IDAHO JUVENILE DRUG COURTS EVALUATION

IDAHO
JUVENILE
DRUG COURTS

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Prepared by: Planning and Research

Administrative Office of the Courts

Acknowledgements and Contact Information

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Table of Contents

Executive Brief	iii
Background of Idaho Juvenile Drug Courts	1
Description of JDC Offenders and Juveniles on Probation	2
JDC and Juvenile Probation Recidivism Rates	4
Type, Degree, Frequency, and Time to Re-Offense	6
Completion, Graduation, and Recidivism in JDC	9
Juvenile Characteristics, Recidivism, and Graduation	10
Limitations and Conclusion	11
Appendix A: County and Court Specific Data	12
Appendix B: Method	14

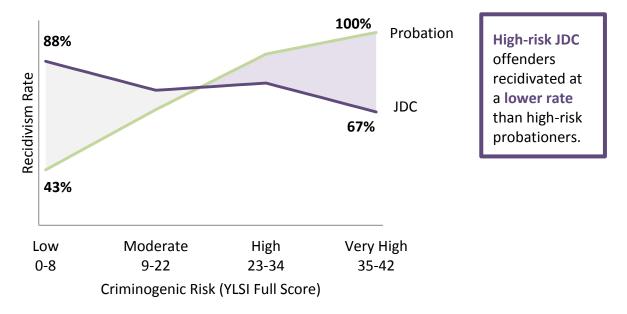
Executive Brief

The purposes of this evaluation were to compare risk of recidivism for Juvenile Drug Court (JDC) offenders and juvenile probationers, and to enhance our understanding of factors that contribute to recidivism for JDC offenders. The evaluation also investigated graduation rates of JDC offenders and the factors that contribute to the likelihood of graduation.

Recidivism

Overall, JDC offenders recidivated at higher rates than juveniles on probation, but risk played an important role in recidivism. Among low-risk juveniles, JDC offenders recidivated at a higher rate, whereas among high-risk juveniles, probationers recidivated at a higher rate.

High-risk and very high-risk JDC offenders do very well in drug courts



Recidivism: Type and Degree of Offense

JDC recidivists looked similar to matched probation recidivists when it came to type and degree of re-offenses and length of time to first re-offense. The most common re-offenses were drug and alcohol, property, motor vehicle, and public order (see Appendix B for descriptions of offense types). Most recidivists committed misdemeanors only, though around one-quarter committed felonies. JDC recidivists recidivated slightly less frequently than matched juvenile probationers.

Average number of days to the first re-offenses was similar for both groups. It was 375 days for JDC offenders and 339 days for probationers. This difference was not statistically significant.

JDC Graduation

Of the 85% of JDC offenders who had completed drug court, 48% successfully graduated. Graduates recidivated at lower rates than non-graduates (66% of graduates and 88% of non-graduates recidivated).

Regression analyses revealed that female JDC offenders were far more likely to graduate than male JDC offenders when differences in age, minority status, and criminogenic risk were controlled for.

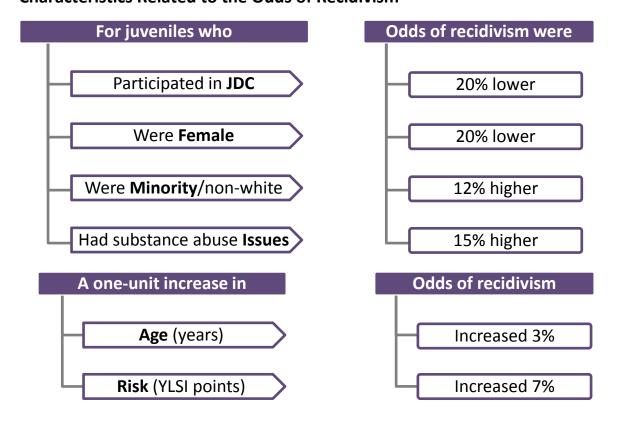
Juvenile Offender Characteristics and Recidivism

Regression analyses revealed that when controlling for other variables, juveniles were significantly less likely to recidivate if they:

- participated in JDC;
- were female;
- were white;
- did not have substance use issues;
- were younger; and
- had lower criminogenic risk.

