



Radicalisation Prevention
Competences' Development
Programme for Justice Professionals



R4JUST

**Collection of approaches and best practices on using risk and needs
assessment information at sentencing across European jurisdictions**

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R4JUST Project

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1. Change Control

1.1. Document Properties

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3. Table of Acronyms

AUC: area under the curve

CAN: The Camberwell Assessment of Need

CANFOR: The Camberwell Assessment of Need – Forensic version

ERG22+: Extremism Risk Guidelines

HCR-20: historical, clinical, risk management-20

LSI-R: Level of Service Inventory-Revised

NRA: Needs and Risk Assessment

NVRA: Nonviolent Risk Assessment

OxRec: Oxford Risk of Recidivism Tool

PCL-R: Psychopathy Checklist-Revised

RRAP: Radicalisation Risk Assessment in Prisons

RNR: Risk-Need-Responsivity Model

SAVRY: Structured Assessment of Violence Risk in Youth

SPJ: Structured Professional Judgement

US: United States of America

VERA: Violent Extremist Risk Assessment

VRAG: Violence Risk Appraisal Guide



4. Executive summary

The current report of R4JUST aims at collecting the approaches and best practices on using risk and needs assessment information at sentencing. While the initial focus, as stated in the project application was on European Jurisdictions, the scarce scientific research in the topic led the authors to widen the geographic scope and include contributions from outside Europe (mostly from the U.S.). The report starts by exploring the well-established Risk-Need-Responsivity Model (chapter 6), followed by a collection of empirical evidence on the use of risk and needs assessment tool at the sentencing stage (chapter 7). This collection of studies then led to the mapping of existing risk/needs assessment tools (chapter 8) with a focus on the ones that have been applied more extensively and therefore produced more data that can be used to conjecture about its potential use at the sentencing stage. Chapter 9 problematise the use of this tools for sentencing purposes and reflects on the topic of radicalised/terrorist offenders and the tools available for these defendants, arguing that generic tools used for non-terrorist offender might not be appropriate for this population. Conclusion (chapter 10) are then presented and confronted with reviewed literature. Main conclusions are that: (1) risk/needs assessment tools are widely used and recommended; (2) they allow a usually fast evaluation of the offender bringing insights for different stages (such as sentencing, rehabilitation, parole); (3) the sole use of these tools (particularly actuarial tools) for sentencing purposes is not recommended.



5. Introduction

The current deliverable aims at collecting the approaches and best practices on using risk and needs assessment information at sentencing, with a focus on European jurisdictions.

From a dictionary definition, according to the Cambridge dictionary, a sentence is to “decide and say officially what a punishment will be”, and sentencing refers to “a punishment given by a judge in court to a person or organisation after they have been found guilty of doing something wrong”. According to Warren (2007), while sentencing, judges aim at proportionately punish the offender and promote public safety – through incapacitation, deterrence, or rehabilitation of the offender, and deterring criminal conduct by other offenders. Hence, it remains crucial to understand to which extent the addition of Risk and Needs Assessment information at sentencing could play a significant role on the decision-making process of judicial professionals. The benefits of such inclusion should not be overlooked, since the assessment and understanding of offenders’ needs could successfully impact offenders’ rehabilitation while risk assessment can play an important role in the punishment decision and adequate measures.

Therefore, at a certain point, professionals from the criminal justice system aim at evaluating (dynamic, that is, criminogenic needs, but also static) risk factors that are known to contribute to criminal behaviour. This evaluation, that aims at accurately predict recidivism risk, is an inevitable part of the sentencing process and has historically been done by two ways: (1) through professional judgment based on the clinical assessment of the defendant; and (2) through actuarial (statistical) prediction. Focusing on the latter, these assessment instruments are usually designed to support a data collection semi-structured interview with offenders’, focusing on attitudes and behaviours that have a link with the risk of recidivism (James, 2018). Consequently, these assessment tools are expected to have a good predictive validity, that is, being capable of accurately predict the likelihood of



reoffending. The use of such instruments started nearly a century ago, however with an exponential growth since the 1980s (Starr, 2014). Even though this information can be useful at different stages such as sentencing, release, parole, probation, management and placement of offenders (Fazel et al., 2019; Shepherd & Sullivan, 2017), the focus of this report will be on the use of risk and needs assessment at sentencing. Therefore, the authors face a challenge of combining and searching literature that stands at the interface between social sciences and law.

Back in 2007, listing policy initiatives to reduce recidivism, Warren mentioned several initiatives that are relevant in the context of this deliverable and project such as:

- Explicitly include risk reduction and recidivism reduction as key objectives of effective state sentencing policy;
- Ensure that state sentencing policy allows sufficient flexibility for sentencing judges to implement risk reduction strategies;
- Promote use of actuarial risk assessment instruments in assessing suitability of sentencing options;
- Develop community-based corrections programs that address the criminogenic needs of felony offenders;
- Develop community-based intermediate sanctions appropriate to the nature of committing offenses and offender risks;
- The inclusion of a curriculum on evidence-based practices for sentencing judges' education programmes.

Therefore, to reduce recidivism, the author recognises the importance of proportional sentences (highlighting the need for flexibility and community based programmes), the role that risk assessment plays in providing information for decision-making (e.g., diversion from prison) and the need for risk reduction initiatives and judges' training in evidence-based practices, therefore reducing the potential for unfair/disproportionate sentencing.



