Innovative Research Approaches in Elder Abuse: Evaluation

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USC Tamkin Symposium Presentation

September 16, 2016

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Overview

- Background

- Review of Prevention and Intervention Research

- Evaluation Design Options
  - RCTs
  - Non-randomized options

- NIJ 2016 Elder Abuse Prevention Demonstration
  - Solicitation overview
  - Award announcement

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"Where We've Failed Miserably: Evidence based treatment and prevention strategies"

- A very wise man Karl Pillemer (September 15, 2016)

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Background

- Brief history of NIJ's funding in elder mistreatment evaluation research through FY 2015.

    - 30+ funded projects between FY 2005 and FY 2015
    - 3 funded projects evaluating 2 Elder Abuse Forensic Centers
    - 0 funded preventive intervention evaluations

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Comparison to Other Fields Using CrimeSolutions.gov Program Registry

- 122 programs listed under Violent Crime (25 effective, 87 promising).

- 87 programs listed under Victims and Victimization (22 effective, 53 promising).

- 23 programs listed under Child Abuse and Maltreatment (6 effective, 15 promising).

- Nothing listed under Elder Mistreatment

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Comparison to Other Fields Using CrimeSolutions.gov Practice Profiles

- Domestic violence interventions for male perpetrators using the Duluth Model – 22 studies

- Psychotherapies for victims of sexual assault – 6 studies

- Cognitive Behavior Therapy for domestic violence offenders – 22 + studies

- Second responder programs – 10 studies

- Sexual Assault Nurse Examiner forensic exams – 6 studies

- Advocacy interventions for victims of domestic violence – 2 studies

- No practice profile for elder mistreatment or any elder mistreatment practice

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2016 Systematic Review of EA Interventions
Ayalon, Lev, Green, & Nevo (2016)

- 24 studies met the inclusion criteria

- Only 5 studies used any type of elder abuse as the outcome measure and only 1 of those included physical abuse

- International scope

- Studies were grouped into 3 categories
  - Interventions for professionals to detect or stop EM (2)
  - Interventions targeting older adults who experience EM (3)
  - Interventions targeting caregivers who mistreat older adults (19)

- 13 RCTs, 7 Quasi-experimental or comparison group designs, 4 pre-post designs

- 9 physical restraint studies that measured restraint as an outcome (pooled effect: -.24)

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2015 Integrated Review of EA Interventions

O'Donnell, Phelan, & Fealy (2015)

- 37 experimental studies for 34 separate interventions were reviewed and grouped by level of human ecology
- Quality of the research based on a 22 point scale
- Of the 34 interventions, 11 received at least a score of 12.
- Methods categorized as randomized or non-randomized
- No indication in the report of specific outcomes for each study

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2016 Cochrane Review
Interventions for Preventing Abuse in the Elderly
Baker, Francis, Hairi, Othman, & Yuen Choo (2016)

- Just published in mid-August.

- Includes RCTs, Quasi-experimental studies, pre-post studies with at least a 12 week follow-up period designed to prevent or reduce EA.

- Only 7 studies met the inclusion criteria.

- Few measured occurrence or reoccurrence of abuse.

- None reported unintended negative outcomes.

- The quality of the evidence was low.

- Authors concluded that there is inadequate evidence to assess the effects of elder abuse interventions.

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Rigorous Alternatives to Randomized Control Trials (RCTs)

- RCTs are preferable when they are ethically feasible
- Conditions favorable for non-randomized designs:
  - Intervention feasibility or acceptability is high
  - Little potential for harm
  - Effect sizes are large
  - Confounders are known and measured
  - There is evidence for a causal link between the intervention and the desired outcome(s)

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Rigorous Alternatives to RCTs: Propensity Score Matching

- PSM is a quasi-experimental design that estimates the difference in outcomes between program participants and non-participants that can be attributed to the program.

- PSM reduces selection bias by creating a comparison group that is similar to the treatment group using regression to constructing a propensity score from observed baseline variables.

