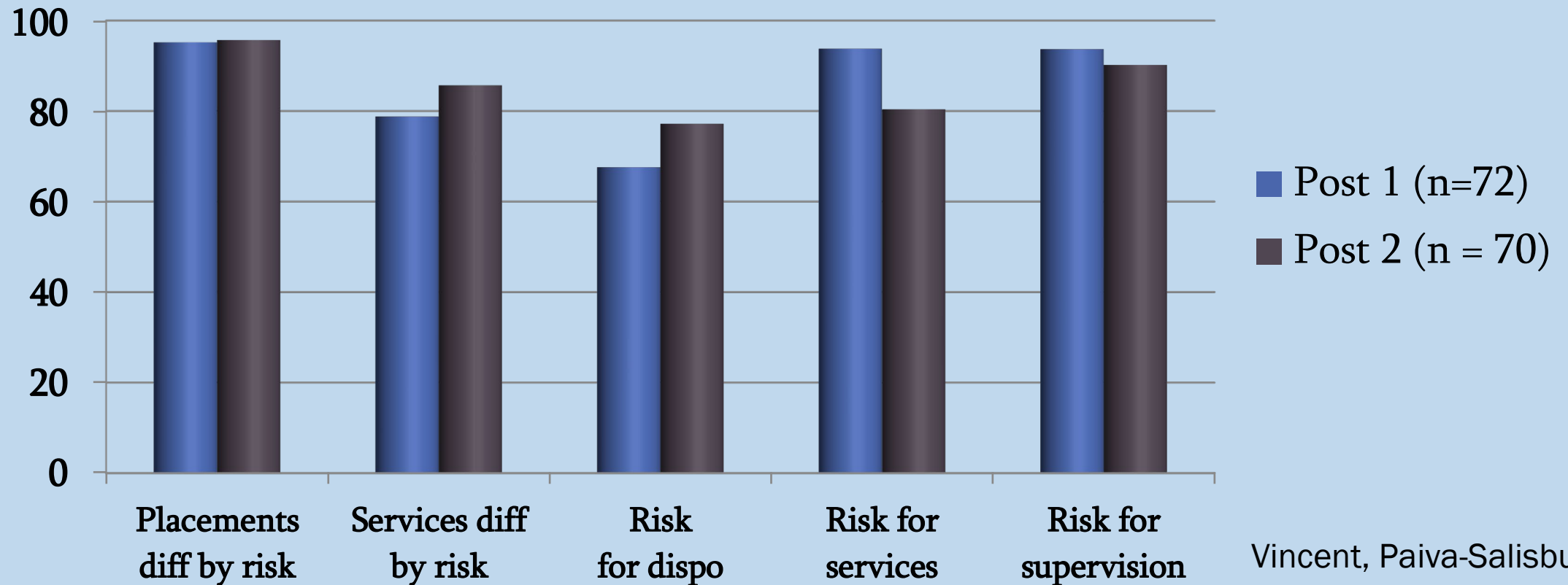
Vincent, Paiva-Salisbury, Cook, Guy, & Perrault (2012)

Adherence – Do They Follow RNR Procedures With Fidelity?

"What Information Best Informs Your **Service** Referrals?"
Areas of Greatest Change (Qualitative)

Legend:
- Pre-Test n=70
- 3 Mth, n=72
- 10 Mth, n=73

Categories: Fit Between Needs & Referral, Resource Availability, Parent Characerics, School Performance
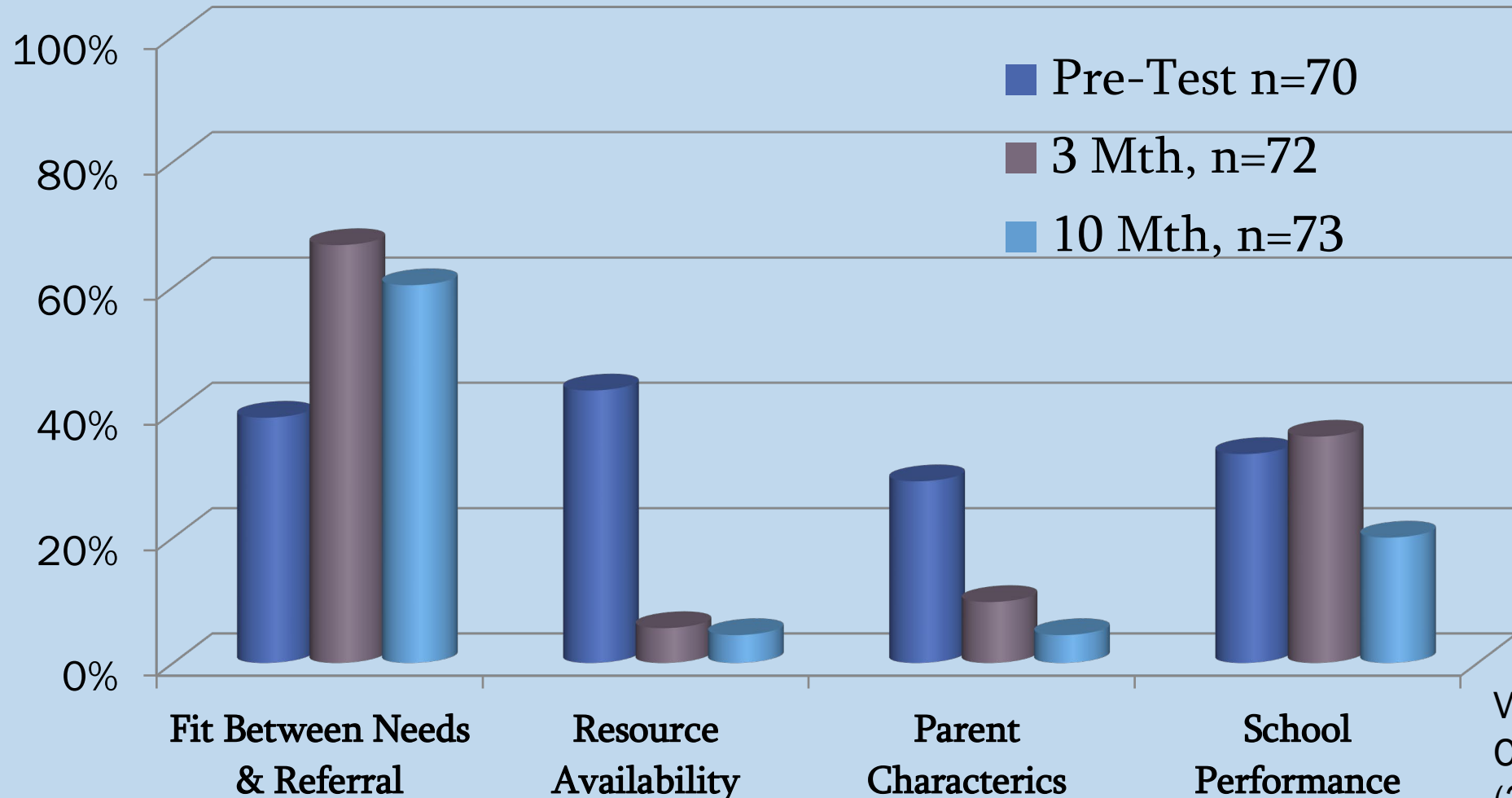
Vincent, Paiva-Salisbury, Cook, Guy, & Perrault (2012)

