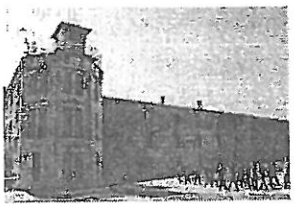
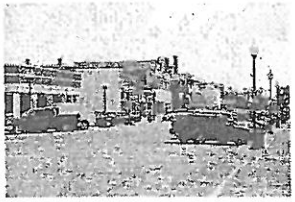
Parolee Success in Iowa:
Individual and Treatment Effects on Recidivism





Presented to the Iowa Department of Corrections Directors Meeting on January 17, 2013 in Des Moines, Iowa.

NIJ NATIONAL INSTITUTE of JUSTICE

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OVERVIEW

What is the project about?

To understand the individual and community factors that drive recidivism rates among parolees in Iowa.

- Demographics and risk propensities.
- Treatment provisions and quality.
- Distance to DOC and social services.
- Community socioeconomic contexts

Who funded it?

National Institute of Justice grant encouraging ...

- Collaboration between criminal justice agency professionals and university researchers.
- Application of social science research to address practical issues in the criminal justice system.

OVERVIEW

Why does it matter?

Need to serve more parolees with less state funding.

Need to focus on areas where you have control and can make a difference.

Avoid spending resources on areas where you have little control.

Sociology

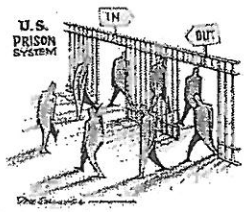
PLAN OF WORK

Step 1 ... Controlling for treatment selection.

- Compile data from DOC, Census, and other sources.
- Estimate propensity scores for statistical model.

Step 2 ... Understanding fixed effects of recidivism.

- Predict probability of recidivism at 1-yr and 2-yr intervals.
- Model includes individual risk factors, treatment provision/quality, distance from services, and community socioeconomic conditions.



- Regional models – urban-rural areas and CCDs.
- Demographic models – men-women and race.
- Purpose is to understand what factors drive recidivism that are largely beyond the control of CCD staff.

Sociology

PLAN OF WORK

Step 3 ... Understanding amenable effects of recidivism.

- Identify parolees that did better than the model predicted.
- Interviews will be conducted within each CCD to ascertain why these parolees did not reoffend, when their risk profile suggested they should have.
- Purpose is to understand the unique factors that cannot be accounted for by the model, and which CCD staff may have some control over.

Step 4 ... Synthesis and dissemination.

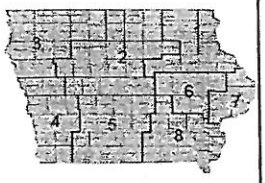
- Based on the results, a series of "best practices" will be identified and communicated to corrections professionals.

PAROLEE SUCCESS IN IOWA

DEMOGRAPHICS

DEMOGRAPHICS

Defining parolees ...



N=1,272 persons who ...

- were paroled or special sentenced in 2010
- had valid physical address
- lived in Iowa and not institutionalized

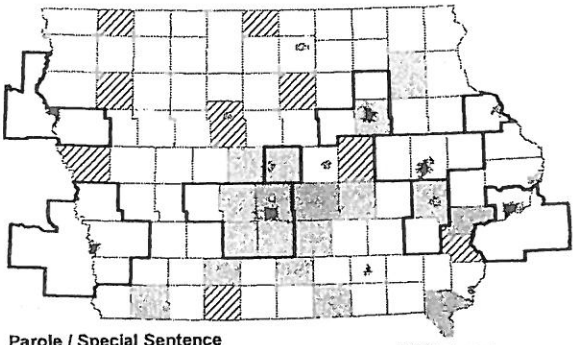
Basic Demographics ...

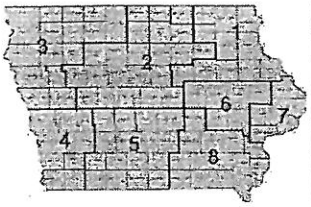
Most parolees are white middle-aged men who were born in Iowa.

