# **STATIC-99R Predictive Validity**



# Objective

To describe a sample of WADOC sex offenders and to examine the performance of the Static–99R in predicting recidivism (overall, sexual, sexually violent, and violent).

# Main Findings

The Static–99R was significantly likely to predict most types of recidivism (overall, sexual, and violent) rates, but did not predict sexually violent recidivism. The findings are limited in variability due to small number of individuals in the sample returning to prison for a sexual violent or violent new crime.

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#### Problem

Sex offenders comprise a fifth of the US incarcerated population (Alper & Durose, 2019). In Washington, sex crimes consist of approximately 21% and 16.8% of the individuals under confinement and supervised in the community, respectively (WADOC, 2019).

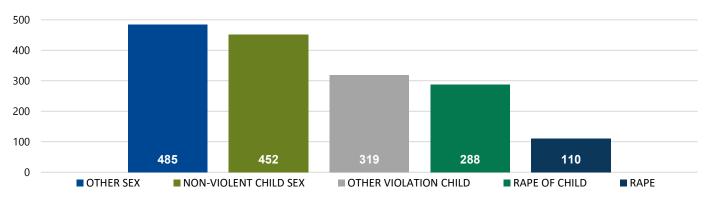
Risk assessments for sex offenders are necessary to evaluate offenders for sentencing and long-term community supervision. The Static–99R is a brief actuarial assessment used by the Washington Department of Corrections (DOC) that measures risk among adult male sex offenders and plays a vital role in determining offenders' treatment priority and likelihood to reoffend. Evaluating the predictive validity of the Static–99R to predict overall, sexual, violent and sexually violent recidivism supports DOC's mission to improve public safety by positively changing lives. Data regarding the predictive validity of the Static-99R used by the DOC, however, is limited.

The purpose of this report is to:

- Provide a demographic overview of the sample of DOC sex offenders assessed using the Static-99R;
- Provide counts of individuals who return to prison within three years of release with a completed Static–99R; and
- Evaluate the predictive validity of the Static–99R with regard to overall, sexual, violent and sexually violent recidivism.

# Sample

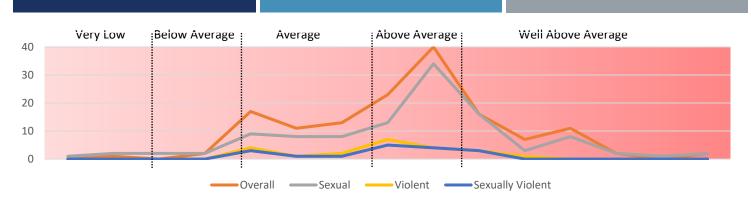
The sample included 1,262 offenders who were incarcerated for at least one sex offense (or sexually motivated offense), released by September 30, 2016, and had a Static–99R completed prior to their release. The average age of individuals included in the sample were 36.7 years old (SD = 12.6) at their most recent admission prior to assessment and 41.5 years old (SD = 13.1) at release. Most sex offenders were either non-Hispanic White (n = 920, 72.9%), non-Hispanic Black (n = 117, 9.3%), or Hispanic (n = 134, 10.6%).



NOTE: Includes individuals who were convicted with multiple offenses. "Other Sex" is defined as failure to register as a felony sex offender (1st, 2nd, or more), voyeurism, and sex motivation class as well as Indecent Liberties or Exposures and P.N. Sex (Commercial Sexual Abuse of a Minor, Possessions of/Viewing/Dealing in Depictions of a Minor Engaged in Sexually Explicit Conduct (1 or 2), Promotion Prostitution (1 or 2), Sexual Exploitation of a Minor, or Sodomy. "Non-violent Child Sex" includes Child Molestation (2 or 3), Communications with Minor for Immoral Purposes, Incest (1 or 2), or sexual Misconduct. "Other Violation Child" is defined as Child Molestation 1. "Rape of a Child" includes Rape of a Child 1 or 2 and "Rape" includes Rape (1, 2, or 3) and Statutory Rape 2.

