

South Dakota
Detention Risk Assessment Instrument
Validation Results

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Introduction

This analysis is intended to supplement the descriptive analysis of risk factors and the examination of override rates conducted by the South Dakota JDAI State Coordinator. It was intended to be small in scale and is funded by a technical assistance grant from the Annie E. Casey Foundation. Our purpose is to determine whether the RAI accurately classifies youth into risk levels that correspond to their risk to public safety, whether the RAI produces results that are equitable across race and gender, and whether any modifications to the RAI's scale could improve its performance.

Sample

The validation sample included 672 youth who were screened using the RAI between July 1, 2015 and January 31, 2016, had disposition dates and who were released outright or to an ATD at the time of screening. In other words, youth whose cases were dismissed were dropped from the analysis. Furthermore, youth who were detained at the point of screening were also not included in the validation because they do not have time at-risk in the community. In the end, Pennington County contributed 251 cases and Minnehaha contributed 421 cases to the sample.

Analysis and Results

The overall rate of recidivism was 16%. In other words, 109 of the 672 youth were either arrested for a new crime or violated the conditions of their release. Recidivism was defined as “arrest or violation” because this was the data most accessible at the time of the analysis. While a more stringent measure (e.g., a sustained petition) could have eliminated any bias that may come from utilizing arrest data, the data accessibility and limitations of the project needed to be considered. If anything, using arrest data may inflate the recidivism rates because some of the youth's charges were likely dropped by the prosecutor. So, failure rates using a more stringent measure would likely have been lower.

A “survival analysis” was conducted in order to provide a more nuanced look at recidivism. This analysis calculates the amount of time that passes before the arrest/violation occurs. It is useful when considering the types of support that are offered through ATDs and also can assist in the examination of case processing times. For example, if youth recidivate quickly, ATDs may be able to provide more intensive services shortly after release/screening in order to better support the youth's behavior. On the other hand, if long survival times are observed, the jurisdiction could consider accelerating case processing so that a disposition is reached prior to the period at which most youth recidivate (i.e., shorten the “time at risk”), the idea being that youth would receive additional support via informal sanctions or supervision that might better support their behavior.

The mean survival time was 21 days; the median was 43 days. (The mean is a statistical average; the median is the point at which 50% fell below and 50% fell above—it is less susceptible to outliers, i.e., very short or very long survival times, than a straight average).

While a community's tolerance for risk to public safety is paramount, these results are squarely within the acceptable range, based on our experience.

To ensure the RAI is equitable for the various subpopulations in South Dakota, we examined the extent to which recidivism rates varied across the two counties and across race/ethnicity and gender.

- The rate of recidivism was similar across the two counties. In Pennington County, 39 of 251 youth recidivated (15.5%). In Minnehaha, 70 of 421 youth recidivated (16.6%). This difference was not statistically significant.
- The rate of recidivism was similar across gender (16.4% for males and 16.1% for females). This difference was not statistically significant.
- The rate of recidivism was similar across race/ethnicity (16.3% for Native American; 14.5% for White; 17.5% for Black). These differences were not statistically significant.

In short, youth who are released outright/to an ATD have relatively low rates of recidivism. The rates are similar across counties; across gender; and across race, indicating the fundamental fairness of the RAI.

We also examined the rates of recidivism according to the type of release. Youth who were released outright had a recidivism rate of 15% (68 of 453 youth) while youth who were released to an ATD had a recidivism rate of 18.7% (41 of 219 youth).

- These differences were not statistically significant.
- Youth released out right/to an ATD also had mean survival times that were not statistically different from each other.
- Furthermore, among those who recidivated, there was no difference in the mean or median survival times for youth who were re-arrested versus youth who received a violation.

These results are indicative of a sound risk screening instrument. No matter the type of release, relatively small proportions of youth went on to commit subsequent offenses or to violate the terms of their release.

Using the total sample of 109 youth who recidivated, we examined the types of offenses for which youth were arrested/violated. [Note that some youth had both a new arrest and a violation, which is why the total number of cases is higher than the number of youth who “failed”; 97 rearrested + 36 violated = 133 recidivism events versus 109 youth who “failed”.]

As shown in the table below, the vast majority of youth who recidivated were arrested for low level offenses. In fact, only 15 of the 97 youth (15%) were arrested for a felony-level offense.