Of course, the evidence-based practices come from theoretical models and practical knowledge that has been acquired during the last decades. Therefore, it is important to mention the risk-need-responsivity model before moving to the analysis of the use of risk and needs assessment information at sentencing.

6. The Risk-Need-Responsivity Model (RNR)

Developed in the last decades, based on the work from Donald Andrews and James Bonta, the RNR model represented a paradigm shift from a “nothing works” perspective to a scientific approach of inmates’ risks and needs, and authors started to work with inmates: (1) addressing behavioural characteristics that were related to inmates’ offending behaviour; (2) following behavioural and cognitive behavioural treatments; and (3) focusing on inmates in the moderate and high-risk spectrum (Wormith & Zidenberg, 2018).

Principles of the RNR model are related with whom to treat (Risk), what to treat (Needs), and how to treat them (Responsivity). In more detail, regarding risk, it is key to have a (valid and accurate) risk assessment tool in order to assign inmates to available treatment or vary the intensity of such treatment according to the inmates’ risk level (i.e., more treatment for those that are more likely to reoffend). In terms of needs, the model states that inmates’ needs, and particularly criminogenic needs, should be addressed by interventions, since these are dynamic risk factors that are susceptible to change over time, particularly if adequate interventions (i.e., therapy, programmes, services) are implemented (Wormith & Zidenberg, 2018). Last, responsivity argues that rehabilitative actions should be delivered in such a way that its style is consonant with offenders’ learning abilities and style (James, 2018).

The RNR model also contributed to the identification of the most common criminogenic needs, referred by the authors as the central eight. These eight dynamic risk factors include the Big Four (i.e., history of antisocial behaviour; antisocial personality pattern; antisocial cognition; and antisocial associates) and the Moderate Four (i.e., family/marital circumstances; school/work;



leisure/recreation; and substance abuse) (Grieger & Hosser, 2014; James, 2018). In detail, the Big Four can be described as follows:

- 1) History of antisocial behaviour: includes indicators such as “being arrested at a young age, a large number of prior offenses, and rule violations while on conditional release” (James, 2018, p. 6);
- 2) Antisocial personality pattern: includes callous traits, an impulsive behavioural pattern, and involvement in trouble, among others;
- 3) Antisocial cognition: “negative attitudes towards the law and justice system, beliefs that crime will yield rewards, and rationalisations that justify criminal behaviour” (James, 2018, p. 6)
- 4) Antisocial associates: this factor is related with offender’s relations that are strengthened with other offenders and weakened with noncriminals.

On other hand, the Moderate Four encompass the following risk factors:

- 1) Family/Marital circumstances: offender’s relationships are marked by poor quality links with parents or spouses;
- 2) School/Work: poor performance and low involvement in school or work activities leading to little or no rewards and satisfaction;
- 3) Leisure/Recreation: the persons gets little or no satisfaction from noncriminal recreational activities;
- 4) Substance Abuse: problems with alcohol and drugs represent a risk factor, particularly are current.

Aligned with this model, the authors developed an inventory (Level of Service Inventory) that can be applied to assess inmates’ needs and risk level.



7. Empirical evidence on the use of risk and needs assessment at sentencing

Forensic psychologists are frequently involved in a process where judicial decisions in the justice system need to be legitimised by the application of principles and procedures of psychological assessment (Gonçalves, 2010; Shepherd & Sullivan, 2017). Moreover, the justice system expects the forensic expert to clarify the motivations that lead to crimes and the veracity and credibility of testimonies provided by different actors (Gonçalves, 2010). In this scenario, the Forensic Examiner appears as an important role, that is, a “psychologist who examines the psychological condition of a person whose psychological condition is in controversy or at issue” (American Psychological Association, 2013, p. 19). In order to perform this examination, particularly in the case of radicalised individuals, the forensic examiner will use available risk and needs assessment tools to inform its judgement and suggest any measures that may apply to the offender plethora of needs and risk level. The use of this assessment tools will allow for a quantification and precision that are different from only having judge’s speculation. That is, as stated by Hester (2020), “instead of imprecise guesswork («there’s a good chance this defendant will reoffend») the risk instrument can put a number on the likelihood: 70% of individuals who share characteristics with this person go on to reoffend, while 30% do not” (p. 252). As the author also highlights, by providing this evidence one is not telling the judge what to do but instead it allows an increase in precision when compared to the natural, non-structured intuitive process.

According to Monahan and Skeem (2016) the use of risk assessment instruments at sentencing contributes for the following three main roles:

- Inform decisions regarding the imprisonment of high-risk offenders;
- Inform decisions regarding the supervised release of low-risk offenders;
 - Estimate low likelihood of reoffending to justify “an abbreviated period of incapacitation, supervised release (probation/parole), or no incapacitation at all” (p. 494).
- Inform decisions designed to reduce offender risk status;



- Understanding that the risk status will help in prioritising interventions for a group of inmates. Analyse how the likelihood of recidivism changes over time. Identification of risk factors that can be changed to lower the likelihood of committing new crimes.

Research in Europe is scarce regarding the use of risk and needs assessment at sentencing. Therefore, despite the initial focus of this deliverable on the European context, in this section we analyse research results independently of the country of origin.

