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Consultancy report

Review of violent extremism risk assessment tools in Division 104 control orders and Division 105A post-sentence orders

Prepared by the Australian Institute of Criminology
for the Countering Violent Extremism Branch,
Department of Home Affairs

Dr Timothy Cubitt
Dr Heather Wolbers



Serious & Organised Crime
Research Laboratory

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Acronyms

| | |
|----------------|--|
| AIC | Australian Institute of Criminology |
| CVE | countering violent extremism |
| ERG 22+ | Extremist Risk Guide 22+ |
| HRTO | High Risk Terrorist Offender |
| PJCIS | Parliamentary Joint Committee on Intelligence and Security |
| TRAP-18 | Terrorist Radicalisation Assessment Protocol-18 |
| VERA-2R | Violent Extremism Risk Assessment Version 2 Revised |

Executive summary

Introduction

Risk assessment for violent extremism plays a critical role in understanding the threat posed by radicalised offenders and determining how these individuals are managed both in correctional settings and in the community. The Australian Institute of Criminology (AIC) was engaged by the Department of Home Affairs' Countering Violent Extremism (CVE) Branch to conduct a review of the use of risk assessments for violent extremism in Australia.

The aim of this review was to:

- identify and describe violent extremism risk assessment tools currently available to support risk assessments of convicted terrorist offenders;
- assess each tool's suitability to assist an expert to conduct an assessment of the risk to the community from an offender, when a court is considering whether to issue a control order under Division 104 or a post-sentence order under Division 105A of the *Criminal Code Act 1995* (Criminal Code); and
- review current risk assessment frameworks, including the use of Structured Professional Judgement, to assess the risk of violent extremist offending and consider how violent extremism risk assessment tools might be improved.

A review of relevant peer-reviewed and grey literature was undertaken alongside semi-structured interviews with a group of experts in violent extremism risk assessment. Findings from this review are organised according to the Terms of Reference.

Violent extremism risk assessment tools for convicted terrorist offenders

Research into the risk and protective factors for cognitive and behavioural radicalisation is rapidly expanding. This research has helped to inform the development of a range of risk assessment tools that consider the degree to which an individual is at risk of engaging in future acts of violent extremism. This review focused on four of these tools: the Violent Extremism Risk Assessment Version 2 Revised (VERA-2R), the Terrorist Radicalisation Assessment Protocol-18 (TRAP-18), the Radar, and the Extremist Risk Guide 22+ (ERG 22+). These differ in terms of their focus, including the domains they cover, the outcomes they attempt to measure, the individuals for whom they were designed and the settings in which they can be applied.

Suitability of risk assessment tools for Division 104 control orders and Division 105A post-sentence orders

The VERA-2R and the ERG 22+ are the most suitable of these risk assessment tools. The VERA-2R remains the tool with the broadest applicability. Conversely, the Radar and the TRAP-18 are not suitable. However, it was rare that these tools were used in isolation, and practitioners reported using several risk assessments concurrently in the Structured Professional Judgement process. There is a relative lack of research into the efficacy of these tools, which is a barrier to their use and undermines confidence in expert assessments that rely on these tools. Further independent research and validation studies are urgently required.

Current risk assessment frameworks, including the use of Structured Professional Judgement

The Structured Professional Judgement approach is widely accepted in the literature as the most appropriate risk assessment framework for violent extremism. Participants interviewed as part of this review universally supported this view, identifying Structured Professional Judgement as superior to both unstructured professional judgement and actuarial risk assessment approaches. There is a need to better understand how this process works in relation to the High Risk Terrorist Offender (HRTTO) scheme, how experts make use of multiple assessment tools when making their assessment, and the degree to which the model delivers consistent outcomes between cases and over time. Relatedly, there is support for an expanded focus on protective factors and on developing a local evidence base to guide decisions about the selection of assessment tools for use by practitioners.

List of recommendations

Recommendation 1: The VERA-2R remains the most suitable risk assessment tool for use with Division 104 control orders and Division 105A post-sentence orders and should continue to be used, in conjunction with other suitable tools as appropriate, but it must be subjected to further scrutiny and, in particular, validation.

Recommendation 2: Any risk assessment tool employed to inform expert assessments for Division 104 and 105A proceedings must be validated for, at a minimum, face validity, construct validity and interrater reliability. These validation studies must be undertaken by appropriately qualified researchers who are fully independent of the authors or the colleagues of the authors of these tools.

Recommendation 3: Any use of risk assessment tools (including the VERA-2R), or consideration of the outcomes of Structured Professional Judgement processes, should be accompanied by a clear acknowledgement and communication that risk assessment tools in themselves are not predictive of the likelihood of violent extremism. The development or validation of risk assessment tools that are predictive of the likelihood of extremist or terrorist acts remains an important focus but will require a long-term strategy.

Recommendation 4: A commitment should be made by agencies that fund this research that any research into risk assessment tools, including validation studies, be made fully public.

Recommendation 5: While Structured Professional Judgement was considered the optimal framework for risk assessment, empirical research is required to better understand whether it produces consistent findings and outcomes between cases and between practitioners.

Recommendation 6: The Department of Home Affairs should take carriage of making relevant data available for the purpose of independent validation studies.