Change in Probation Officer Perceptions of Youth: What Percentage of Youth on Your Caseload to You Think Will Reoffend?
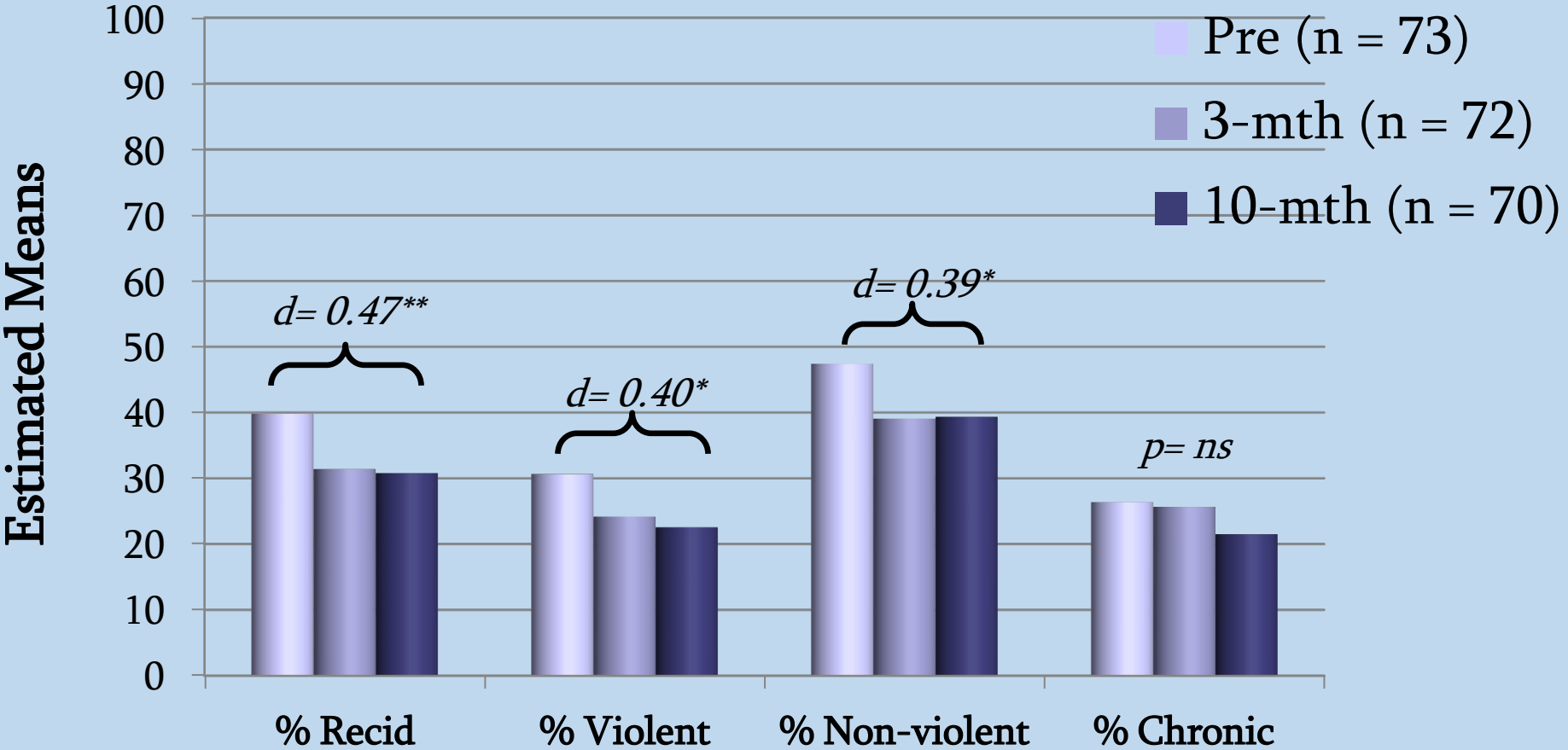
Note. Cohen's *d*: .2=small, .5=medium, .8=large.