The use of risk assessment tools to justify non-prison sentences has been studied in the United States of America (US), since recent changes in the US Penal Code seem to increasingly rely on risk assessment in order to deprioritise prison for low-risk offenders, favouring different approaches (Garrett & Monahan, 2019). Results from a recent study with a sample of 7,416 inmates in Virginia show that alternative sentences were given to (drug and property) offenders in 42% of the cases, when offenders were assessed as low-risk offenders (3,396 out of 7,416). Even when these offenders were evaluated as being at higher risk, in 23% of the cases, an alternative sentence was imposed. The risk classification was obtained with the Nonviolent Risk Assessment (NVRA) tool (Garrett et al., 2019). The NVRA is an actuarial risk assessment instrument that was developed by the Virginia Criminal Sentencing Commission and independently validated by the US National Center for State Courts (Garrett & Monahan, 2019).

Most common alternatives to a prison sentence were supervised probation, diversion from prison to jail, restitution, unsupervised probation, and substance abuse treatment. Therefore, this study, using a large sample, provides some evidence regarding the use of assessment tools' results by judges in the sentencing process (Garrett et al., 2019).

Hester (2020) presents a study using sentencing and recidivism data from Pennsylvania (n = 10,000) to illustrate two important concepts on risk assessment: accuracy (i.e., how precise the tool is) and outcome (what it predicts). Developing a



parsimonious risk instrument that considered prior convictions, presence of a juvenile adjudication, age, and gender as predictors the author confirms the adequacy of the predictors, showing a linear relation between the obtained score (ranged from 1 to 9) and the real recidivism rates (within 3-years after release). Moreover, he does the same exercise but only considering violent recidivism, to illustrate the different meaning of “high risk”. That is, while offenders that had the highest punctuation (9) showed a recidivism rate of 79% (considering any type of crime), when it comes to violent recidivism, the same group of offenders had a recidivism rate of 18%. Therefore, the judges need to be aware of the technicalities of this assessment instruments, since as this case illustrates an offender flagged as being a high-risk offender can present very diverse recidivism rates according to the outcome that is being considered.

A study in the Netherlands explored the Structured Assessment of Violence Risk in Youth (SAVRY) ability to predict reoffending and compared it to an unstructured clinical judgement. Results show that the structured approach outperformed the unstructured risk assessment. Juvenile judges’ only had access to the unstructured risk assessment. Researcher compared whether judges’ decision were more influenced by the index offense (type of crime) than for the unstructured professional judgement, concluding that a significant association between the unstructured assessment and the type of sentence (mandatory treatment vs detention) exists (Lodewijks et al., 2008).

A study in Spain using the SAVRY showed that young offenders that relapsed presented higher means in all domains when compared with non-recidivism offenders. This means that repeated young offender present higher values in historical, social and individual factors, while having lower punctuations in the protective factor (García-García et al., 2016). The use of SAVRY results at sentencing was studied by Spice, Viljoen, Gretton, and Roesch (2010). The authors did a correlation between tool results and sentencing and concluded that youth offenders that were sentenced as adults were the ones who received higher risk ratings by psychologists.



A systematic review that analysed the performance of risk assessment tools, encompassing 73 samples (from 13 countries), with a total of 24.847 participants, concluded that they are very accurate on the detection of low risk individuals. However, the authors do not recommend their sole use for sentencing, as well as detention and release (Fazel et al., 2012).

Considering the high accuracy in detecting low-risk individuals, a potential use for these results is related with preclusion from incarceration. In a recent paper, Reitz (2020) considers that the following three groups of offenders should be considered, resulting in a potentially substantial drop in incarceration rates:

- 1) “Defendants who should not be sent to prison or jail by sentencing judges even though the law allows for such penalties” (p. 208); in particular, the author argues that a preclusion strategy should be offered to offenders with a risk assessment score compatible with a low risk of violence/serious violence bin;
- 2) Inmates (i.e., those already serving prison sentences) who “should be released by parole boards or other releasing authorities at the earliest opportunity” (p. 208); and
- 3) “Probation and parole violators who should not be revoked to prison or jail despite the fact that revocation is a legally authorised sanction in their cases” (p. 208).

Very few studies exist reporting how the risk assessment is used at sentencing. In Portugal, one master thesis devoted to the topic was found. Analysing 14 forensic reports and the corresponding judicial sentences the authors conclude that most court decisions went against the expert report. However, the majority of the judicial sentences (78,6%) refer the existence of the forensic report and mentions aspect of the report (Faria, 2011). In another similar study, there was an agreement between judges’ decision and forensic reports in 58,8% of the times, with judges accepting experts’ suggestions in 66,7% of the times (Berenguel, 2014).



8. Available risk and/or needs assessment tools

Before moving to a more detailed analysis of some of the available tools it is important to note that hundreds of these tools exist (Fazel et al., 2012, 2016) and therefore our focus will be on the ones that have been applied more extensively and therefore produced more data that can be used to conjecture about its potential use at the sentencing stage. Following findings from a meta-analysis in the field (e.g., Fazel et al., 2012) we will focus on the characterisation of violent offending and any criminal offending risk assessment tools, namely, the Level of Service Inventory-Revised (LSI-R), the Psychopathy Checklist-Revised (PCL-R), the Violence Risk Appraisal Guide (VRAG), Historical, Clinical, Risk management-20 (HCR-20) and the Structured Assessment of Violence Risk in Youth (SAVRY). Additionally, a recently developed scalable tool using actuarial data will be described (OxRec). In terms of needs assessment, we will describe the forensic version of the Camberwell Assessment of Need.