When controlling for differences in other variables, the risk of recidivism is lower for JDC offenders than probationers.

Characteristics Related to the Odds of Recidivism



Limitations and Conclusion

The scope of this evaluation was limited to the outcomes of recidivism and graduation and did not include measures of process. Process will be important in future evaluations in order to understand differences in outcomes of individual courts. There were also measurement limitations resulting from missing data. About a quarter of JDC offenders were missing initial risk scores, and substance abuse information was not available for any JDC offenders. (Scale scores are not currently recorded in the case management system for JDC offenders.)

In spite of these limitations, the evaluation produced meaningful findings regarding the effectiveness of JDCs, most notably the important role risk played in JDC recidivism. When comparing low risk offenders in both populations, low risk JDC offenders recidivated at a higher rate than low risk probationers. Conversely, a comparison of high risk offenders in both populations revealed that high risk JDC offenders recidivated at a lower rate than high risk probationers

Results suggest that JDCs will have the greatest positive impact if they admit only high- and very high-risk offenders. The finding aligns with the recommendation adopted by the DCMHCCC in September of 2014 to limit JDC to high- and very high-risk juveniles (Juveniles scoring a 23 or higher on the YLSI).

Background of Idaho Juvenile Drug Courts

Pursuant to the Idaho Drug and Mental Health Court Act,² juvenile drug courts (JDCs) seek to reduce juvenile commitments, reduce the abuse and dependency of alcohol and other substances by juvenile offenders, hold juvenile offenders accountable, and reduce recidivism.

Juvenile drug courts began in the 1990s and have spread rapidly in the United States. One reason for the proliferation of juvenile drug courts is the success of adult drug courts. However, juvenile drug courts differ from adult drug courts in important ways.

First, juvenile offenders are different than offenders in adult drug courts. Juveniles are still developing physically, cognitively, and socially. Juvenile drug courts must consider and address the powerful influence of peers, family members, and schools.³

Second, research also suggests that drug preferences, motivations for substance use, and response to substance use treatment is different in juveniles and adults.³

Finally, a growing body of research demonstrates the effectiveness of adult problem solving courts, but research on JDCs is limited and results are mixed. Whereas some studies have shown modest positive effects of JDCs, other studies have

shown no effects, or have found harmful effects of some JDCs. 3,4

The lack of research into the processes and outcomes of JDCs and the mixed findings of the existing research underscore the need to evaluate Idaho JDCs.

The Idaho Drug Court Act² and other legislation in 2001 authorized the creation of problem solving courts in Idaho, including JDCs. By the end of 2002, five JDCs served Ada, Minidoka and Cassia, Bannock, Bingham, and Bonneville Counties. Over the years, some JDCs have discontinued and other courts have started. Currently, six JDCs operate in Idaho. The current JDCs serve Canyon, Minidoka and Cassia, Twin Falls, Bannock, Bingham, and Bonneville Counties.

This evaluation sought to answer specific questions about the effectiveness of Idaho JDCs in order to inform immediate policy decisions. Of particular interest was recidivism rates of JDC offenders compared to juvenile probationers. The scope of the evaluation was limited and did not include inquiry into JDC practices or processes. The evaluation compared offenders from the six current JDCs and the Ada county JDC (which discontinued operations in 2014) to Idaho juvenile probationers.

²Title 19: Criminal Procedure, Chapter 56: Idaho Drug and Mental Health Court Act

³Latessa, E.J. et al., (2013). Final Report Outcomes and Process Evaluation of Juvenile Drug courts. U.S. Department of Justice.

⁴Marlowe, D.B. (2014). *The Verdicts on Drug Courts After 25 Years.* Presentation at the annual meeting of the National Association of Drug Court Professionals.

Description of JDC Offenders and Juveniles on Probation

This evaluation used information from the case management systems for the Idaho courts and county probation information obtained by the Idaho Department of Juvenile Corrections (IDJC). The sample for this evaluation included 406 JDC offenders and 3,770 juvenile probationers.

The juveniles included in this study began participation in drug court or started probation during calendar years 2009 – 2013. When possible, juveniles for the probation comparison group were drawn from the same counties in which JDCs operate. However, juvenile probationers in Minidoka County were not included in the comparison group because of insufficient data, and information was limited on

juvenile probationers in Twin Falls County. (See Appendix A for a breakdown of the JDC and comparison samples by county.)