<i>Category of Most Serious Arrest</i>	<i>Frequency</i>	<i>Percent</i>
Status Offense	21	21.6
Warrant	12	12.4
Misdemeanor Person	10	10.3
Felony Property	8	8.2
CHINS/Status	7	7.2
Misdemeanor Property	7	7.2
Other Misdemeanor	7	7.2
Misdemeanor Assault	5	5.2
Misdemeanor Drugs	5	5.2
Technical Violation	5	5.2

Felony Assault	2	2.1
Felony Drugs	2	2.1
Felony Person	2	2.1
Probation Violation	2	2.1
Misdemeanor Drug	1	1.0
Other Felony	1	1.0
Total	97	100.0

As shown in the table below, nearly all of the youth who violated the terms of their release, did so by failing to appear in court. We examined the data within the two counties to ascertain whether the problem was more concentrated in one than the other. As shown in the table below, the proportion of cases that FTA'ed was similar across the two counties. Although Minnehaha contributed more FTAs than Pennington to the total sample (n=20 versus n=14; or 59% versus 41%), this makes sense given that Minnehaha cases comprised 63% of the total sample of cases (i.e., n=421 of 672; 63%).

Category of Violation	Total		Pennington		Minnehaha	
	Number	%	Number	%	Number	%
FTA	34	94.4	14	87.5	20	100.0
Cut off EM	1	2.8	1	6.3	-	-
Ran from Shelter Care	1	2.8	1	6.3	-	-
Total	36	100.0	16	100.0	20	100.0

A targeted effort to ensure youth are aware of and have transportation to their court dates would likely reduce the FTA rate and thus lower the recidivism rate even further for the youth who are released outright or placed in an ATD.

We also examined whether youth who scored into the two release categories had better outcomes than youth who were overridden into those categories. [This is often the case in other jurisdictions, when staff doubt the integrity of the instrument and override youth into various release categories based on factors that staff believe to be more relevant than the scored risk factors.] This was not the case in South Dakota. Among youth who were released, those who scored into the category (n=423) had a recidivism rate of 15% and those who were overridden into the category (n=31) had a recidivism rate of 16%. This difference was not statistically significant. Similarly, among those who were placed in an ATD, those who scored into the category (n=108) had a recidivism rate of 22% and those who were overridden into the category (n=110) had a recidivism rate of 15%. This difference was not statistically significant.

As a side note, during their field test of the RAI, the South Dakota JDAI state/site coordinator examined the use of overrides. An override is a mechanism used to place a youth in a more restrictive setting than that indicated by his/her risk score. For example, an override would be used to place a youth who scored as low-risk into detention. The reason given to justify an override can be instructive to the overall detention reform strategy. During the period studied, 56 of the 154 overrides (36%) were applied because of an "FTA Warrant." Implementing the court

date notification and transportation support strategies mentioned above would also help to reduce the number of FTA warrants, and thus the number of youth overridden into secure detention who otherwise do not pose a serious threat to public safety.

Overall, staff appear to be making override decisions that are appropriate and that do not subvert the strength of the risk factors in accurately classifying youth according to their risk to public safety pending adjudication.

Finally, we examined alternative scenarios for the RAI's scale cut points to determine whether a different structure could produce risk groups with greater distinctions in recidivism rates. The RAI was designed so that youth with scores 6 and lower are released outright, and those with scores between 7 and 11 are placed in an ATD. We conducted several simulations that looked at whether moving the cut point between Release and ATD to 4, 5 or 7 points would produce greater distinctions in the recidivism rates. None of these scenarios created groups with statistically significant differences in recidivism rates, so as a result, we recommend leaving the scale as it is.

In summary, the South Dakota RAI is a well-designed instrument that identifies youth for outright release or placement in an ATD who have low rates of recidivism. Overwhelmingly, those who are rearrested are accused of very low-level offenses. The instrument produces similar results across both gender and race/ethnicity, indicating its fundamental fairness. An assessment of outcomes for youth whose RAI scores were overridden so they could be placed in a different release category indicated that the feature is used appropriately (youth who are overridden into a category perform the same as youth who scored into that category). A test of the scale's cut points indicated that the current threshold of 0-6 points for outright release operates as well as any of the other options (e.g., 0-4, 0-5 or 0-7 points) to create groups with distinct rates of recidivism. In other words, we do not recommend any changes to the application of the scale to youth who are screened using the RAI.