Before moving to the characterisation of the tools it is important to provide readers with some notes regarding predictive accuracy of the tools, sometimes called discrimination, that is, in this context, how accurate a tool can correctly predict true positives. This is usually calculated using the area under the curve (AUC) value. According to Melo (2013) “AUC value is within the range [0.5–1.0], where the minimum value represents the performance of a random classifier and the maximum value would correspond to a perfect classifier (e.g., with a classification error rate equivalent to zero)”. This means, in the context of risk and needs assessment tools that a tool with an AUC value of 1 would be able to predict with full accuracy and therefore successfully discriminate recidivist and non-recidivists. On other hand, an AUC of 0.5 will be worthless.



8.1. Camberwell Assessment of Need – Forensic Version

The Camberwell Assessment of Need (CAN) represents a series of questionnaires used to assess problems experienced by people with mental health issues. Among those questionnaires, a forensic version exists (CANFOR), aiming at assessing the needs of people with mental health problems who are in contact with forensic services.

The CANFOR supports data collection using an interview, in which a difficulty in the last month (in a particular area) is considered as a need. After identifying needs, they can be scored as met or unmet. According to the authors that developed this needs assessment instrument “A met need is defined where a difficulty has been identified for which an appropriate intervention is currently being received. An unmet need is defined where a difficulty has been identified for which no interventions are currently being received, from either formal or informal sources, or that any interventions or support being received are not helping” (Thomas et al., 2003, cit in Thomas et al., 2008, p. 112).

CANFOR considers the following domains: 1) Accommodation; 2) Food; 3) Living environment; 4) Self care; 5) Daytime activities; 6) Physical health; 7) Psychotic symptoms; 8) Information; 9) Psychological distress; 10) Safety to self (self-harm); 11) Safety to others (violence); 12) Alcohol; 13) Drugs; 14) Company; 15) Intimate relationships; 16) Sexual expression; 17) Childcare; 18) Basic education; 19) Telephone; 20) Transport; 21) Money; 22) Benefits; 23) Treatment; 24) Sexual offences; and 25) Arson.

8.2. Level of Service Inventory-Revised

The Level of Service was developed within the scope of the RNR model. It is a 54-item survey that considers the following 10 domains: 1) criminal history; 2) education/employment; 3) financial; 4) family/marital; 5) accommodation; 6) leisure/recreation; 7) companions; 8) alcohol/drug problems; 9) emotional/personal; and 10) attitudes/orientation.



The practitioner that uses the LSI scores the presence (1) or absence (0) of a particular risk factor and after all items are scored offenders are categorised as having Low (0-13), Low-Moderate (14-23), Moderate (24-33), Moderate-High (34-40), and High (41-54) risk (Lowder et al., 2019).

According to Duwe and Rocque (2016), the LSI-R has been extensively used, particularly with a focus on recidivism prediction. However, since the LSI-R is used to guide treatment and supervision of offenders, their correct placement (i.e., addressing offenders needs) may have a suppressor effect, meaning that if the rehabilitation process is successful, recidivism rates may tend to be similar between offenders targeted in different risk levels.

Concerns regarding racial bias in risk assessment were also addressed by Lowder et al.'s (2019) study. Using a sample of 11,792 Black and White probationers, results show that little to no racial bias exist when using information from the LSI-R at sentencing. Despite the general use of LSI-R as a risk and needs assessment tool in several countries, the predictive validity of the measure is questionable, with studies showing a poor predictive performance of the tool, independently of the interventions the offender received or not between being assessed and recidivism (Duwe & Rocque, 2016).

8.3. Psychopathy Checklist-Revised

The Psychopathy Checklist-Revised (PCL-R) uses information from semi-structured interviews and file information (case-history) to rate on a three-point scale ranging from 0 to 20-items. Therefore, punctuations range from 0 to 40 and generally a cut score of 30 is commonly used in North America, but different cut scores can be used according to the purpose of the evaluation (Hare & Neumann, 2005). Despite multiple dimensional configurations can be found in the literature, Hare and Neumann (2005) propose the following four factors: 1) interpersonal; 2) affective; 3) lifestyle; and 4) antisocial.



The interpersonal factor includes items such as pathological lying and grandiose sense of self-worth; the affective factor includes items that evaluate the lack of remorse/guilt, fail to accept responsibility and callous and/or lack of empathy; lifestyle dimension encompasses stimulation seeking, parasitic lifestyle, and lack of realistic, long-term goals; and the antisocial dimension considers items such as poor behavioural controls, juvenile delinquency and criminal versatility.

8.4. Violence Risk Appraisal Guide

The Violence Risk Appraisal Guide (VRAG) estimates recidivism rates of mentally ill male offenders, therefore providing evaluators with the probability that a offender “will be arrested or charged with a subsequent violent offense” (Harris et al., 2002, p. 378). This assessment tool has 12 items, incorporating scores from other tools such as the PCL-R and diagnosis criteria from the Diagnostic and Statistical Manual of Mental Disorders (DSM) – criteria for schizophrenia and personality disorders. Additionally, considers other risk factors such as elementary school maladjustment, history of alcohol problems, failure on prior conditional release and age at index offence. The risk assessment tool was developed in Canada but is translated and adapted to several countries. Predictive accuracy of the tool appears to be higher than other options for violence and criminal recidivism, with AUC values indicating good predictive accuracy in a validation study in Germany (Kröner et al., 2007).