The JDC and comparison samples are described here including gender, minority status, age at intake or start date, initial risk based on the Youth Level of Service/Case Management Inventory (YLSI), and length of participation or supervision.

Both the JDC sample and the probation sample were mostly male and white. The JDC sample had a higher rate of male offenders and a slightly higher rate of minority offenders compared to probation. Table 1 contains a summary of demographic information for JDC offenders and juveniles on probation.

Table 1. Gender and Minority Status

	JD	С	Proba	tion
	count	%	count	%
Male	306	75%	2509	67%
Female	100	25%	1261	33%
Minority	107	26%	807	21%
White	279	69%	2699	72%
Race and Ethnicity Unknown	20	5%	264	7%

Note: All JDC percentages are statistically different from probation percentages at the p < .05 level.

Table 2 contains descriptive statistics for age at intake or start date, initial criminogenic risk, and length of participation or supervision period for JDC offenders and juveniles on probation.

JDC offenders were older than probationers. The average age of JDC offenders was about 16½ years old. The average age of probationers was about 15 years old. The youngest offender in JDC was 13. The youngest probationer was 6.

JDC offenders had higher initial criminogenic risk¹ than probationers. Although the range of YLSI overall scores was similar for both groups, the average overall score of the JDC group was just

more than double the average of probationers.

Probationers' supervision periods were longer than JDC offenders' drug court participation. The average length of participation in JDC was about a year and three months. On average, juveniles were on probation for a year and ten months.

JDC average risk score (YLSI) was more than double the average of probationers.

Due to the differences between groups, JDC offenders were matched to probationers on certain characteristics to make them more comparable. Most of the analyses presented in this report used the matched sample.

Table 2. Age, Initial Risk, and Length of Participation for Full Samples

JDC	Average	Standard Deviation	Range	Count
Age at Intake	16.4	0.9	13.6 - 17.9	406
YLSI	20.7	7.4	4 - 38	306
Length of Participation (days)	471.8	329.1	49 - 2127	404

Probation	Average	Standard Deviation	Range	Count
Age at Supervision Start	15.1	1.8	6.4 - 17.9	3770
YLSI	9.5	6.3	1 - 38	3705
Length of Supervision (days)	667.8	468.5	1 - 2157	3703

Note: All three JDC averages are significantly different from probation averages at the p < .05 level.

JDC and Juvenile Probation Recidivism Rates

In order to create more meaningful comparisons, JDC offenders were matched to juveniles on probation prior to calculating recidivism rates. JDC offenders were matched to probationers with substance abuse issues. Matching was based on gender, age, and when available, initial risk, minority status, and county.

Probationers included in the match scored a 3, 4, or 5 on the substance abuse scale of the YLSI. Substance abuse scale scores were not available for JDC offenders; all JDC offenders were presumed to have substance abuse issues (See Appendix B for details about the matching process).

Recidivism rates were calculated for the matched sample (300 JDC offenders and 300 juvenile probationers). Recidivism was then explored by criminogenic risk for all JDC offenders and probationers.

Recidivism⁵

For this evaluation, any felony or misdemeanor filing 60 or more days after intake or start of probation but prior to January 1, 2015 that resulted in adjudication or conviction was counted as recidivism.

Figure A. Recidivism Rates in a Matched Sample



Note: The JDC recidivism rate is significantly higher than the probation rate at the p < .05 level.

In the matched sample, JDC offenders recidivated at a significantly higher rate than juveniles on probation. Given what the research^{4,6} demonstrates about the

important role of risk in JDC outcomes, additional analysis was completed to determine the role risk may have played in recidivism.

⁵The Idaho Association of County Juvenile Justice Administrators defines recidivism as "juveniles who have been 'Adjudicated' of a new misdemeanor or felony within 24 months of being placed on supervision prior to the reporting period. Do not include courtesy supervision, interstate compact, or juvenile placed on probation for alcohol and tobacco offenses."