- The propensity scores estimate the probability of participation in the program and are constructed from characteristics that may affect program participation.

Propensity Score Matching Example: LA Elder Abuse Forensic Center Evaluation
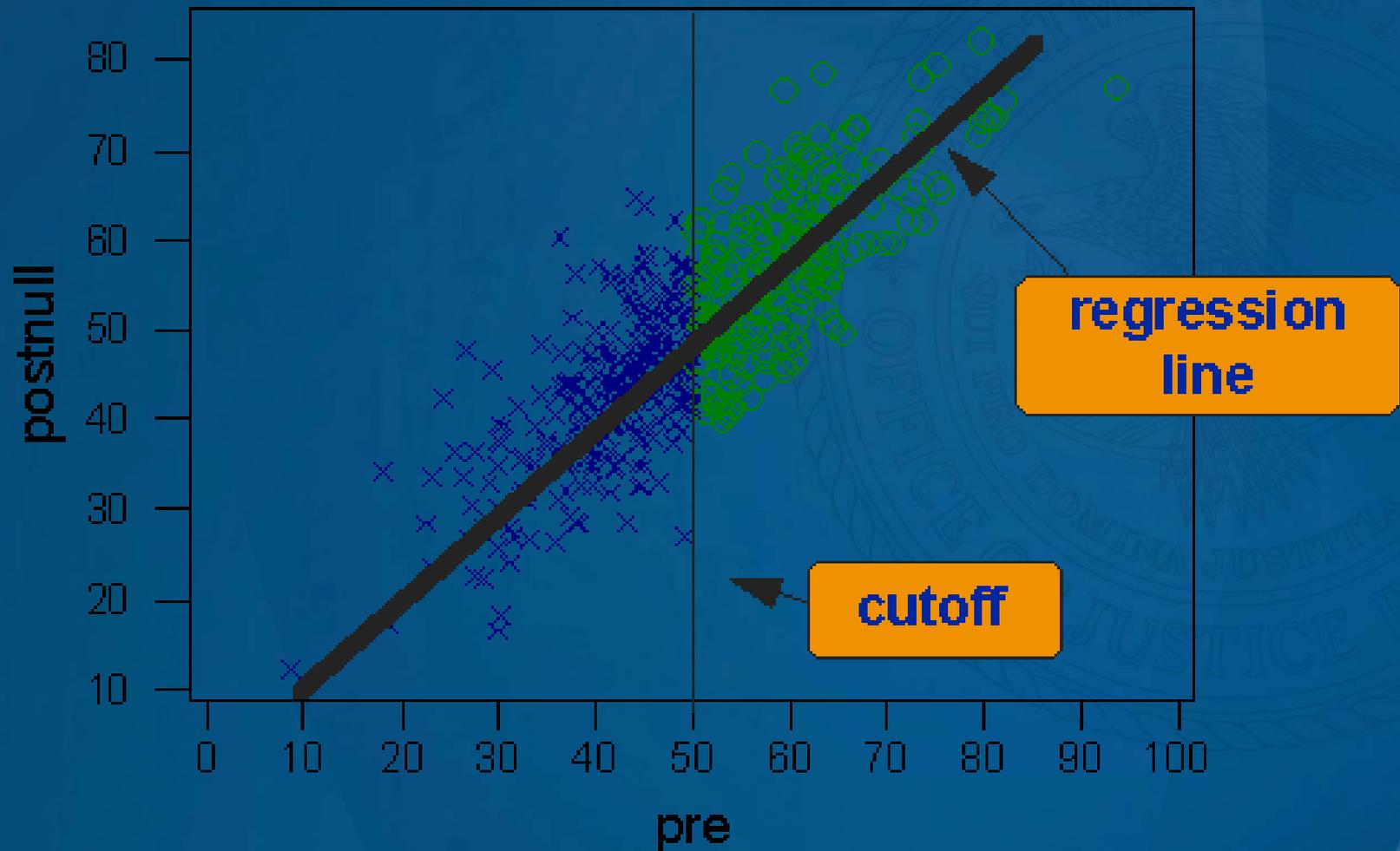
Navarro, A. E., Gassoumis, Z. D., & Wilber, K. H. (2013)

- Original design was RCT, but was modified due to organizational changes outside of the researchers' control.