8.5. Structured Assessment of Violence Risk in Youth

The Structured Assessment of Violence Risk in Youth (SAVRY) has a total of 30 items, of which 24 are scored as low, moderate or high, and organised in the following three dimensions (Spice et al., 2010):

- 10 items for Historical Risk (e.g., early initiation of violence, parental/caregiver criminality);
- 6 items for social/contextual risk (e.g., peer delinquency, stress and poor coping); and



- 8 items for individual/clinical risk (e.g., low empathy/remorse, anger management problems).

The six remaining items refer to the protective items (scored as absent or present) such as having strong attachments and bonds. Items from the historical risk represent static risk factors while social/contextual risk and individual/clinical risk factors are dynamic risk factors.

As the name indicated, the SAVRY was design to assess the risk of violence in adolescents aged 12 to 18. The tool appears to have good predictive validity in terms of violent recidivism and (general) recidivism, with the protective factors also being good predictors of desistance from reoffending (Urquhart & Viljoen, 2014). Analysing 50 court cases (mostly in Canada and USA), results show that SAVRY is mainly used at sentencing, with adolescents that were charged by offenses such as murder, robbery/theft, and assault. The judges that had access to the evaluation results refer to youth's specific risk factors in 41% of the cases and to strengths of protective factors in 30% of the cases. In the judicial decision making process, considering the 50 cases already mentioned, judges directly or indirectly refer the risk assessment tool in 76% of the cases, stating in 58% of the cases that risk assessment tool was considered/weighted among other factors that were considered (Urquhart & Viljoen, 2014).

8.6. Historical, Clinical, Risk management-20

The historical, clinical, risk management-20 is a tool initially developed in 1995 and revised in 1997 and 2013. The HCR-20^{v3} contains 20 risk factors, intended to evaluate risk for general violence in adults, that are organised in three scales: 1) historical scale; 2) clinical scale; and 3) risk management scale.

In higher detail, the historical scale encompasses risk factors that refer to a history of problems with diverse topics such as relationships, substance abuse, violence, mental disorders, personality disorders, traumatic experiences and violent



attitudes, among others; the clinical scale, in turn, refers to more recent problems with violent ideation or intent, (affective, behavioural and cognitive) instability, symptoms of major mental disorder, insight (related with violence risk, mental disorder and need for treatment), and compliance and/or responsiveness to treatment or supervision response. Last, the risk management scale is related with future problems with professional services and plans, living situation, personal support, treatment or supervision response and stress or coping.

The administration of the tool is done following seven steps (Douglas et al., 2014):

1. Gather information: in this stage, the evaluations should not only interview the evaluatee but also assemble enough information to be able to assign different ratings to the risk factors;
2. Presence of risk factors: during this stage, information previously gathered is organised and risk factors are rated considering a threefold rating structure (i.e., 'No', 'Possibly or Partially', and 'Yes');
3. Relevance: consider the relevance of different risk factors, that is, take into account the role of specific risk factors in explaining past and future violence. Evaluators should rate each risk factor as having a low, moderate or high relevance to understand the evaluatee's violent behaviours;
4. Formulation/case conceptualisation: case formulation is done following previous steps and aims at providing an explanatory framework for the person's behaviour. This conceptualisation should include elements such as the causes and explanations of behaviour, providing guides for risk reduction efforts;
5. Scenarios: develop/plan different risk scenarios, aligned with the evaluator concerns regarding what a person might do. Scenarios draw by the evaluator can be optimistic (a belief that violent behaviour will cease), worst-case scenarios – refers to a escalation scenario, in which severity of violent actions are expected to increase over time –, repeat scenario (the same type of violence will be perpetrated), and a twist scenario (violent behaviour will occur but with a different configuration);



6. Management: refers to the management of the case according with the case conceptualisation and scenarios;
7. Final options: in this final step the evaluator summarises his/her concerns about the evaluatee's risk level and prioritisation of services. The summary risk ratings should be presented in the following format:
 1. Risk of future violence generally, or case prioritisation;
 2. Risk for serious physical violence, and
 3. Risk for imminent violence.

Despite the popularity of the HCR-20, in studies in Europe (using the second version) the tool failed to achieve predictive validity (cf. Eisenbarth et al., 2012). However, the same second version showed good predictive validity in other studies (cf. Cox et al., 2018).

8.7. Oxford Risk of Recidivism Tool

Trying to overcome some of the limitations of existing instruments, Fazel et al. (2016) developed the Oxford Risk of Recidivism Tool (OxRec). This tool was developed and externally validated in Sweden, providing a probability score for violent reoffending and stratifying offenders according to prespecified low, medium and high categories. The authors claim that this tool performs as well as other current approaches to risk assessment while having the advantage of taking up to 15 minutes to be completed, using information that is already routinely collected and offering an online free calculator to be used by professionals. After the original study performed with a Swedish sample, the authors did a validation with a Dutch sample of 9072 offenders released from prisons and 6329 individuals on probation (Fazel et al., 2019). Results show a moderate discrimination for the prisoners' sample (0.68, with a 95% confidence interval of: 0.66–0.70) for 2-year violent reoffending.