⁶Carey, S.M., van Wormer, J., Mackin, J.R. (2014). Maintaining fidelity to the juvenile drug court model: Let's not throw the baby out with the bath water. *Drug Court Review*, *9*(1). 74-98.

Recidivism rates were calculated for the *full sample* of JDC offenders and probationers by their criminogenic risk level.

Figure B shows the recidivism rates for JDC and probation across criminogenic risk levels. Among probationers, low-risk juveniles recidivated at much lower rates than high-risk juveniles.

Among JDC offenders the trend is reversed and less pronounced. Low-risk JDC offenders recidivated at high rates and

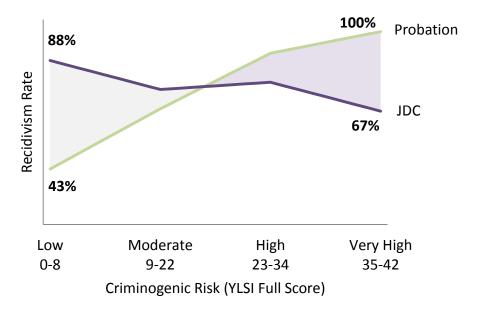
high-risk JDC offenders recidivated at lower rates.

Low- and **moderate-risk** JDC offenders recidivated at **higher rates** than low- and moderate-risk juveniles on probation.

High- and very high-risk JDC offenders recidivated at lower rates than high- and very high-risk juveniles on probation.

See Appendix A for court-specific information about JDC offender risk levels.

Figure B. Recidivism by Risk for JDC and Probation (Full Samples)



Recidivism by risk findings are in line with research that suggests JDCs are intended for high-risk and high-need juveniles and are not appropriate for and may be harmful to low-risk juveniles.⁶

Admission of low and moderate risk juveniles likely contributed to higher rates of recidivism in Idaho JDCs.

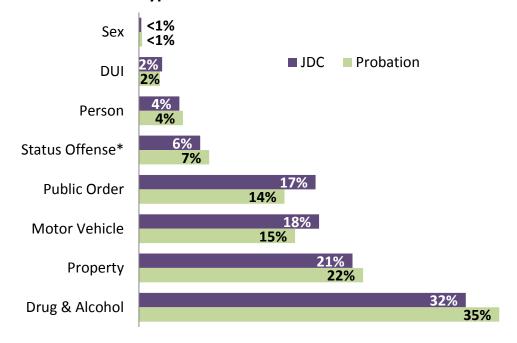
⁶In September of 2014, the DCMHCCC adopted a recommendation to admit only juveniles with risk scores of 23 or higher.

Type, Degree, Frequency, and Time to Re-Offense

In order to present a complete picture of recidivism in JDC offenders and probationers, this section provides

information on the type, degree, frequency of re-offenses, and time to re-offense.

Figure C. Re-Offense Types for Matched JDC and Probation Recidivists



^{*}Status offenses in this chart do not include underage tobacco and alcohol.

JDC and the matched comparison group committed the various types of re-offenses at similar rates (see Figure C).

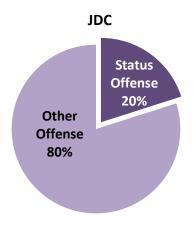
About **one third** of re-offenses for JDC offenders and probationers were **drug and alcohol** violations.

The most common re-offenses were drug and alcohol, property, motor vehicle, or public order re-offenses, which accounted for more than 85% of re-offenses in both groups.

About one fifth of all recidivism charges in both groups were status offenses. A status offense is an offense that is illegal because of the underage or minor status of the perpetrator.

Status offenses included underage tobacco or alcohol, runaway, curfew, truancy, incorrigible/beyond control, and certain weapons charges.

Figure D. Percent of Status Offenses

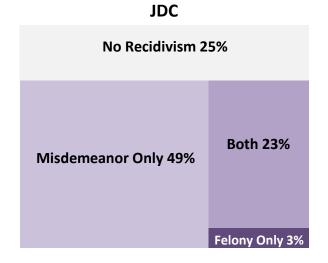


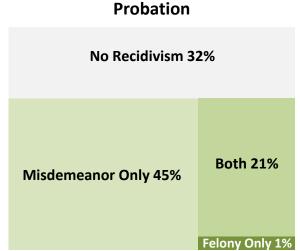


The rate of status offenses was slightly higher in the probation group, but the difference was not significant. Figure D

shows the percent of re-offenses that were status offenses for JDC and probation.