- Revised design used PSM to compare cases that went to the LA EAFC (n=287) to similar APS cases (selected from 33,650 cases).

- Using available administrative data, cases were matched on age, race/ethnicity, APS office, number of abuse types reported and type of abuse.

- Findings: LA EAFC cases were significantly more likely to be submitted to the District Attorney's office.

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Rigorous Alternatives to RCTs: Regression Discontinuity

- Essentially this is a pre-test, post-test design where the participants are assigned to program or comparison groups based on a pre-program cut off score (e.g., risk for abuse score).

- Intervention is delivered only to those most as need as determined by the cut off score.

- Has been used more in education than in social sciences. It does not allow for judgment to override the cut off classification.
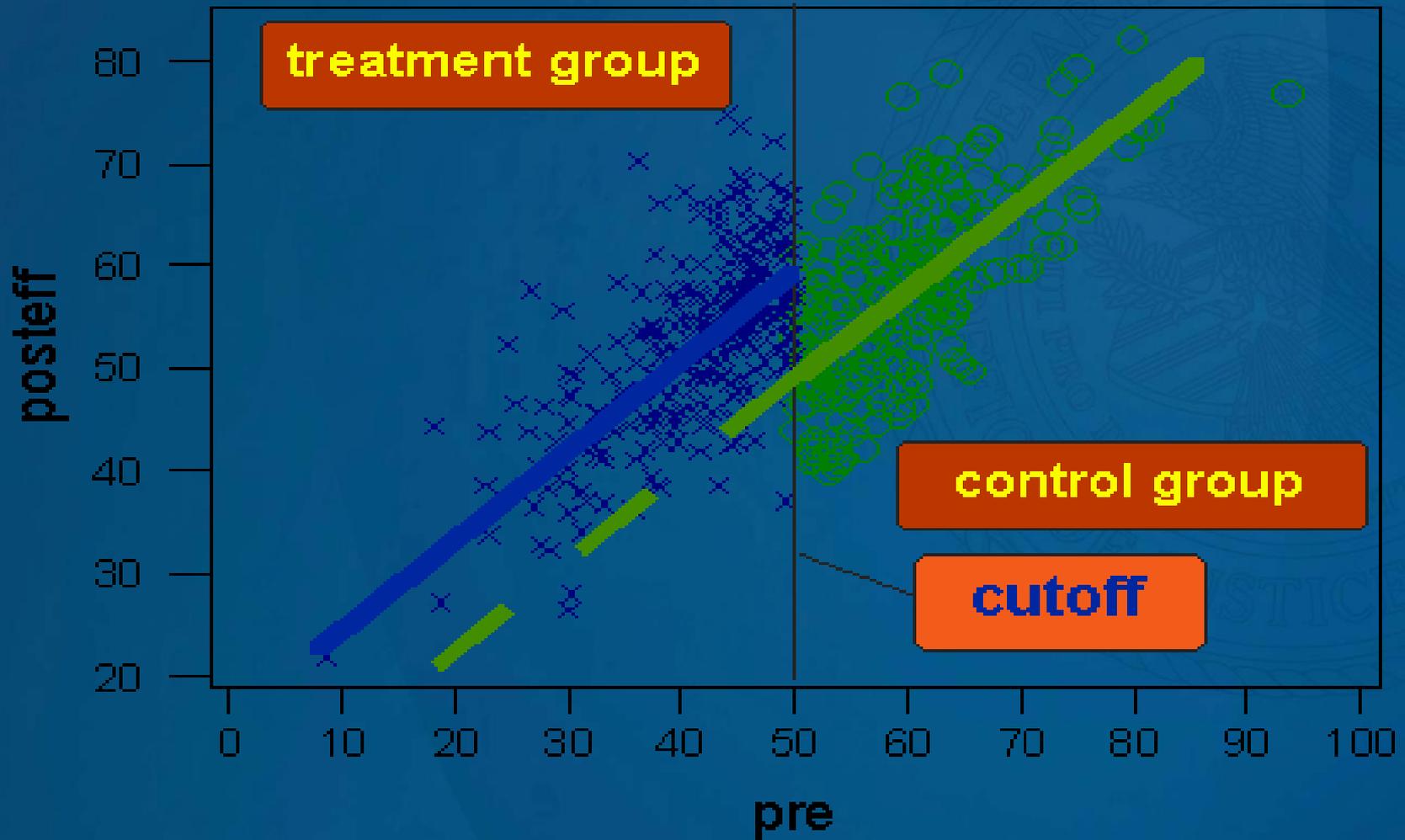
For more information on regression discontinuity see
http://www.socialresearchmethods.net/kb/quasird.php

