

The Violence Risk Scale

Screening Version©

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Predictive Validity of Violence Risk Scale – Screening Version©

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The Violence Risk Scale – screening version (VRS-SV) was developed to address the needs of clinicians and practitioners who require a tool with static and dynamic variables similar to the VRS for brief screening of clients for clinical and research purposes. Such screenings may include, but are not limited to, the selection of clients for additional more detailed assessments, for different intensities of treatment and so forth. The VRS-SV does not replace the VRS; it is a tool with properties similar to the VRS but requires less time to administer than the VRS.

The VRS-Screening Version (VRS-SV) consists of 6 static (S1, S2, S3, S4, S5, S6) and 5 dynamic VRS variables (D1, 6, 7, 8 and 17), a total 11 variables. The sample used to evaluate the VRS-SV is the same as the VRS (see Wong & Gordon, 2006). The AUCs for ROC for violent and all re-conviction with a mean follow-up time of 4.4 yrs are both .74 with upper and lower bound for 95% confidence intervals of .71 and .77 for both. The predictive validity for violent and all re-convictions are high. The total VRS-SV scores can be divided into 3 point bins: 0-3, 4-6, 7-9, 10-12, 13-15, 16-18, 19-21, 22-24, 25-27, 28-30 and 31-33. When the bins are plotted against percentage reconvicted for violent and non-violent crimes, the regressions equation for violent and all re-convictions are

Equation 1: **Violent reconviction** $y=6.6691x -11.663$ with $R^2 = .93$

Equation 2: **All reconviction** $y=8.1627x -2.6673$ with $R^2 = .96$

The large R^2 s (.93 and .96) suggest that the relationships between VRS-SV scores and percent violent and non-violent reconvictions are approximately linear. Refer to Wong & Gordon (2006) for examples of similar computations for percent recidivate for different bins (score ranges). For example, when 9 (bin 9 score of 25-27) is substituted as x in the regression equations for violent reconviction and non-violent reconviction, the percentages reconvicted obtained are 48.3% and 70.8% respectively.

The VRS-SV score ranges in each bin can provide, through computation using the regression equations, an estimate of the approximate percent of individuals predicted to recidivate in the study sample within the follow-up period. It is difficult to decide a-priori the best cut-off to use to select the so-call high risk individuals. Different cut-offs will select different number of individuals at different risk levels. The number that is meaningful to select may depend on the resources available for their management and treatment. It may also be useful to divide the entire range of VRS-SV scores into thirds such that 3-range of services, low, medium and high, are identified for those in the lower, middle or higher VRS-SV score ranges.

Generally, individuals who have been trained to administer the VRS should also be able to administer the VRS-SV since all the VRS-SV variables and scoring criteria are the

same as the corresponding variables in the VRS. Users of the VRS-SV should exercise the same level of care and be aware of various caveats in the interpretation of the scores as applied to the VRS (see Wong & Gordon, 2006).

Violent Risk Scale – Screening Version (VRS-SV) Total Scores and Percent Violent and All Reconvictions*

VRS-SV Total Score	% Violent reconviction	% All reconviction
0 to 3	0	5.5
4 to 6	1.7	13.7
7 to 9	8.3	21.8
10 to 12	15.0	30.0
13 to 15	21.7	38.1
16 to 18	28.4	46.3
19 to 21	35.0	54.5
22 to 24	41.7	62.6
25 to 27	48.4	70.8
28 to 30	55.0	79.0
31 to 33	61.7	87.1

* Based on results in Wong, S.C.P. & Gordon, A. (2006). The validity and reliability of the Violence Risk Scale: A treatment friendly violence risk assessment scale. *Psychology, Public Policy and Law*, 12(3), 279-309 and Wong, S.C.P. & Gordon, A. (2007). Predictive validity of Violence Risk Scale – Screening Version. (Unpublished research data and research note; available from the authors).

The percent reconvictions are estimates only and due caution should be exercised in the interpretation of the results as suggested in the above articles.