- Male – 85%
- Average age – 38 years.
- White, non-Hispanic race – 74% (97% in 4th-District)
- Iowa born – 74% (62% in 4th-District)
- Hispanic any race – 3% (6% in 3rd, 6th, 7th Districts)
  - Only 1% needed interpreters.

DEMOGRAPHICS

Parole / Special Sentence Population ...





Parole / Special Sentence Population (percent offenders)

- 0.0 to 0.5
- 0.5 to 1.0
- 1.1 to 2.0
- 2.1 to 3.0
- 3.1 and over
- No Data
- Metropolitan Area

ANALYSIS: Sociology, Iowa State University.
SOURCE: Iowa Department of Corrections.
IOWA STATE UNIVERSITY

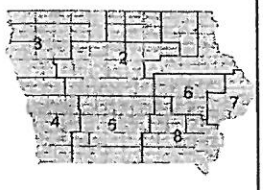
- 1-District = 17.0
- 2-District = 10.9
- 3-District = 7.7
- 4-District = 5.3
- 5-District = 30.7
- 6-District = 6.5
- 7-District = 11.4
- 8-District = 10.5

PAROLEE SUCCESS IN IOWA

RISK ASSESSMENT

RISK ASSESSMENT

Most parolees are high risk who have multiple previous convictions.



High LSI Risk – 38.91 (last score)
Growing LSI Risk – 1.96 rise (last v. first score)

Previous convictions – 7.7
- *Highest in 7th-District (10.1). Lowest 5.6 4th-District (5.6)*

Sentence served – 24.5 months
- *Highest in 6th-Dist (30.6 mos). Lowest in 4th-Dist (18.3 mos)*

Paroled from violent offense – 17.8%
- *Highest in 6th-Dist. (21.6%). Lowest in 4th,7th Dist. (13.1%)*

Paroled sex offender – 5.0%
- *Highest in 2nd,4th,6th Dist (7.3%). Lowest in 5th-Dist (3.6%)*

Drug and other non-property offenses – 49.9%.

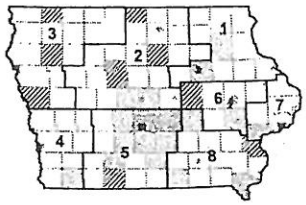
RISK ASSESSMENT

LSI-R Scores (last) ...

LSI-R
(Last Score)
- 0.0 to 30.0
- 30.1 to 35.0
- 35.1 to 37.0
- 37.1 to 40.0
- 40.1 and over

No Data
Metropolitan Area

ANALYSIS: Sociology, Iowa State University.
SOURCE: Iowa Department of Corrections.
IOWA STATE UNIVERSITY



- 1-District = 39.43
- 2-District = 38.97
- 3-District = 37.67
- 4-District = 38.38
- 5-District = 38.73
- 6-District = 38.90
- 7-District = 39.31
- 8-District = 39.26

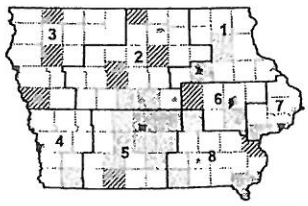
RISK ASSESSMENT

Change in LSI-R Scores (last v. first) ...

Change in LSI-R
(Last v. First Score)
- -3.0 or less Drop
- -2.9 to -1.0 Drop
- -0.9 to 0.9
- 1.0 to 2.9 Gain
- 3.0 or more Gain

No Data
Metropolitan Area

ANALYSIS: Sociology, Iowa State University.
SOURCE: Iowa Department of Corrections.
IOWA STATE UNIVERSITY



- 1-District = 2.45
- 2-District = 2.11
- 3-District = 1.42
- 4-District = 1.97
- 5-District = 1.75
- 6-District = 2.03
- 7-District = 2.65
- 8-District = 1.19

PAROLEE SUCCESS IN IOWA

TREATMENT COMPLETION

TREATMENT

Most parolees are "in-treatment" status, but very few have actually completed any treatment (as of last status).