Figure E. Rates of No Recidivism, Felony, Misdemeanor, or Both Felony/Misdemeanor

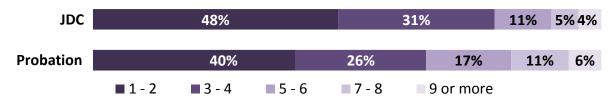




Most recidivists committed only misdemeanor re-offenses though some committed both misdemeanor and felony re-offenses. Very few recidivists committed only felony re-offenses. Figure E shows the

percentages of juveniles with no recidivism and the percentage who committed only misdemeanors, only felonies, or both. Rates are similar for JDC and probation juveniles.

Figure F. Number of Court Cases Resulting in Recidivism



Note: JDC percentages are significantly different than probation at the p < .05 level.

In order to compare *frequencies* of reoffenses between JDC offenders and juvenile probationers, an additional analysis was done on the number of court *cases* resulting in recidivism. JDC offenders tended to have fewer cases that resulted in recidivism than juveniles on probation. Almost 80% of JDC recidivists had four or fewer cases; 66% of probation recidivists had four or fewer cases (see Figure F). On average, matched probation recidivists had significantly more cases resulting in recidivism than JDC recidivists (see Table 3).

Table 3. Average Number of Court Cases Resulting in Recidivism and Days to First Re-Offense

JDC	Average	Standard Deviation	Range	Count
Count of Recidivism Cases*	3.2	2.4	1 - 13	224
Days to first Re-Offense	375	286	61 - 1858	224
Probation	Average	Standard Deviation	Range	Count
Count of Recidivism Cases*	3.8	2.8	1 - 16	203
Days to first Re-Offense	339	303	63 - 1441	203

^{*}Averages are significantly different at the p < .05 level.

The average time to first re-offense was just over a year for JDC offenders and just under a year for probationers. The difference was not significant. Table 3 shows the average,

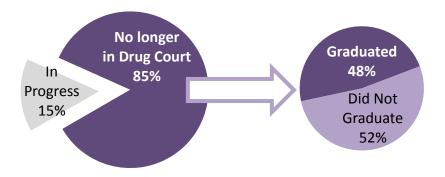
standard deviation, and range for days to first re-offense for JDC and probation recidivists.

Completion, Graduation, and Recidivism in JDC

Most of the JDC offenders included in the sample were no longer enrolled in drug court at the time of analyses. Just less than half of juveniles who had completed their

participation successfully graduated JDC. Completion and graduation rates are shown in Figure G. (See Appendix A for graduation rates of individual JDCs.)

Figure G. Graduation Rate for Offenders no longer in Drug Court (JDC only)



Not surprisingly, JDC offenders who graduated recidivated at lower rates than those who did not graduate. The rate of recidivism in successful offenders was 22%

lower than the rate for offenders who did not successfully complete JDC. Recidivism for graduates and non-graduates is shown in Figure H.

Figure H. Recidivism Rate by Completion Status



Note: The difference is significant at the p < .05 level.

Juvenile Characteristics, Recidivism, and Graduation

Regression analyses revealed offender characteristics associated with the outcomes of recidivism (for both groups) and graduation (for JDC only).

Regression controls for different lengths of follow-up periods and between-groups differences in order to observe the independent influence variables.

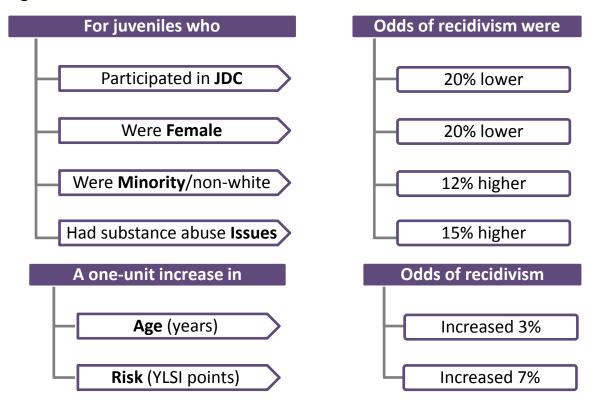
When controlling for differences in other variables, JDC offenders were less likely to recidivate than probationers.