9. Critical Issues and potential solutions

Despite the merits of the tools that were presented, some of the tools (e.g., OxRec) are actuarial tools, that is, tend to focus on indicators related with the offender demographics and socioeconomic variables. The use of these tools have been criticised by some authors (cf. O’Hear, 2020), since as pointed out by Starr (2014), “almost none include the crime for which the defendant was convicted in the case at hand” (p. 811). This issue can be particularly critical for terrorist offenders since in most cases they do not have criminal background and therefore can be identified by actuarial measures as low risk offenders. Another criticism regarding the use of actuarial measures is related with the fact that this instruments focus on who the defendant is (to try to predict what the person is expected to do in the future) instead of putting the focus on what the person has done (Starr, 2014), reducing the person to a number or a risk category, therefore promoting the dehumanisation of offenders (O’Hear, 2020).

Trying to overcome this limitations, in the context of terrorist offenders and radicalized individuals, evaluation approaches favour a structured professional judgement (SPJ) approach as an attempt to overcome the limitations presented by unstructured clinical judgments and actuarial measures (John Monahan, 2012). The SPJ approach predicts violent behaviour (with moderate degrees of accuracy) while providing guidance on how to manage the identified risks (Guy et al., 2012). Contrary to what happens in the clinical judgement, in this approach the professional is systematically guided and must decide about the presence or absence of a series of risk factors for a given offender (Gray et al., 2011). Overcoming some of the actuarial measures identified limitations, indicators considered in SPJ tools are identified and developed after a review of the existing scientific research but also take into account professional and legal literatures (Guy et al., 2012; Otto, 2000), meaning that they do not focus solely on indicators statistically related with the prediction of recidivism. The assessment conclusions are therefore based on categories of risk (e.g., low, moderate, and high), taking into account the “individual manifestation and relevance of each item for the particular individual” (Guy et al.,



2012, p. 271), instead of following an additive model of risk, where more risk factors equals greater risk. Moreover, the final judgement relies on (structured) human decision making rather than on a fixed algorithm (De Vogel & De Ruiter, 2006). In sum, a SPJ represents a more tailored approach to assess offenders, exploring in higher detail the factors that may contribute to reoffending, given a particular case, which in turn provides more refined information for interventions.

Structured professional judgement tools were developed to assess terrorists and violent extremist offenders in the last two decades (e.g., VERA, ERG22+, RRAP). However, data on the psychometric properties of these tools is very scarce and information regarding construct validity and internal consistency is not available (cf. Scarcella et al., 2016), with just basic information regarding readability of the items, respondents burden (based on the number of items) and content validity being available.

10. Conclusions

Results from the current state of the art show that the use of risk assessment tools in forensic settings is generally accepted and encouraged. Despite some limitations and need for further research in terms of predictive accuracy of the tools, there is a general understanding that the use of risk assessment tools is beneficial at different stages. Considering the use of these tools for sentencing purposes, researchers and practitioners' discourse is consonant in the sense that both agree that these tools are important to inform a judicial decision but this decision should also consider the analysis of other aspects that may be relevant to a holistic understanding of the offender's behaviour, risk, needs, and potential harm to the society. Therefore, our conclusions are aligned with current research that states that results of assessment tools, particularly actuarial ones, should be considered as "presumptive, not a conclusive, indication of an offender's likelihood of reoffense" (O'Hear, 2020, p. 196) and therefore sentencing decisions should be based solely on results from these tools (Fazel et al., 2012). We also argue that this is particularly relevant in the case



of terrorist offenders, since tools for this population are much more recent than for other types of offenders and considering the characteristics of these offenders that have been described in the literature, such as the lack of major mental illness, free criminal record and mainly without psychopathic personality (cf. J. Monahan, 2012) and the consideration that risk, needs and motivations of these offenders differ from the non-terrorist, wider offender population (Powis et al., 2019; Silke, 2014).

Despite some criticisms, results from the risk and needs assessment tools are also important to decisions regarding placement of offenders and to consider alternative measures (to prison), promoting effective rehabilitation and an adequate response to criminogenic needs. Therefore, it is important to clarify, as a conclusion, that their general use is recommended. What can be problematic and counterproductive is the use of these tools for sentencing purposes, particularly the actuarial ones, since they focus on criminal history and statistical indicators to predict reoffending and can exacerbate mass incarceration if misused.

11. References

- American Psychological Association. (2013). Specialty guidelines for forensic psychology. *American Psychologist*, 68(1), 7–19.
<https://doi.org/10.1037/a0029889>
- Berenguel, F. M. C. (2014). *Perícias forenses na Região Autónoma dos Açores: impacto nas decisões judiciais?* Universidade do Minho.
- Cox, J., Fairfax-Columbo, J., DeMatteo, D., Vitacco, M. J., Kopkin, M. R., Parrott, C. T., & Bownes, E. (2018). An update and expansion on the role of the Violence Risk Appraisal Guide and Historical Clinical Risk Management-20 in United States case law. *Behavioral Sciences and the Law*, 36(5), 517–531.
<https://doi.org/10.1002/bsl.2376>