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Trochim, William M. The Research Methods Knowledge Base, 2nd Edition. Internet WWW page, at URL:
<http://www.socialresearchmethods.net/kb/>
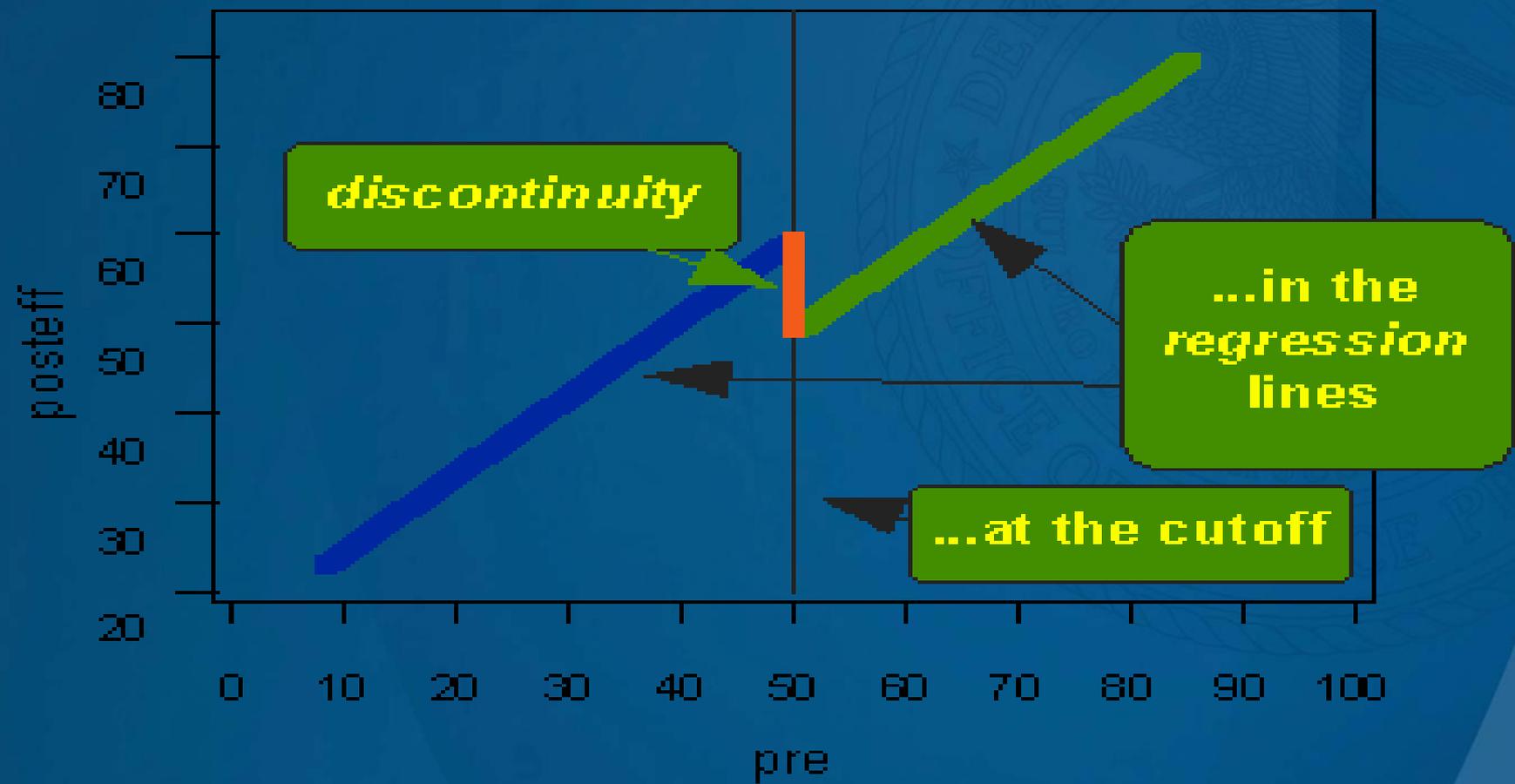
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Trochim, William M. The Research Methods Knowledge Base, 2nd Edition. Internet WWW page, at URL: <http://www.socialresearchmethods.net/kb/>

