Computation of General and Violent Recidivism Risk

The VRS Calculator was developed to compute the predicted rates of general and violent recidivism of forensic service users after a 3- and 5-year follow-up in the community based on results of logistic regression modeling using VRS pre-treatment and change scores (see Olver et al., 2022). The calculator requires input of a VRS pre-treatment or T1 total score, and if the individual has participated in risk reduction treatment and re-assessed at post-treatment or T2, a VRS change score is inputted to compute predicted general and violent recidivism rates *(see further instructions below and in the VRS Workbook)*.

Instructions for use of the VRS Calculator and input of Change Scores

Pre-Tx/T1 assessments and computation of Change Scores:

• The '*Time 1 only*' model in the calculator incorporates a default 2.5 change score. Use the 'Time 1 only' model for individuals who may have participated in offense-reduction interventions and did not repeatedly fail to complete such interventions. If the individual has not previously been offered the opportunity to participate in offense-reduction intervention(s) but the individual is not currently resistant to participate in recommended interventions, also use the 'Time 1 only' model. In both of such scenarios, the individuals are currently likely to be in either the Contemplation or a more advanced SOC.

Note: If the failure to complete past interventions was due to the presence of a neurodevelopmental or major mental disorder, such as an intellectual disability or a psychotic disorder, use the 'Time 1 only' model if the individual is not currently resistant to re-engage in offense-focused intervention(s).

For individuals who have participated but repeatedly failed to complete offense-reduction interventions and are currently resistant to participate in recommended interventions, e.g., those who currently are likely in the Precontemplation SOC, rather than using the T1 only model, use any one of the other recidivism rate models (e.g., Computing Violent or General Recidivism for 3 or 5 years) and insert '0' for the change score. If the individual has not previously been offered the opportunity to participate in offense-reduction intervention(s) but is currently resistant to participate in recommended interventions, e.g., in Precontemplation SOC, also insert '0' for the change score.

Note: If the failure to complete past interventions was due to the presence of a neurodevelopmental or major mental disorder, such as an intellectual disability or a psychotic disorder, but the individual is currently resistant to engage in recommended interventions, e.g., in the Precontemplation SOC, also insert '0' for change score.

Post-Tx/T2 assessments and computation of Change Scores:

At the time of the Post-Tx/T2 assessment, a change score is computed as follows:

- Pre-Tx/T1 Total Score (Static + Dynamic scores) **minus** Post-Tx/T2 Total Score (Static + Dynamic scores).
- Pro-Rate the respective Total Scores as applicable.

Further information and details relevant to change score computations, along with details of the research samples, methodology, and the interpretation and communication of the absolute and relative risk measures as well as the common language risk levels are provided in the VRS Workbook. The VRS Workbook and VRS Calculator can be downloaded at no cost at https://psynergy.ca/vrs.