Vincent, Paiva-Salisbury, Cook, Guy, & Perrault (2012)

Instrument Fidelity: PO Inter-rater Reliability & Validity

SAVRYs in the Field - ICC$_1$ (n = 80 youth)
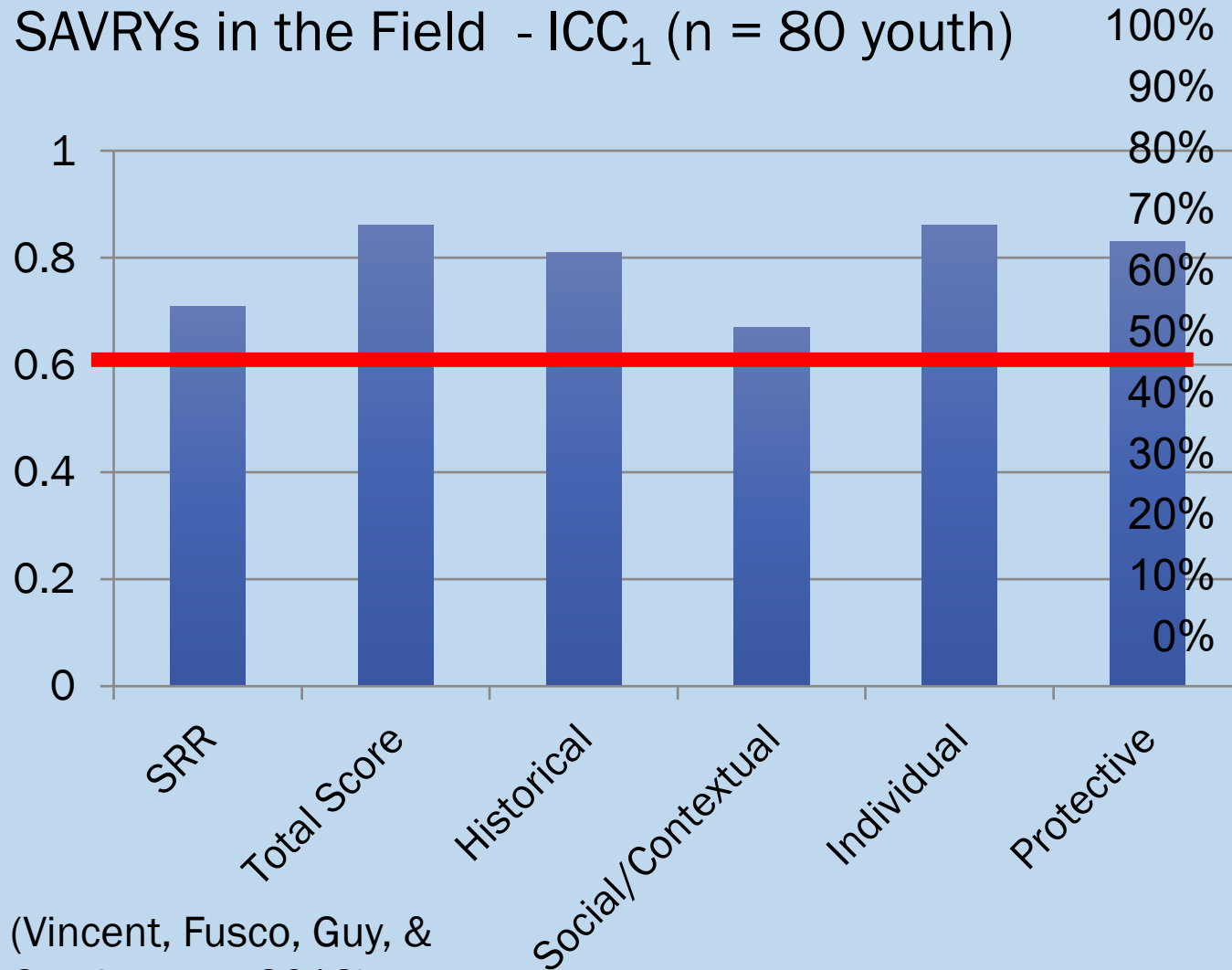
Predictive Validity over 602 days

Low (n=194)
Moderate (n=188)
High (n=73)

p < .001

Any petition
$n = 97$

Violent petition
$n = 38$

(Vincent, Fusco, Guy, & Gershenson, 2012)

Cox Regressions:
Any petition - Exp(B) = 1.83***
Violent petitions - Exp(B) = 1.96**

Adherence to Administering the Risk Assessment

LA	N Youth	RNA Completed	RNA Completed At Right Time
Site 1	217	90.0%	82.5%
Site 2	105	82.6%	57.3%
Site 3	130	95.4%	80.0%
PA			
Site 1	232	86.0%	68.8%
Site 2	116	NA*	NA
Site 3	231	37.0%	28.7%

Conclusion:
Need an adherence rate of at least 85% for strong intervention-level outcomes

(Vincent, Guy, Perrault, & Gershenson, 2016)

Really poor

*Partial implementation – YLS conducted with subset of youth

IMPACTS:
CHANGES IN SYSTEM & YOUTH OUTCOMES AFTER 1.5 YEARS

- Disposition   -Recidivism
- Out-of-home placement
- Supervision level
- Service allocation

Guy et al., 2015, Vincent et al., 2016;
Vincent & Perrault, 2018

What Impacts <u>Should</u> We See?

