

Forensic risk assessment models

Forensic Psychology

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Overview

The paper written by Heilbrun (1997), provides guidance in aiding legal decision making regarding violent risk assessment (RA). It focuses on improving the quality and accuracy of forensic mental health assessment contributing to a better informed legal system using two RA models: prediction model (PM) and management model (MM). PM aims to improve accuracy regarding the individual's likelihood of reoffending based on past behaviour through the use of actuarial, statistical designs. This model is only administered once and the risk factors (RF) it identifies are static and fixed. Therefore, the model is predictive and has limited applicability in relation to changing future behaviour through intervention. The MM is a post-assessment model which can be administered multiple times and can influence risk reduction intervention. Data generated by the MM can be used to make new, better informed decisions based on new data. The MM model is therefore dynamic meaning that the RF may change over time. In not guilty for reasons of insanity and civil commitment proceedings a combination of the PM and MM is usually applied.

Violent offenders:

Violent offenders are individuals who commit an act of aggression. However, not all acts of aggression are considered violent offences and there is no official agreed upon definition (Brown & Campbell, 2010). An example of a violent offence is homicide, which is defined as the act of killing another human being either intentionally or unintentionally (Appleton, 2010). According to the Office of National Statistics (2015), 2015 saw a 14% increase in homicides in England and Wales. It is therefore important to address this increased statistic and collate information regarding appropriate predictive and management RA interventions.

Violent risk assessment models:

The violence risk appraisal guide (VRAG) is an example of a violence RA tool (Singh, Grann, & Fazel, 2011). Most RA models including VRAG (Barry, Loucks, & Kemshall, 2007) are actuarial risk assessment tools (ARAT) used to assess the probability of future violent behaviour (Hanson, 2000). Although ARAT can be cost effective (Crighton & Towl, 2015) they can also be inflexible as they are structured instruments comprised of statistical methodology which may fail to address the complexity of RA and future management plans (Mendoza, Rose, Geiger, & Cash, 2016). They focus on the historical, static RF, and hold limitations due to their large error margins relating to confidence intervals. This limits the accuracy of predictability (Skeem, Douglas, & Lilienfeld, 2009). Accuracy of prediction is important as a false negative prediction may lead to inadequate protection due to the mistaken RA (Kemshall, 2001). In contrast to ARAT, Structured Professional Judgement (SPJ) is an empirically based decision-making approach to risk assessment, it is used by many current RA tools such as HCR-20v3 (Guy, 2008). SPJ aims to address the inflexibility of ARAT and to bridge the disparity between ARAT and Unstructured Clinical Assessments (Guy, 2008). SPJ enables decisions of RA to be made based on a list of predetermined risk factors (RF) combined with professional judgement (Falzer, 2013) moving from predicting violence to assessing risk of violence. The combination of professional judgement and predetermined RF limits the bias that can occur under professional judgement (Crighton & Towl, 2015).

HCR-20v3

HCR-20v3 is recommended as an effective example of SPJ to assess violent offenders in the UK (Doyle et al., 2014) and is the most used tool worldwide (Belfrage, 2015). It is a 20-item instrument, including both static and dynamic RF and focuses on three areas:

clinical, management, and historical RF (Brown & Singh, 2014). HCR-20_{v3}, combines both the PM, through static historical RF, and the MM, through the dynamic clinical and management RF (Douglas & Reeves, 2010). The ten historical items focus on predicting future violent behaviour based on specific characteristics such as antisocial attitudes, impulsivity and substance misuse (Craig, Beech, & Cortoni, 2013). The remaining ten clinical and management items included in HCR-20_{v3}, address future risk management and aim to provide a framework for interventions (Haque & Webster, 2012) focusing on supervision, treatment, monitoring and victim protection (Shiina, 2015).

Although research has supported HCR-20_{v3}'s high level of reliability and validity, it has been criticized for its lack of short term predictability as studies conducted only predicted risk of violence several months in the future (Douglas & Reeves, 2010). Previous versions of HCR-20 have focused on nomothetic considerations rather than focusing on the individual. Although scientific, the nomothetic approach only provides superficial understanding and can neglect personal details of the individual (Barlow & Nock, 2009). The third version aimed to incorporate both nomothetic and ideographic considerations to address this limitation (Strub, Douglas, & Nicholls, 2014). SPJ, the approach used in the HCR-20_{v3} model also holds limitations. SPJ categorizes individuals into risk subdivisions making the system vulnerable to mistakes. For example, if an individual is categorized as being high risk but does not commit any future violent act, the resources distributed to that individual may be wasted (Ryan, Nielssen, Paton, & Large, 2010). Although not necessarily a limitation, the question of ownership of HCR-20_{v3}, along with all RA tools needs to be addressed. Where ownership lies with private businesses, there may be dissonance between profit margins and the benefits to the legal system and the individuals within it (Hamilton, 2015).

Arguably, the most effective RA scheme to determine high risk individuals would be a parental/school-based preventative management intervention in association with predictive

neurobiological tests (Popma & Raine, 2006) assessing reduced heart rate, skin conductance and increased levels of cortisol and testosterone hormones. This, in combination with sociocultural indicators such as poverty and low intelligence, may indicate early antisocial behaviour such as aggression seen in violent offenders (Crighton & Towl, 2015). Loucks (2002) found that individuals who commit serious offenses often start offending in early life and are more likely to engage in recidivism. However, although parliament introduced a similar preventive intervention in schools (Cabinet Office, 2006), the current political climate regarding public sector cuts in prisons and the mental health sector (Monbiot, 2013; Hellowell, & Pollock, 2009) has led to reduced intervention implementation.

Word count: 1000

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