Treatment In-Progress or Completed (Needs 1-2) ...

- 40.1% in no treatment
- 28.8% in 1 treatment
- 22.9% in 2 treatments
- 8.3% in 3 or more treatments

Treatment Completion (Needs 1-2) ...

- 65.5% no completions
- 21.5% 1 completion
- 11.3% 2 completions
- 1.7% 3 or more completions

TREATMENT

What drives treatment completion?

Treatment more likely to be completed if ...

- Male parolee
- 3 or more offenses
- Added second offense
- Added charges while under supervision
- Past school expulsion or suspension
- Did not complete 12th grade
- Unfavorable attitude towards conviction
- Presence & increasing number of criminal acquaintances
- Increasing unsatisfactory relationship with relatives

Low Treatment Completion Bias = 26.4%
No race/ethnic bias in treatment completion.

TREATMENT

What drives treatment non-completion?

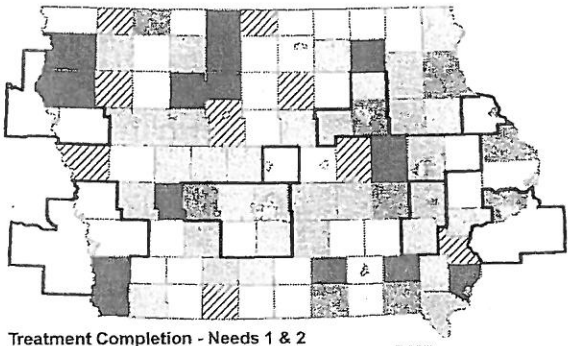
Treatment less likely to be completed if ...

- Convicted from Dubuque courts
- Paroled from prison
- Three of more address changes last year
- Added adult conviction
- Severe interference from active psychosis
- Psych assessment needed (on-going)
- Increasing drug problem

Low Treatment Completion Bias = 26.4%
No race/ethnic bias in treatment completion.

TREATMENT

Treatment Completion (Needs 1 & 2) ...



Treatment Completion - Needs 1 & 2 (percent)

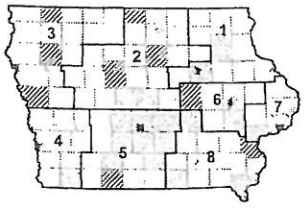
- 0.0% to 20.0%
- 20.1% to 40.0%
- 40.1% to 60.0%
- 60.1% to 80.0%
- 80.1% to 100.0%

No Data

Metropolitan Area

ANALYSIS: Sociology, Iowa State University.
SOURCE: Iowa Department of Corrections.

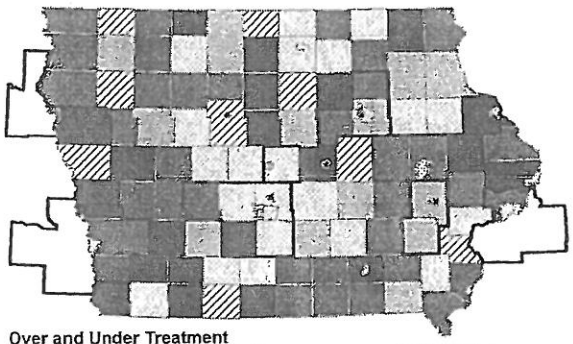
IOWA STATE UNIVERSITY



- 1-District = 43.72
- 2-District = 28.78
- 3-District = 23.71
- 4-District = 32.35
- 5-District = 31.03
- 6-District = 34.94
- 7-District = 36.55
- 8-District = 42.11

TREATMENT

Under-Treatment and Over-Treatment ...



Over and Under Treatment Completion Rate (Needs 1 & 2)

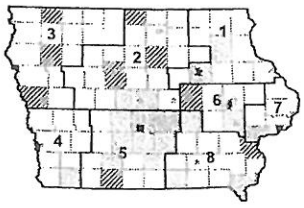
- Very Under-Treated (-20% or less)
- Under-Treated (-20% to -10%)
- Optimal Treated (-10% to 10%)
- Over-Treated (10% to 20%)
- Very Over-Treated (20% or more)

No Data

Metropolitan Area

ANALYSIS: Sociology, Iowa State University.
SOURCE: Iowa Department of Corrections.