<u>System Outcomes</u>

- Decreased rates of formal processing   Yes, but depends

- Improved resource allocation for supervision & services   Yes

- Less youth in out-of-home placements   Depends

- Matching services to needs (individualized case planning)   Still working on it

<u>Youth Outcomes</u>

- Protecting public safety (e.g., recidivism)   Inconsistent

(Viljoen, Cochrane, & Johnson, 2018; Vincent, Sullivan, et al., 2018)

Were There Reductions in Rates of Severe Dispositions?

Pre-adjudication assessment
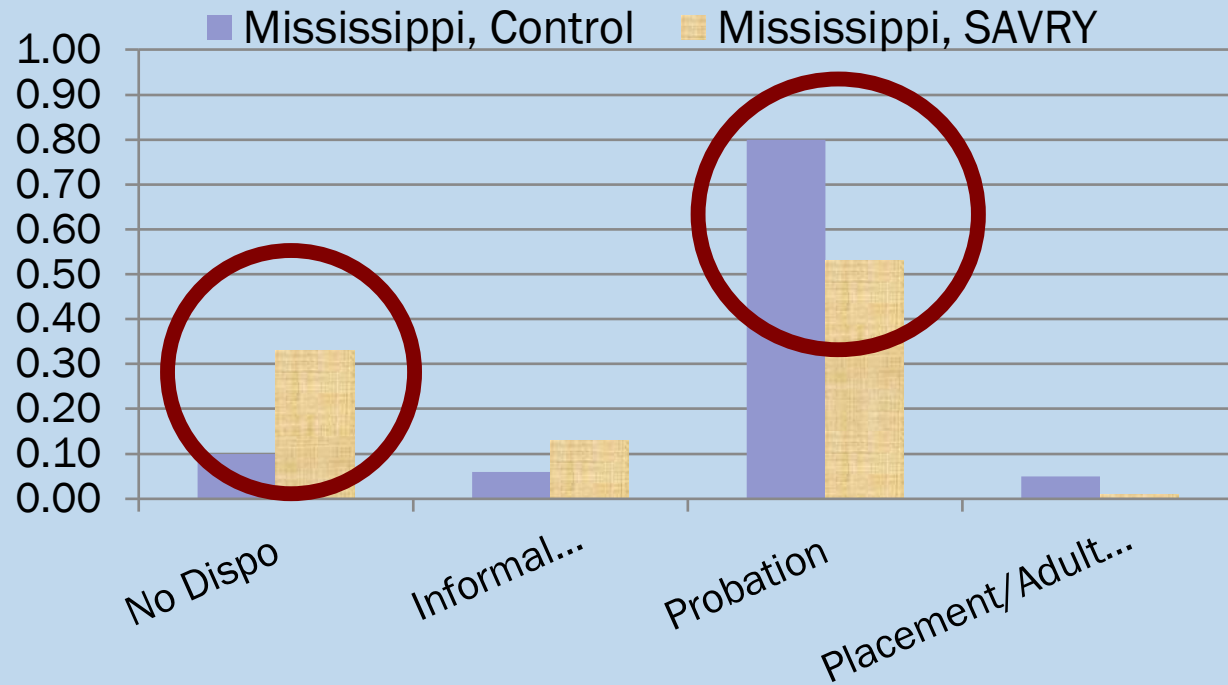
Every jurisdiction with good adherence to administration policy & other implementation-outcomes had a significant reduction in severity of dispositions (7 out of 12)

Post-adj/pre-disposition
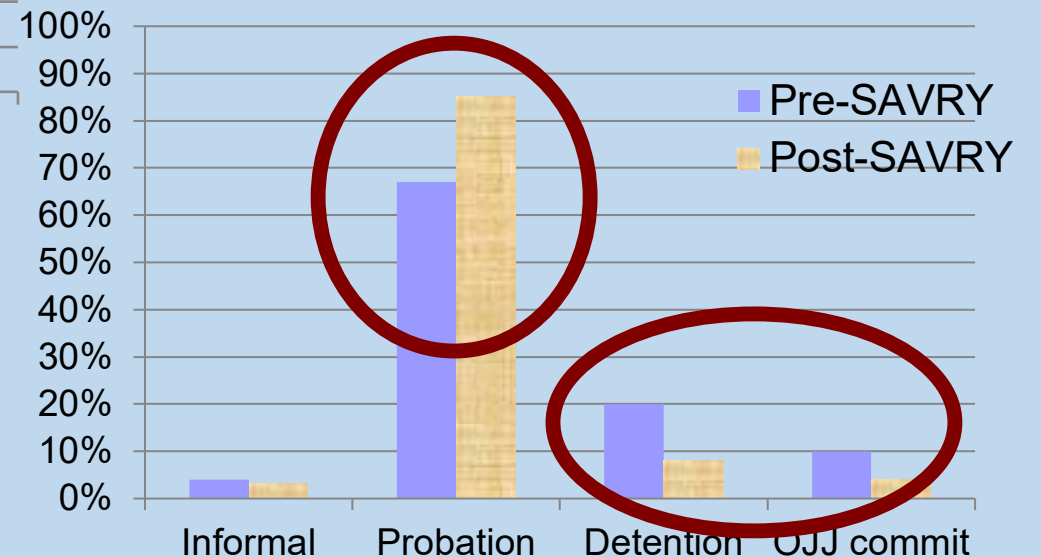
(Guy et al., 2015, Vincent et al., 2016; Vincent & Perrault, 2018)

Were There Reductions in Use of Out-of-Home Placements?