Offenders were less likely to recidivate if they were in JDC, were female, were white, did not have substance abuse issues, were younger, and had lower initial risk (see Figure I).

Regression revealed that gender was associated with the probability of graduation for FDC offenders when minority status, age, and risk were controlled.

The odds of graduating were more than two times greater for females than for males.

Figure I. Characteristics Related to Risk of Recidivism



Note: All predictors are significant at the p < .05 level. There is an interaction between risk and JDC participation (JDC*YLSI score). This means that participation in JDC has different effects on recidivism depending on risk level. The interaction is seen in Figure B. When the regression includes the interaction term, participation in JDC is associated with increased odds of recidivism.

Limitations and Conclusion

This evaluation produced meaningful findings about the effectiveness of Idaho JDCs that can inform important policy decisions and the future practice. Perhaps the most important finding was regarding the interplay of risk level and recidivism:

JDC outcomes were mixed; **effectiveness varied** based on **risk level** of offenders.

Low-risk juveniles in JDC have poorer outcomes than low-risk juveniles on probation. On the other hand, high-risk juveniles in JDC have better outcomes than high-risk juveniles on probation.

The examination of recidivism by risk in JDC and probation juveniles (page 5) and the results of the recidivism regression analysis (page 10) have clear implications:

JDCs will have the greatest positive impact if they admit only high- and very high-risk offenders.

Results underscore the importance of the recommendation adopted by the DCMHCCC in September of 2014 to limit drug court to high- and very high-risk offenders.

However, it is important that these findings be considered in the context of some key

limitations of the study. First, the evaluation is limited in scope. The primary purpose of the evaluation was to compare risk of recidivism among JDC offenders as compared to juvenile probationers. The evaluation included no measure of JDC processes, although the inclusion of risk in our analyses provided some insight about the population targeted for Idaho JDCs. Outcomes, without the context of process, may be difficult to interpret. JDC outcomes vary considerably across the state (see Appendix A). Future evaluations of JDCs should assess processes in an effort to understand differences in court outcomes.

Second, measurement was somewhat limited because of missing data. Findings highlight the importance of criminogenic risk level. However, risk scores were missing for about a quarter of JDC offenders. See Appendix A for YLSI scores by JDC including the rates of missing scores.

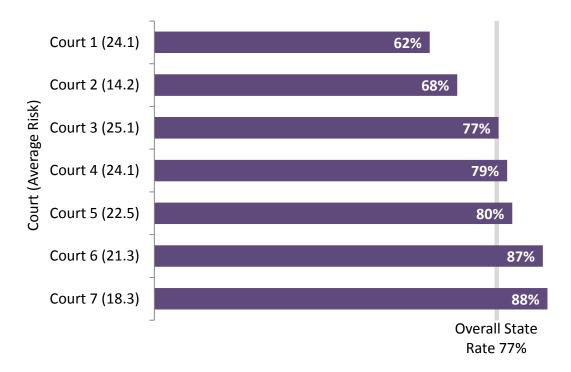
Specific YLSI scale scores were not available for JDC offenders. The substance abuse scale score (from the YLSI) would have been included in matching and regression analyses were it available for JDC offenders.

Appendix A: County and Court Specific Data

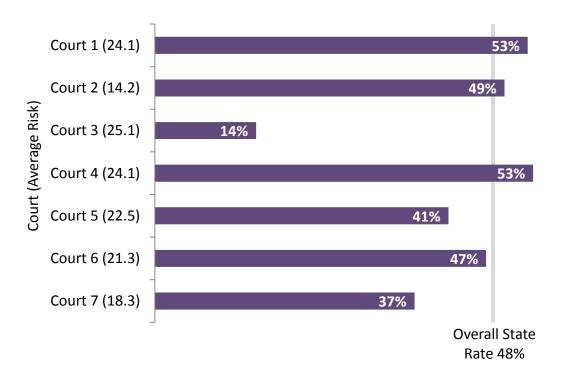
County Sample Size for JDC and Probationers