IOWA STATE UNIVERSITY



- 1-District = 1.65
- 2-District = -2.71
- 3-District = -8.86
- 4-District = 0.92
- 5-District = -2.84
- 6-District = 0.39
- 7-District = 3.57
- 8-District = 10.37

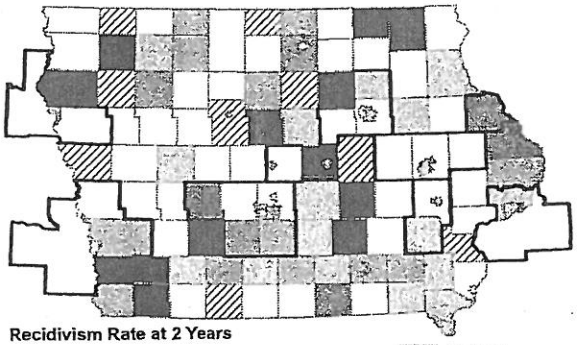
PAROLEE SUCCESS IN IOWA

EXPLAINING RECIDIVISM

Sociology

RECIDIVISM

Recidivism at 2-Years (to prison or arrest) ...

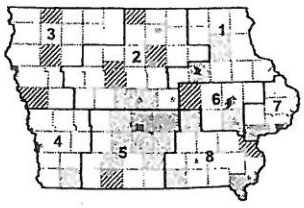


Recidivism Rate at 2 Years

- Zero to 30.0%
- 30.1% to 40.0%
- 40.1% to 50.0%
- 50.1% to 60.0%
- 60.1% to 70.0%
- 70.1% to 100.0%
- No Data
- Metropolitan Area

ANALYSIS: Sociology, Iowa State University.
SOURCE: Iowa Department of Corrections.

IOWA STATE UNIVERSITY



- 1-District = 38.89
- 2-District = 36.69
- 3-District = 43.88
- 4-District = 41.18
- 5-District = 40.26
- 6-District = 32.53
- 7-District = 32.41
- 8-District = 39.85

Sociology

FINDINGS – RURAL PAROLEES

Factors increasing odds of recidivism ...

- Not married (51%)
- Less severe conviction crime (15%)
- Greater & growing criminal history risk (31% & 16%)
- Greater housing/residence risk (41%)
- Greater alcohol/drug risk (15%)
- Greater & growing emotion/psychological risk (14% & 13%)
- Farther from community college & workforce offices (1% each).

Model explains 27.3% of 2-year recidivism.
52.4% correct classification as recidivist.

FINDINGS – RURAL PAROLEES

Factor decreasing odds of recidivism ...

- Older age (-2%)
- More dependents (-19%)
- Greater education/employment risk (-12%) – *programs available*
- Greater non-participation/time-use risk (-26%) – *more supervision*
- Greater pro-crime attitudes (-20%) – *more supervision*
- Growing financial risk (-29%) – *public assistance*
- Growing family/martial risk (-17%) – *programs available*
- Greater distance to DOC office (-1%)

Model explains 27.3% of 2-year recidivism.
52.4% correct classification as recidivist.

FINDINGS – URBAN PAROLEES

Factors <u>increasing</u> odds of recidivism ...

- Male (189%)
- More dependents (9%)
- Greater criminal history risk (28%)
- Greater emotional/psychological risk (19%)
- Growing housing/residence risk (20%)

Model explains 21.3% of 2-year recidivism.
52.1% correct classification as recidivist.