Chart title legend: ■ Pre-SAVRY ■ Post-SAVRY

Y-axis: 0% to 100%

OR = 0.56 (Any placement during probation)
OR = 0.37 (Placed after disposition)

X-axis categories: Any placement during probation | Placed after disposition
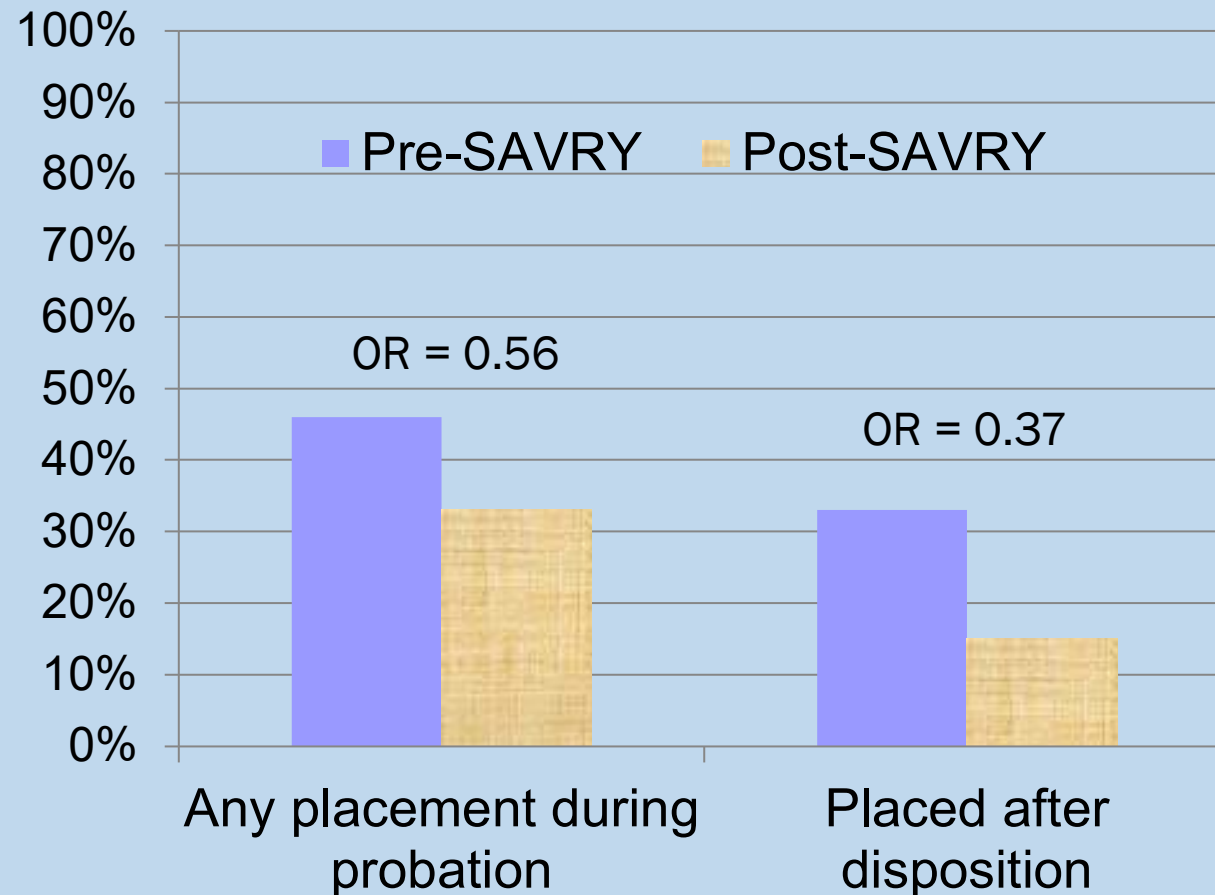
Significant reductions **in only 2** out of 12 offices but decisions significantly related to risk

2 offices with initially low rated (around 20%) increased

Conclusion: Rate does not seem to get below 30% even when implementation was strong but LOS reduces

(Guy et al., 2015, Vincent et al., 2016; Vincent & Perrault, 2018)