- De Vogel, V., & De Ruiter, C. (2006). Structured professional judgment of violence risk in forensic clinical practice: A prospective study into the predictive validity of the Dutch HCR-20. *Psychology, Crime and Law*, 12(3), 321–336. <https://doi.org/10.1080/10683160600569029>
- Douglas, K. S., Hart, S. D., Webster, C. D., Belfrage, H., Guy, L. S., & Wilson, C. M. (2014). Historical-Clinical-Risk Management-20, Version 3 (HCR-20V3): Development and Overview. *International Journal of Forensic Mental Health*, 13(2), 93–108. <https://doi.org/10.1080/14999013.2014.906519>
- Duwe, G., & Rocque, M. (2016). A Jack of All Trades But a Master of None? Evaluating the Performance of the Level of Service Inventory–Revised (LSI-R) in the Assessment of Risk and Need. *Corrections*, 1(2), 81–106. <https://doi.org/10.1080/23774657.2015.1111743>
- Eisenbarth, H., Osterheider, M., Nedopil, N., & Stadtland, C. (2012). Recidivism in Female Offenders: PCL-R Lifestyle Factor and VRAG Show Predictive Validity in a German Sample. *Behavioral Sciences & the Law*, 30, 575–584. <https://doi.org/10.1002/bsl>
- Faria, A. F. A. (2011). *Perícias forenses de agressores conjugais: caracterização e impacto nas sentenças judiciais*. Universidade do Minho.
- Fazel, S., Chang, Z., Fanshawe, T., Långström, N., Lichtenstein, P., Larsson, H., & Mallett, S. (2016). Prediction of violent reoffending on release from prison: Derivation and external validation of a scalable tool. *The Lancet Psychiatry*, 3(6), 535–543. [https://doi.org/10.1016/S2215-0366\(16\)00103-6](https://doi.org/10.1016/S2215-0366(16)00103-6)
- Fazel, S., Singh, J. P., Doll, H., & Grann, M. (2012). Use of risk assessment instruments to predict violence and antisocial behaviour in 73 samples involving 24 827 people: Systematic review and meta-analysis. *BMJ (Online)*, 345(7868), 1–12. <https://doi.org/10.1136/bmj.e4692>
- Fazel, S., Wolf, A., Vazquez-Montes, M. D. L. A., & Fanshawe, T. R. (2019). Prediction of violent reoffending in prisoners and individuals on probation: a Dutch



- validation study (OxRec). *Scientific Reports*, 9(1), 1–9.
<https://doi.org/10.1038/s41598-018-37539-x>
- García-García, J., Ortega Campos, E., Zaldívar Basurto, F., & Gil-Fenoy, M. J. (2016). Predicción del riesgo de reincidencia en una muestra de menores infractores españoles. Evidencias de validez del SAVRY. *Psicumex*, 6(1), 83–95.
<https://doi.org/10.36793/psicumex.v6i1.259>
- Garrett, B., Jakubow, A., & Monahan, J. (2019). Judicial Reliance on Risk Assessment in Sentencing Drug and Property Offenders: A Test of the Treatment Resource Hypothesis. *Criminal Justice and Behavior*, 46(6), 799–810.
<https://doi.org/10.1177/0093854819842589>
- Garrett, B., & Monahan, J. (2019). The use of risk assessment in sentencing. *Judicature*, 103(2), 42–48. <https://doi.org/10.5040/9781509921447.ch-002>
- Gonçalves, R. A. (2010). Psicologia Forense em Portugal: Uma história de responsabilidades e desafios. *Análise Psicológica*, 28(1), 107–115.
<https://doi.org/10.14417/ap.256>
- Gray, N. S., Taylor, J., & Snowden, R. J. (2011). Predicting violence using structured professional judgment in patients with different mental and behavioral disorders. *Psychiatry Research*, 187(1–2), 248–253.
<https://doi.org/10.1016/j.psychres.2010.10.011>
- Grieger, L., & Hosser, D. (2014). Which Risk Factors are Really Predictive?: An Analysis of Andrews and Bonta’s “Central Eight” Risk Factors for Recidivism in German Youth Correctional Facility Inmates. *Criminal Justice and Behavior*, 41(5), 613–634. <https://doi.org/10.1177/0093854813511432>
- Guy, L. S., Packer, I. K., & Warnken, W. (2012). Assessing Risk of Violence Using Structured Professional Judgment Guidelines. *Journal of Forensic Psychology Practice*, 12(3), 270–283. <https://doi.org/10.1080/15228932.2012.674471>
- Hare, R. D., & Neumann, C. S. (2005). Structural models of psychopathy. *Current Psychiatry Reports*, 7(1), 57–64. <https://doi.org/10.1007/s11920-005-0026-3>



