Name of Tool	Violence Risk Appraisal Guide-Revised (VRAG-R)
Category	Violence Risk (Validated)
Author / Publisher	Quinsey, Harris, Rice and Cormier
Year	2013

Description

- The Violence Risk Appraisal Guide-Revised (VRAG-R) is a 12-item actuarial risk assessment instrument for the prediction of violent recidivism among male forensic psychiatric patients.
- The instrument was revised in 2013 in order to make it easier to score. Four of the original VRAG items were dropped for using outdated diagnostic criteria or because they have been shown not to be fully applicable to individuals who committed sexual offences (Hertz et al., 2019).
- The instrument utilises the clinical records as a basis for scoring rather than structured interviews or questionnaires (Harris et al., 2015).
- The VRAG-R provides a numerical estimate of the risk of violent recidivism. It is suitable for males aged 18 years and older who have committed serious, violent or sexual offences.

Age Appropriateness

18+

Assessor Qualifications

Professional expertise and training on instrument.

Strengths

- The VRAG-R has a large literature base.
- This tool can be used in combination with historical notes and criminal records (Thomson et al., 2008).

Empirical Grounding

The VRAG was developed from file reviews of 618 male criminal offenders and forensic patients who were initially being assessed for criminal responsibility, fitness to stand trial and/ or being treated in a secure setting; this sample was followed for 7 years. Subsequently, the tool was recalibrated with an extended sample of 800 individuals and followed over a period of 10 years (Quinsey et al., 2006). It was revised in 2013 to make it easier to score. The results of the developmental sample of the VRAG-R showed good predictive accuracy with an AUC of .76 (Harris, Rice and Quinsey, 2016).

RATED page updated: July 2019

Inter-Rater Reliability	
a) UK Research	•Gray et al. (2007) – the VRAG obtained a high ICC value of .95 •Doyle and Dolan (2006) found an inter-rater reliability value of .99 between three raters based on seven cases.
b) International Research	•Rossegger et al. (2011) - the VRAG obtained an ICC value of .95. •Endrass et al. (2008) utilised Krippendorff's alpha to determine the VRAG's inter-rater reliability. The VRAG attained an excellent inter-rater reliability coefficient of .89. •Mills et al. (2007) found an ICC value of .95 for the VRAG in a sample of incarcerated Canadian offenders. •Olver and Sewall (2018) found the VRAG-R displayed excellent inter-rater reliability across 35 randomly selected double-coded cases, with an ICC value of .97.

Validation History

General Predictive Accuracy	
•The VRAG has been devised for use in forensic psychiatric settings (see section 'IV. Mentally Disordered Offenders'). As previously mentioned, other studies have also tested its validity in offenders without psychiatric diagnoses (Langton et al., 2007; Loza and Dhaliwal, 1997).	
a) UK Research	None available at present.
b) International Research	•Rice, Harris and Lang (2013) developed a revised version of the VRAG (VRAG-R), making it easier-to-score. Both the revised version and the original VRAG yielded high predictive accuracy with an approximate ROC of .75. •The VRAG was administered to 52 violent offenders in a Swiss prison to test its ability to predict misconduct. The VRAG displayed good predictive validity for physically violent misconduct and any misconduct (AUCs of 0.83 and 0.81 respectively); fair predictive validity was shown for other misconduct (AUC=0.73) (Abbiati et al., 2014). •Using a sample of 296 sex offenders followed-up over 17.6 years, Olver and Sewall (2018) found the VRAG-R scores demonstrated moderate to large predictive

	accuracy for sexual (AUC range=60-.67) and violent (AUC range=.70-.78) recidivism respectively. • In the first European cross-validation study of the VRAG-R, 534 individuals convicted of a sexual offence were followed up for an average of 7.62 years. The VRAG-R showed moderate to large predictive accuracy for violent, general and sexual recidivism (AUCs of .75, .78 and .63 respectively). It was found that predictive accuracy for sexual recidivism was only significant for those convicted of child sexual abuse offences but not for that who committed them against adult victims (Hertz et al., 2019). • When applied to a sample of 597 male juvenile sexual offenders, the VRAG-R showed potential strength in predicting non-sexual violent recidivism. It was found, however, that elevated offence severity and adverse childhood experiences encumbered the predictive accuracy of the tool, particularly in the cases of sexual recidivism (Barra et al., 2018).