Was There Improved Resource Allocation: Services?
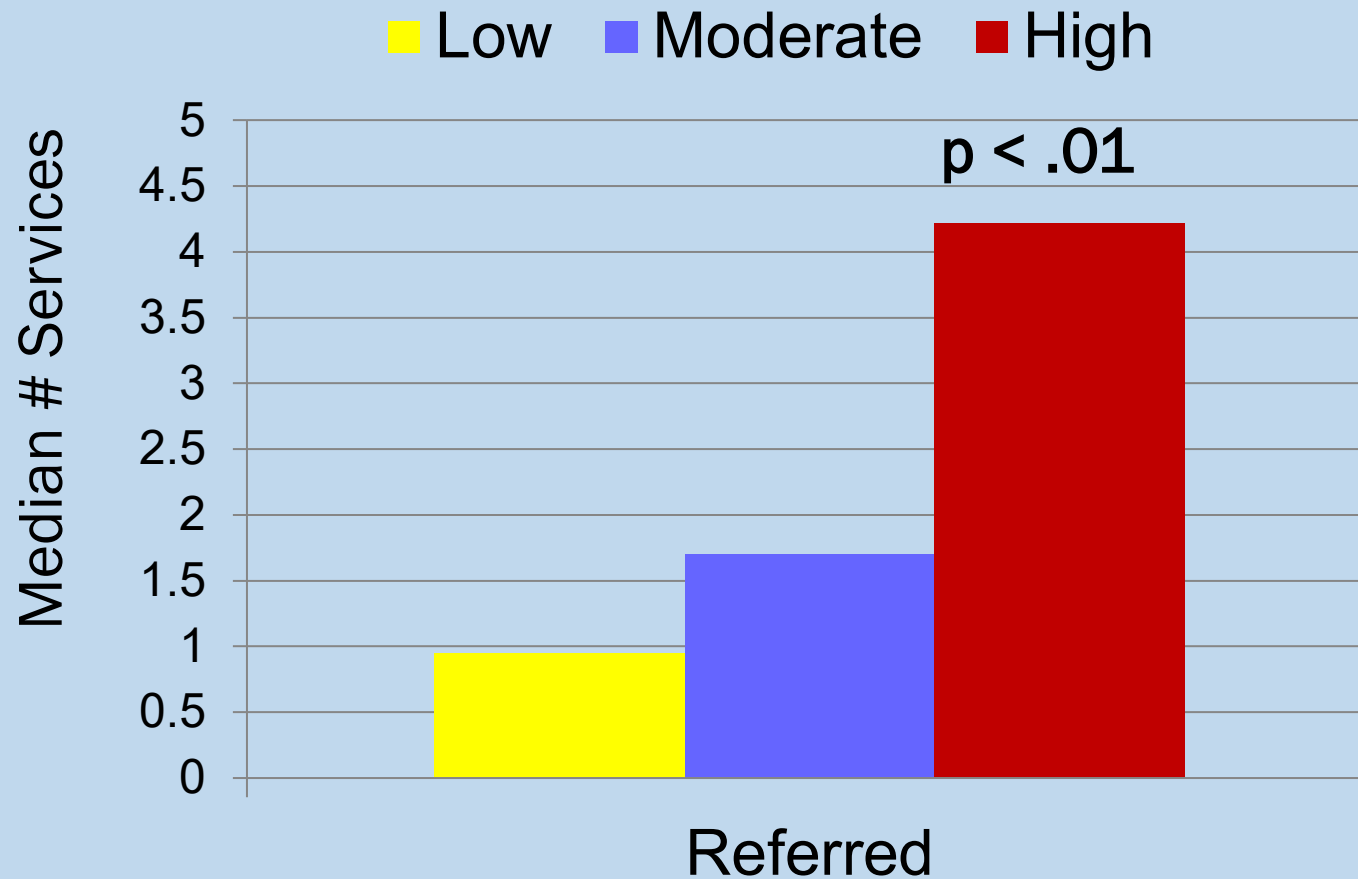
# of services referred or received significantly related to risk level in all offices with good implementation (10 out of 13)

(Guy et al., 2015, Vincent et al., 2016; Vincent & Perrault, 2018)

Improved Resource Allocation: Amount of Supervision?
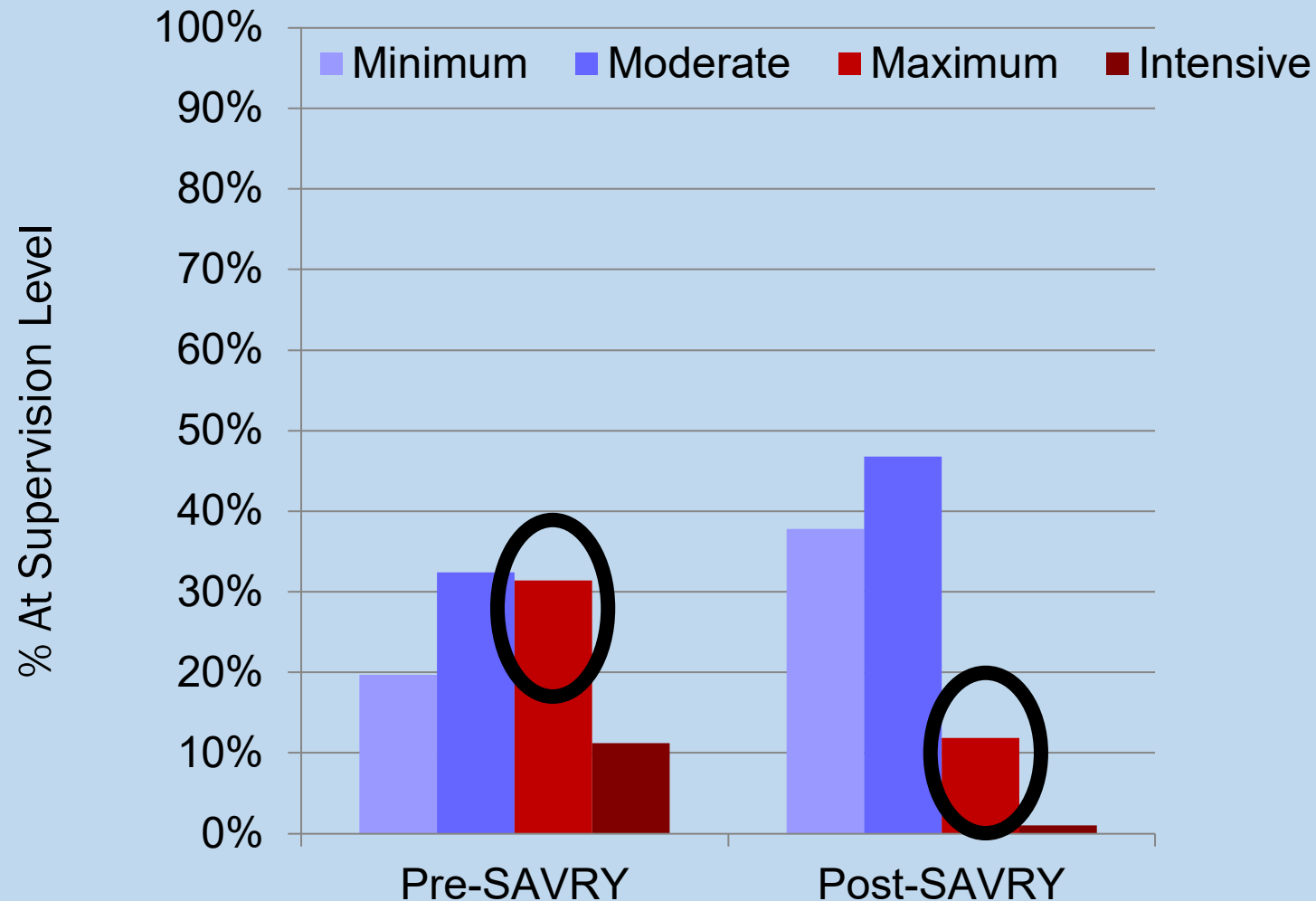
Reductions in the average amount of supervision contacts is a consistent result