## Findings

Most of the offenders were assessed on the Static–99R as average (n = 612, 48.5%), above average (n = 277, 22.0%), or below average (n = 205, 16.24%) risk to recidivate. Another 10.0% of the sample were assessed as well above average while only 3.3% were assessed as very low.



NOTE: Represents the percentage of offenses type per Static-99R score. Number of offenses appear larger as some individuals were convicted with multiple offenses. Static-99R Risk Categories: Very Low= -3 to -2; Below Average= -1 to 0; Average= 1 to 3; Above Average= 4 to 5, Well Above Average= 6+

First, we evaluated how the Static–99R explains the proportion of the variance with regard to overall (e.g., non-specific type of offense), sexual, sexually violent, and violent recidivism. Second, we assessed the change in relative risk in association to the unit change of the Static–99R scores by evaluating odds ratios. Findings revealed:

- For overall recidivism, the Static–99R was statistically significant in predicting overall recidivism, (F (1, 1,262) = 43.64, p < .001), suggesting that the Static–99R scores accounted for about 3.5% of the total variability in overall recidivism. Specifically, a 1-point increase in Static–99R scores produced a 1/3 increase in overall recidivism for the sample of offenders examined.
- For sexual recidivism, the Static–99R was also statistically significant in predicting sexual recidivism, (F (1, 1,262) = 34.71, p < .001) suggesting that the Static–99R scores accounted for about 2.8% of the total variability in sexual recidivism. Specifically, a 1-point increase in Static–99R scores produced a 1/3 increase in sexual recidivism.</li>
- For violent recidivism, the Static–99R was marginally significant in predicting violent recidivism, (F (1, 1,262) = 3.02, p = .08). The Static–99R scores accounted for about 0.23% of the total variability in violent and sexually violent recidivism, respectively. A 1-point increase in Static–99R scores produced a 1/6 increase in violent recidivism.
- For sexually violent recidivism, the Static–99R was not statistically significant in predicting sexual recidivism (F (1, 1,262) = 1.99, p = .16, NS) (not visualized due to insignificance).

Third, we reviewed the probability that a randomly selected offender who did not recidivate would have a lower Static–99R score than a randomly selected offender who did recidivate by utilizing the Area under the Curve (AUC). The measure, derived from the AUC, ranges from 0.5 (i.e., only a 50% chance that an unsuccessful offender will have a higher score than a successful offender) to 1 (i.e., perfect sorting; all unsuccessful offenders have higher risk scores than all successful offenders). In determining size of AUC values, Rice and Harris (2005)'s guidance was utilized (e.g., AUC values = .56 as small, .64 as moderate, and .71 as large).

#### Overall 0.75 0.25 AUC: .705 CI: 0.66-0.80 0.00 0 25 0 50 0.75 1 00 1.00 Sexual 0.75 0.50 0.25 AUC: .690 CI: 0.67-0.82 0.00 0.50 0.75 0 25 1 00 1.00 Violent 0.75 0.25 AUC: .634 CI: 0.68-1.02 0.00

0.75

0.50

## Implications and Next Steps

Eighty-two sex offenders from the sample returned to prison (e.g. returning to prison within three years of release). It is important to note that while failure to register is considered a sex offense under Washington statute, this was excluded from current analyses. Although the present analyses consisted of a small sample out of a larger population, the results provide meaningful information regarding returns to prison and the applicability of assessments that predict the likelihood of reoffending, including sexual, violent, and sexually violent recidivism. Future research from Research & Data Analytics (RDA) will assess the predictive validity of the Stable 2007 on overall, sexual, sexually violent, and violent recidivism, analyzing the rates of recidivism in sex offenders who participated in Sex Offender Treatment and Assessment Program (SOTAP) and evaluating the SOTAP program's efficacy to reduce infraction, violation, and recidivism rates [DOC Policy 570.000].

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