Validation History

Applicability: Females	
a) UK Research	• Coid et al. (2009) – the VRAG generated moderate predictive accuracy of recidivism in a sample of female offenders with ROC values ranging between .65 to .66.
b) International Research	• Eisenbarth et al. (2012) - the VRAG demonstrated good accuracy in predicting general recidivism in a sample of 80 German female offenders (AUC = .72). • Hastings et al. (2011) - the VRAG was unable to predict institutional misconduct and post-release recidivism in female offenders.

Validation History

Applicability: Ethnic Minorities	
a) UK Research	• Snowden, Gray and Taylor (2010) - in a two-year follow-up, the VRAG obtained an AUC value of .74 in predicting violent reconvictions for offenders of Black ethnic origin.
b) International Research	None available at present.

Validation History

Applicability: Mental Disorders	
a) UK Research	• Doyle et al. (2012) - the VRAG moderately predicted post-discharge violence in a sample of patients discharged from acute mental health units (AUC = .65). • Coid et al. (2009) - the VRAG appeared to outperform the HCR-20 and the PCL:R, demonstrating a ROC area of .70 for violent recidivism; the VRAG scores also predicted acquisitive reconviction in males with a ROC of .71. • Ho et al. (2009) - AUC analysis revealed that the VRAG had moderate to high accuracy in predicting minor violence (.70), serious violence (.74) and any violent incidents (.68). • Snowden et al. (2009) – the VRAG obtained a ROC value of .77 in a sample of male psychiatric patients.
b) International Research	• A study within an Australian clinical forensic practice found that the revised version of the VRAG (VRAG-R) demonstrated predictive validity for recidivism (Brookstein, Daffern and Ogloff, 2016). • Glover and colleagues (2017) tested the VRAG-R on a sample of 120 male correctional individuals. Results indicated that the VRAG-R gave moderate levels of predictive validity for general and violent recidivism that was able to be sustained over time. • Camilleri and Quinsey (2011) report the VRAG has "good predictive accuracy with psychiatric patients of lower intelligence". • Verbrugge et al. (2011) - the VRAG total score attained AUC values of .79 and .92 for violent and general recidivism respectively in a sample of 59 community-based offenders with intellectual disabilities. • In their retrospective study, Rice et al. (2008) showed that the VRAG had the ability to discriminate risk between non-intellectually disabled individuals (control) and intellectually disabled sex offenders. • Kröner et al. (2007) - the tool demonstrated moderate accuracy (AUC) in predicting general (.70) and violent recidivism (.70) in a sample of German male offenders undergoing clinical evaluation for criminal responsibility.

	• Pouls and Jeandarme (2018) collected VRAG scores for 52 offenders with intellectual disabilities (OIDs). AUCs were non-significant; although a trend towards significance was evident for physical aggression (AUC=0.74). The results show that the VRAG overestimated risk of OIDs and was only accurate in identifying low-risk individuals.

Contribution to Risk Practice

- The VRAG-R has the ability to create awareness of static risk factors and can prompt further assessment of the risk of reoffending.
- The VRAG-R shows some consideration for responsivity issues (e.g. psychopathy).

Other Considerations

- Since the VRAG is composed solely of static factors, the tool does not have the capacity to inform treatment protocol or monitor offender progress or motivation for intervention (Daffern, 2007).
- In a review of cases decided in United States federal courts, it was found that the VRAG was mainly introduced by the prosecution as a measure of violence risk and was rarely challenged (Cox et al., 2018).
- The VRAG was found to have high concurrent validity with SAQ total scores (Andreau-Rodriguez, Peña-Fernández and Loza, 2016).
- The tool also relies on PCL:R rating scores as part of the predictive measurement. A study by Doyle, Dolan and McGovern (2002) found that the PCL:SV was a significant contributor to the predictive validity of the VRAG.
- For more information on the VRAG-R, please visit the following website: http://www.vrag-r.org/