County	JDC	Probation
Ada	96	2,204
Bannock	76	666
Bingham	33	236
Bonneville	104	622
Canyon	13	35
Minidoka	39	
Twin Falls	45	7
Total	406	3,770

Recidivism Rate by Juvenile Drug Court with Average Risk Scores



Graduation Rate by Juvenile Drug Court with Average Risk Scores



Criminogenic Risk Percentages and Average by Juvenile Drug Courts

JDC	1-8	9-16	17-24	25-32	33-40	Missing	Average Risk
Court 1	3%	13%	38%	33%	13%	0%	24.1
Court 2	6%	49%	21%	2%	0%	22%	14.2
Court 3	0%	0%	46%	46%	8%	0%	25.1
Court 4	2%	10%	29%	48%	4%	8%	24.1
Court 5	0%	2%	7%	4%	0%	87%	22.5
Court 6	7%	14%	12%	30%	1%	36%	21.3
Court 7	6%	21%	45%	12%	0%	15%	18.3
Statewide	4%	20%	24%	25%	3%	25%	20.7

Note: The most common risk range for each court is shown in **bold**.

Appendix B: Method

Data Preparation and Methodology

The data used for the analyses in this evaluation included data from three datasets.

- The Idaho Supreme Court (ISC) case management system provided information about JDC offenders;
- The IDJC case management system and case management systems of individual juvenile probation offices provided information about juvenile probationers;
- The ISC case management system provided recidivism information for JDC and probationers.

Data preparation consisted of deleting some individuals from the sample, matching individuals to conviction data, and creating a matched sample for analyses.

Probationers who were missing a start date (n = 111) were deleted and 166 juveniles found in both groups were deleted from the probation sample and retained in the JDC sample in order to have independent, non-overlapping samples.

For the purposes of identifying re-offenses to calculate recidivism rates, juveniles were matched to filings based on name and birth date. In near-match cases, dates and names

were confirmed by looking up individuals in the ISC data.

The matched sample was created in an 11-step process outlined in the table on the following page. The JDC and comparison group were matched by county, the presence of substance abuse issues, age, gender, and risk level. The matching process successfully matched 300 (77%) JDC offenders to 300 probationers.

There were two disadvantages to the matching process. First it limited the sample size for both probationers and JDC offenders. There were few very high-risk juveniles in both groups. The very high-risk juveniles are of great interest considering the important influence of risk on outcomes. Unfortunately the very high-risk juveniles were not included in the matched sample, because they did not meet matching criteria.

The second disadvantage to the matching process was that the match is imperfect. Less than one quarter of JDC offenders were perfectly matched on county, gender, minority, age, and risk. About half of the JDC offenders were approximately matched on variables. Finally, about one quarter of JDC offenders could not be matched at all.

11-Step Process Used to Create the Matched Sample

	SA Issue	County	Gender	Minority	e S	Risk		Running
Step	S	ပိ	Ğ	Σ	Age	<u></u>	_Matched_	Total _
1	Ε	Е	Ε	Ε	Е	Е	22%	22%
2	Ε	Ε	Ε	Ε	2	Е	5%	27%
3	Ε	Ε	Ε	Ε	Ε	2	5%	32%
4	Е	Ε	Ε	Ε	2	2	<1%	32%
5	Е	Χ	Ε	Ε	Ε	Е	19%	51%
6	Е	Χ	Ε	Ε	2	Е	5%	56%
7	Е	Χ	Ε	Ε	Ε	2	1%	57%
8	Е	Χ	Ε	Ε	2	2	1%	59%
9	Е	Χ	Ε	Ε	Ε	Χ	6%	65%
10	Е	Х	Ε	Χ	Ε	Х	12%	77%
11	Е	Х	Е	Χ	2	Χ	0%	77%

E - Exact match on variable.

Measurement and Explanation of Variables

Variables for Juvenile Characteristics

Characteristic	Description
Gender	Either male or female and included in ISTARS and IDJC data.
Minority Status	Either minority or white/non-minority based on race in IDJC data and race and ethnicity in ISTARS data.
Age	Calculated time in years from birth date to intake date or supervision start date.
Risk	YLSI/CMI full score included in ISTARS and IDJC data.
Substance Abuse Issue	All JDC offenders were assumed to have substance abuse issues. Probationers who scored 3 or higher on the YLSI substance abuse scale were counted as having substance abuse issues.
Length of Participation/ Supervision	Calculated in days for juveniles as intake or start date to termination date, status change date, or to December 31, 2014.