(Guy et al., 2015, Vincent et al., 2016; Vincent & Perrault, 2018)

Recidivism Reduction (*New Petitions*) in Only 2 Out of 12 Jurisdictions

Chart legend: ■ Pre-YLS ■ Post-YLS

Bars with annotations: Non-Violent OR = .48; Violent OR = .47; Violations OR = .42

Hypothesis: It takes up to 3 years for these outcomes to be realized (Flores et al., 2006); requires strong matching, supervision, and quality services
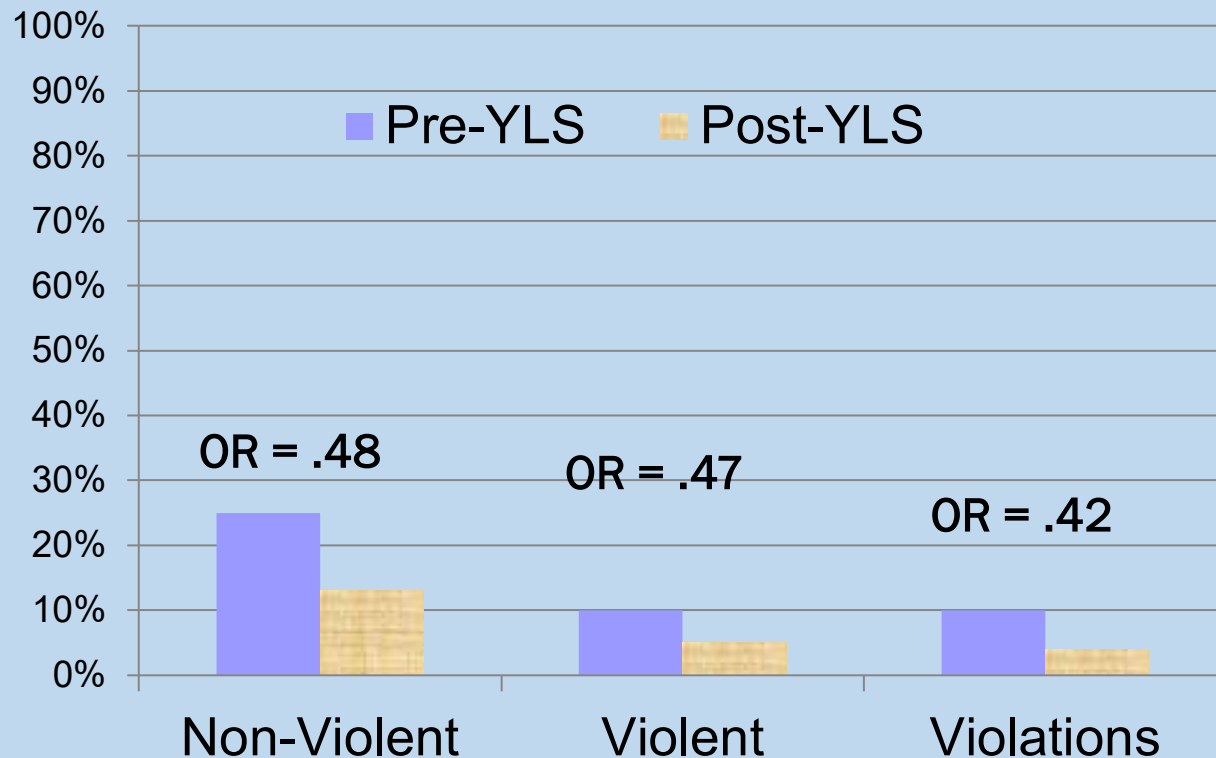
NO jurisdiction had an increase in recidivism