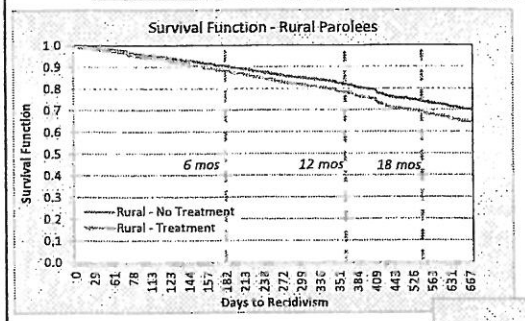
FINDINGS – URBAN PAROLEES

Factors <u>decreasing</u> odds of recidivism ...

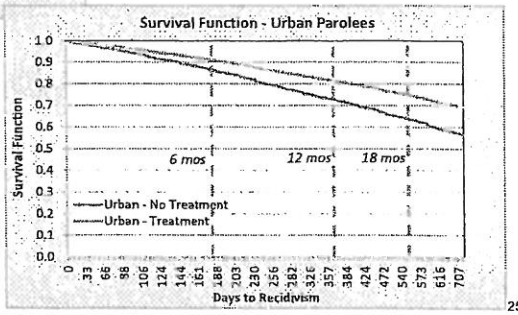
- Older age (-4%)
- Drug conviction (-23%)
- Full-time employment (-29%)
- Greater education/employment risk (-6%) – *programs available*
- Greater financial risk (-17%) – *public assistance*
- Greater housing/residence risk (-35%) – *more supervision*
- Growing family/marital risk (-8%) – *programs available*
- Treatment completion (-47%) – *treatment works*

Model explains 21.3% of 2-year recidivism.
52.1% correct classification as recidivist.

FINDINGS – SURVIVAL FUNCTION



For rural parolees ...
Treatment has worsens survival.
Effects are small and non-significant.



For urban parolees ...
Treatment has improves survival.
Effects are large and significant.

FINDINGS – SURVIVAL FUNCTION

Effect of treatment on survival for rural parolees ...

- 6 mos – 2.2% *decrease* in survival
- 12 mos – 3.8% *decrease* in survival
- 18 mos – 5.2% *decrease* in survival
- 24 mos – 5.7% *decrease* in survival
- Overall – 1.3% *decrease* in survival

Effect of treatment on survival for urban parolees ...

- 6 mos – 4.7% *increase* in survival
- 12 mos – 8.7% *increase* in survival
- 18 mos – 11.0% *increase* in survival
- 24 mos – 12.8% *increase* in survival
- Overall – 6.9% *increase* in survival

SUMMARY

Treatment works! *But ...*

Treatment only works for urban parolees.

Employment matters only for urban parolees.

Distance to services important for rural parolees.

Dependents reduces rural recidivism, but increases urban rates.

Traditional risk factors increase recidivism for all.

Risks amenable to community treatment reduce recidivism for all.

Community factors only have small impact on offender recidivism.

NEXT STEPS AND COMMENTS

Next Steps ...

- Refine regression models.
- Conduct interviews this February and March.
- Analysis and write-up this summer.

Comments and Questions

For more information

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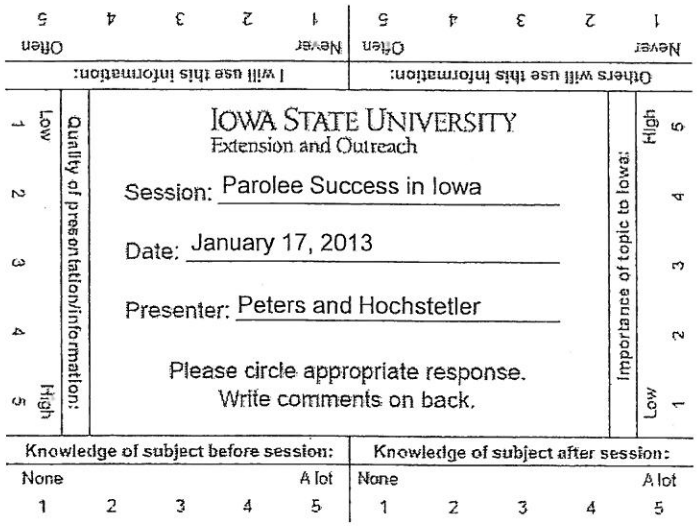
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