If there is a treatment effect, there will be a...

discontinuity

...in the regression lines

...at the cutoff

Trochim, William M. The Research Methods Knowledge Base, 2nd Edition. Internet WWW page, at URL: <http://www.socialresearchmethods.net/kb/>

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Evaluation Research in Elder Abuse: What is needed?

- Clearly identified theory and logic model driven by strong evidence base about risk and protective factors.

- Agreed upon understanding of desired outcomes for intervention programming across a wide range of domains (housing, physical health, psychological wellbeing, financial wellbeing, criminal justice

- Creative use of research methods and adoption of models from related fields.

- Strong advocacy to push for programming and evaluation.

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Goal of NIJ FY 2016 Elder Abuse Prevention Demonstration Project Solicitation

- Fund a rigorous, multi-year demonstration project to prevent abuse, neglect, and financial exploitation of elderly individuals who reside in the community and are at risk for elder abuse.

- Make up to two awards in the form of cooperative agreements, each for an 18-month planning phase.

Expectation for 3-Phased Funding

- Phase 1: This year's solicitation is for an 18-month planning phase. NIJ has just made 2 awards for Phase 1.

- Phase 2: In the future, if phase 1 is successful, NIJ expects to award an 18-month supplement for a pilot phase.

- Phase 3: If the pilot in phase 2 shows promise for preventing elder abuse, NIJ expects to award an implementation study of 3 or more years. This phase will be awarded as a supplement.

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Expectations for Proposed Interventions

- Propose an intervention strongly grounded in theory and specify the theory.
- Build on evidence-based violence prevention or health promotion interventions in related fields.
- Identify a rationale and strategy for selecting participants
- Propose a project that can be replicated, scaled up, and independently evaluated.
- Interventions may focus on single or multiple forms of elder mistreatment
- Consideration of a home visiting component is encouraged
- Partnering with an integrated health care system is encouraged

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Expectations for Proposed Evaluation

- Use a scientifically rigorous design, such as an RCT, propensity score matching, or regression discontinuity.

- Identify meaningful and measureable short- and long-term outcomes that are theoretically linked to the intervention.

- Include reliable, valid, and generalizable measures of all independent and dependent variables, mediators, and moderators.

- Use of administrative datasets is encouraged.

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Expectations for Proposed Research Team

- Multidisciplinary with the following expertise:
  - Experience in the administration and conduct of multidisciplinary and multicomponent research
  - Intervention development and implementation
  - Elder abuse
  - Violence prevention, child abuse prevention, or prevention of violence against women
  - Evaluation research
  - Longitudinal research design and data analysis
  - Instrument development, design, and testing
  - Use of administrative data
  - Cost analysis research

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Announcement of NIJ Awardees

- The awards will be announced next week.
- Awardees will be notified by September 22.

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