Secrets to Success in first 1.5 years:
- Strong court engagement
- Top-notch leadership & supervision
- Well resourced

(Guy et al., 2015, Vincent et al., 2016; Vincent & Perrault, 2018)

Conclusions About Implementation of RNAs & RNR

- Over the course of approximately 1.5 years:
  - *Good implementers had at least 3 significant & positive system impacts*
  - *Poor implementers (4 sites) had little to no change*
  - *Significant recidivism reduction - only happened this quickly for exceptional implementers*

- On average, what was the impact of implementing a risk assessment system?
  - *More youth stayed in the community with less supervision, less resources were being used, and there was no increased risk to public safety*
  - *The nature of the impact depends on ….*
    - Implementation quality
    - Site practices at baseline

Biggest Barriers to Achieving Strong Implementation & Later Positive Impacts

- Lack of Buy-in from Key Stakeholders (Judges)–
  - *Completion of RNA <u>Pre-</u>disposition is essential in many jurisdictions in the U.S.*
- Poor implementation & Lack of Feasibility
  - *Do not train staff on the risk assessment prior to creating an 'enabling' context for RNR (e.g., appropriate P&Ps, templates)*
  - *Alignment with data management systems essential*
  - *Systemic obstacles*
- <u>Must have strong supervisors and a coaching model</u>
- Impacts to recidivism require more time & effective services

THREE SUGGESTIONS FOR RESEARCHERS

Researcher-Engaged Implementation Over 'Passive-Observer'

U.S. Department of Justice
Office of Justice Programs
Office of Juvenile Justice and Delinquen

December 2018

From the Administrator

Juvenile justice practitioners often use standardized risk and needs assessments to help gauge a youth's risk of reoffending and identify factors that, if addressed, can reduce the risk of recidivism. In addition, these professionals rely on assessment findings while they develop treatment and service plans to appropriately target a youth's individual needs and promote the best

Bridging Research and Practice

A Handbook for Implementing Research-Informed Practices in Juvenile Probation

Samantha Harvell, Teresa Derrick-Mills, Chloe Warnberg,
Megan Russo, Constance Hull, Andreea Matei

With Mary K. Winkler, Hanna Love, Janeen Buck Willison, Akiva Liberman

September 2019

Always Assess or Report the Implementation Approach Prior to Evaluating Impact

■ Rather than say 'it doesn't work', ask 'why' and 'where' it doesn't work

- *Remember minimum 3 years from implementation to impact*

WILEY

Introduction to this Special Issue on implementing evidence-based practices in forensic settings

Gina M. Vincent

Implementation Science & Practice Advances Center, Department of Psychiatry, University of Massachusetts Medical School, Worcester, Massachusetts, USA

Correspondence
Gina Vincent, University of Massachusetts Medical School, Worcester, MA, USA.
Email: Gina.Vincent@umassmed.edu

1 | INTRODUCTION

For decades, research related to forensic psychology, criminology and other areas of the justice system has made a significant and invaluable contribution to the practice of working with individuals who have come into contact with the law. This work has spanned all decision points in the criminal and juvenile justice systems, from various pretrial stages (e.g., how to evaluate a person's competency to stand trial; how to select a jury or to improve the memory of witnesses) to re-entry (e.g., release decisions and risk management in the community). The contributions have been numerous, including the creation of well-validated specialized assessment instruments for forensic decisions (e.g., Douglas, Hart, Webster, & Belfrage, 2013; Rogers, Tillbrook, & Sewell, 2004), development and validation of approaches to case and risk management (e.g., risk–need–responsivity; Andrews & Bonta, 2010), and development or validation of evidence-based treatment models (see Blueprints for Healthy Youth Development, https://www.blueprintsprograms.org).

Where the field has not been so strong is in the study of effective implementation of these approaches. Implementation generally refers to a specified set of activities designed to put a practice or program into place (Fixsen, Naoom, Blasé, Friedman, & Wallace, 2005). Research has consistently shown that simply knowing "what works" is insufficient for achieving positive outcomes in the real world. The proper implementation of what works is critical. There are a number of factors that can influence use of an intervention in a real-world setting (Schillinger, 2010).

Implementation science developed as a method of putting an activity or program of known dimensions into practice (Fixsen et al., 2005). As a predicate, the activity or program – also referred to as an intervention or innovation – must be well-defined, scientifically sound, and shown to be effective in controlled research designs. At

LITERATURE REVIEW

Risk assessments for violence and reoffending: Implementation and impact on risk management

Jodi L. Viljoen ✉, Gina M. Vincent

Read the full text >

PDF   TOOLS   SHARE

Abstract

Risk assessment instruments for violence and reoffending are widely used throughout the world. According to researchers, there are many different reasons to use these instruments; for instance, they are thought to reduce violence, save money, and improve treatment planning. In this article, we create a taxonomy to classify these risk management outcomes into agency, professional practice, and evaluee domains. Through a review of research, we show that instruments do not always achieve their goals. First, agencies encounter problems in successfully implementing instruments. Second, a lack of follow through can occur between risk assessments and the subsequent phases of risk management, such as case planning and intervention delivery. By drawing from the field of implementation science, we create an agenda for research.

LOTS of Research on Effective Implementation of Risk Assessment is Needed!!!