^{2 -} Match within 2 years or 2 points on age or risk.

X - Variable not matched.

Variables for Juvenile Outcomes

Outcome	Description
Recidivism	Occurred if one or more misdemeanor or felony charge filed no less than 60 days post intake or start date resulted in a conviction.
Degree	Misdemeanor or felony charges that qualified as recidivism.
Re-Offense Type	Recidivism charge descriptions recoded into categories of drug/alcohol, property, motor vehicle, public order, status offense (not including tobacco and alcohol), assault or battery, driving under the influence (DUI), or sex.
Status Offense	Whether a charge is a status offense based on charge description.
Days to Recidivism	Calculated in days from intake or start date to the filing date of the first qualifying recidivism charge.
Completion Status	Graduation or completion without graduation for JDC offenders only, from ISTARS status at termination.

Re-Offense Types

Re-Offense Type	Description	Examples
Drug Alcohol	Crimes related to controlled substances, prescription drugs, possession, trafficking, delivery, intoxication, tobacco, or alcohol, excepting DUI offenses.	Possession/delivery/intent to use controlled substance, alcoholic beverage under 21, use of tobacco by minor.
Property	Crimes including theft, destruction of property, or trespassing.	Trespass, burglary, petit theft, injury to property, littering.
Motor Vehicle	Crimes related to driving, parking, driver's license, registration, or insurance, excepting DUI.	Fail to purchase/invalid driver's license, reckless driving, fail to purchase vehicle insurance, fail to give notice of accident.
Public Order	Crimes against the public, law enforcement, judiciary, or city or state entities.	Disturbing the peace, obstructing officers, disorderly conduct, fighting, contempt of court, failure to appear, habitual offender.
Status Offense	Offenses that are illegal based on the perpetrators age excepting underage alcohol and tobacco.	Runaway, curfew violation, beyond control of parents, truancy.

Re-Offense Type	Description	Examples
Person	Crimes against persons such as assault, battery, harassment, manslaughter, and others.	Assault, battery, domestic violence, no contact order violation.
DUI	Crimes of operating a vehicle while under the influence of alcohol or other intoxicating substances.	Driving under the influence— excessive/under age 21.
Sex	Crimes of a sexual nature.	Lewd conduct with child under 16, fornication, statutory rape, sexual exploitation of a child, video voyeurism.

Explanation of Statistical Analyses

Statistical Analyses Used in the JDC Evaluation

Statistic or Procedure	Description	Use
Average	A number expressing the central or typical value. Average is calculated as the sum of each value divided by the total number of values.	Used to provide easy comparisons between groups on continuous outcomes such as age, number of recidivism cases, or time to recidivism
Standard Deviation	A number that expresses variability in a set of values. Higher standard deviations indicate the presence of more values that are much higher or much lower than the average.	Reported with average throughout the report to provide an idea of how similar or different individuals within group are on the same measure.
Chi ²	Statistical test for significant difference between two proportions or percentages.	Used to compare the prevalence of characteristics and recidivism between matched JDC and probation samples and between successful and unsuccessful JDC offenders.
T-test	Statistical test for significant difference between two averages.	Used to compare the average age, risk, length of stay, and time to recidivism between juveniles in JDC and juveniles on probation.
Cox Regression	A time-sensitive analysis that estimates the independent influence of variables on the probability of a	Used to identify the relationship of juvenile characteristics and the risk of recidivism.

specific dichotomous outcome.

Logistic Regression	An analysis that estimates the independent influence of variables on the probability of a specific dichotomous outcome.	Used to identify the relationship of JDC characteristics on the probability of graduation from JDC.
Significance Testing	A test that provides the probability of finding an effect when no such effect exists. For this evaluation the acceptable probability (p) was less than .05.	Used to determine whether the effects found for chi ² , t-tests, and regressions were true effects. Note that a significant effect is a true effect, but may not be very meaningful. Meaningfulness has more to do with effect size than significance.