- Harris, G. T., Rice, M. E., & Cormier, C. A. (2002). Prospective replication of the Violence Risk Appraisal Guide in predicting violent recidivism among forensic patients. *Law and Human Behavior*, 26(4), 377–394. <https://doi.org/10.1023/A:1016347320889>
- Hester, R. (2020). Risk assessment savvy: The imperative of appreciating accuracy and outcome. *Behavioral Sciences and the Law*, 38(3), 246–258. <https://doi.org/10.1002/bsl.2457>
- James, N. (2018). Risk and Needs assessment in the Federal Prison System. In *Congressional Research Service*.
- Kröner, C., Stadtland, C., Eidt, M., & Nedopil, N. (2007). The validity of the Violence Risk Appraisal Guide (VRAG) in predicting criminal recidivism. *Criminal Behaviour and Mental Health*, 17, 89–100. <https://doi.org/10.1002/cbm.644>
- Lodewijks, H. P. B., Doreleijers, T. A. H., & De Ruiter, C. (2008). Savvy risk assessment in violent dutch adolescents: Relation to sentencing and recidivism. *Criminal Justice and Behavior*, 35(6), 696–709. <https://doi.org/10.1177/0093854808316146>
- Lowder, E. M., Morrison, M. M., Kroner, D. G., & Desmarais, S. L. (2019). Racial Bias and LSI-R Assessments in Probation Sentencing and Outcomes. *Criminal Justice and Behavior*, 46(2), 210–233. <https://doi.org/10.1177/0093854818789977>
- Melo, F. (2013). Area under the ROC Curve. In W. Dubitzky, O. Wolkenhauer, K.-H. Cho, & H. Yokota (Eds.), *Encyclopedia of Systems Biology* (pp. 38–39). Springer New York. https://doi.org/10.1007/978-1-4419-9863-7_209
- Monahan, J. (2012). The individual risk assessment of terrorism. *Psychology, Public Policy, and Law*, 18(2), 167–205. <https://doi.org/10.1037/a0025792>
- Monahan, John. (2012). The individual risk assessment of terrorism. *Psychology, Public Policy, and Law*, 18(2), 167–205. <https://doi.org/10.1037/a0025792>
- Monahan, John, & Skeem, J. L. (2016). Risk Assessment in Criminal Sentencing.



Annual Review of Clinical Psychology, 12(1), 489–513.
<https://doi.org/10.1146/annurev-clinpsy-021815-092945>

O'Hear, M. (2020). Actuarial risk assessment at sentencing: Potential consequences for mass incarceration and legitimacy. *Behavioral Sciences & the Law*, 38(3), 193–206. <https://doi.org/10.1002/bsl.2460>

Otto, R. K. (2000). Assessing and Managing Violence Risk in Outpatient Settings. *J Clin Psychol*, 56(10), 1239–1262. [https://doi.org/10.1002/1097-4679\(200010\)56:10<1239::AID-JCLP2>3.0.CO;2-J](https://doi.org/10.1002/1097-4679(200010)56:10<1239::AID-JCLP2>3.0.CO;2-J)

Powis, B., Randhawa, K., & Bishopp, D. (2019). An Examination of the Structural Properties of the Extremism Risk Guidelines (ERG22+): A Structured Formulation Tool for Extremist Offenders. *Terrorism and Political Violence*, 0(00), 1–19. <https://doi.org/10.1080/09546553.2019.1598392>

Reitz, K. R. (2020). The compelling case for low-violence-risk preclusion in American prison policy. *Behavioral Sciences & the Law*, 38(3), 207–217. <https://doi.org/10.1002/bsl.2461>

Scarcella, A., Page, R., & Furtado, V. (2016). Terrorism, radicalisation, extremism, authoritarianism and fundamentalism: A systematic review of the quality and psychometric properties of assessments. *PLoS ONE*, 11(12), 0–19. <https://doi.org/10.1371/journal.pone.0166947>

Shepherd, S. M., & Sullivan, D. (2017). Covert and Implicit Influences on the Interpretation of Violence Risk Instruments. *Psychiatry, Psychology and Law*, 24(2), 292–301. <https://doi.org/10.1080/13218719.2016.1197817>

Silke, A. (2014). Risk Assessment of terrorist and extremist prisoners. In A. Silke (Ed.), *Prisons, Terrorism and Extremism: Critical Issues in Management, Radicalisation and Reform* (pp. 108–121). Routledge. <https://doi.org/10.4324/9780203584323>

Spice, A., Viljoen, J. L., Gretton, H. M., & Roesch, R. (2010). Psychological assessment for adult sentencing of juvenile offenders: An evaluation of the RSTI and the



SAVRY. *International Journal of Forensic Mental Health*, 9(2), 124–137.
<https://doi.org/10.1080/14999013.2010.501846>

Starr, S. B. (2014). Evidence-based sentencing and the scientific rationalization of discrimination. *Stanford Law Review*, 66(4), 803–872.

Thomas, S., Slade, M., McCrone, P., Harty, M.-A., Parrott, J., Thornicroft, G., & Leese, M. (2008). The reliability and validity of the forensic Camberwell Assessment of Need (CANFOR): a needs assessment for forensic mental health service users. *International Journal of Methods in Psychiatric Research*, 17(2), 111–120.
<https://doi.org/10.1002/mpr.235>

Urquhart, T. A., & Viljoen, J. L. (2014). The Use of the SAVRY and YLS/CMI in Adolescent Court Proceedings: A Case Law Review. *International Journal of Forensic Mental Health*, 13(1), 47–61.
<https://doi.org/10.1080/14999013.2014.885470>

Warren, R. K. (2007). Evidence-based practices and state sentencing policy: Ten policy initiatives to reduce recidivism. *Indiana Law Journal*, 82(5), 1307–1318.

Wormith, J. S., & Zidenberg, A. M. (2018). The Historical Roots, Current Status, and Future Applications of the Risk-Need- Responsivity Model (RNR). In *New Frontiers in Offender Treatment*. <https://doi.org/10.1007/978-3-030-01030-0>



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