Recommendation 7: The recently funded Centre of Excellence for CVE Research, Risk Assessment and Training should lead the development and implementation of a strategy for the advancement of research into risk and protective factors for cognitive and behavioural radicalisation among Australian samples. This research can directly inform the regular review and, potentially, future refinement of existing risk assessment tools or the development of new tools.

Introduction

Purpose

The AIC was engaged by the Department of Home Affairs' CVE Branch to conduct a review of the use of risk assessments for violent extremism in Australia. This request was in response to Recommendation 2 of the Parliamentary Joint Committee on Intelligence and Security (PJCIS) *Advisory Report on the Counter-Terrorism Legislation Amendment (High Risk Terrorist Offenders) Bill 2020* (PJCIS 2021a). This recommendation stated:

An independent review of the range of risk assessment tools used, including the Violent Extremism Risk Assessment Version 2 Revised (VERA-2R) framework and alternatives, be conducted and findings reported to the Parliament. The independent review should consider the existing assessment framework, alternative tools, improvements which could be made and the effectiveness of mandating participation in deradicalisation programs. (PJCIS 2021a: xi)

The report further noted:

The Committee notes that the VERA-2R assessment framework is in a formative stage of development. The Committee considers that the VERA-2R tool could be a useful addition to the range of assessment tools used, however, the Committee recommends that an independent review be undertaken of the utility of such a tool in Australia. (PJCIS 2021a: 53)

The use of the VERA-2R tool in assessing applications for continuing detention orders was also considered as part of the PJCIS (2021b) concurrent *Review of Police Powers in Relation to Terrorism, the Control Order Regime, the Preventative Detention Order Regime, and the Continuing Detention Order Regime*.

Scope of the review

This review focuses on the ability of risk assessment tools to assist with expert assessments of the risk of an individual engaging in future acts of violent extremism, in particular, the use of risk assessment tools in proceedings relating to Division 104 control order and Division 105A post-sentence order regimes. These orders relate to specific divisions of the Criminal Code.

Division 104 of the Criminal Code sets out the circumstances in which a control order may be made by the issuing court for the purpose of:

- protecting the public from a terrorist act;
- preventing the provision of support for, or the facilitation of, a terrorist act; or
- preventing the provision of support for, or the facilitation of, the engagement in a hostile activity in a foreign country.

A control order may impose a range of prescribed obligations, prohibitions and restrictions on a person, including:

- a prohibition or restriction on the person being at specified areas or places;
- a prohibition or restriction on the person leaving Australia;
- a requirement that the person wear a tracking device; and
- a prohibition or restriction on the person carrying out specified activities (including in respect of his or her work or occupation).

The PJCS (2021b) noted in its *Review of Police Powers in Relation to Terrorism, the Control Order Regime, the Preventative Detention Order Regime, and the Continuing Detention Order Regime* that 10 individuals have been managed on control orders; at the time of writing there have been 19. Most of these orders were for terrorist offenders who had been released from custody.

The continuing detention order scheme was introduced as part of the Criminal Code Amendment (High Risk Terrorist Offenders) Act 2016 (HRTA Act). Division 105A of the Criminal Code provides for the Australian Federal Police Minister to apply to a state or territory Supreme Court for a continuing detention order (CDO) against a terrorist offender who is deemed to pose an unacceptable risk of committing a serious Part 5.3 (Terrorism) offence if released into the community. A CDO commits the offender to detention in prison for the period of the order, which must not be more than three years. A CDO must be reviewed at 12-month intervals. Since 2016 (when the scheme was introduced), two CDOs have been made. The court affirmed one of those CDOs without variation following a mandatory review. In 2021, the High Court of Australia upheld the constitutional validity of Division 105A.

Extended supervision orders (ESOs) were added to Division 105A in 2021 as an alternative to a CDO. Together these orders are now known as post-sentence orders. The ESO scheme enables the court to make an ESO in respect of a high-risk offender who poses an unacceptable risk of committing a serious Part 5.3 terrorism offence after being released into the community at the end of their custodial sentence. When making the order, the court is able to impose a

broader range of conditions than would be available under a control order and which must be considered reasonably necessary, adapted and appropriate to manage the risk of the offender committing a serious Part 5.3 offence. This broader range of conditions allows the court to tailor conditions to the particular risk posed by a convicted offender and to better protect the community from that risk. To date, no ESOs have been made.

Risk assessment tools may be used to help guide decisions regarding whether to impose control orders or post-sentence orders for terrorist offenders. The VERA-2R has been adopted as the primary assessment tool for use as part of the HRTTO regime to assess the risk of an offender perpetrating an extremist act (PJCIS 2021b). Under Division 105A of the Criminal Code, the court may appoint a relevant expert to conduct a risk assessment and submit a report on the offender, while the HRTTO regime may also be supported by historical assessments completed in correctional settings or assessments made in the process of determining the need for a control order or CDO (PJCIS 2021b). The VERA-2R has been used in applications for CDOs, as well in the NSW Terrorist High Risk Offender schemes, but is also used much more widely by law enforcement and correctional agencies and in support of CVE interventions (PJCIS 2021a).

Both PJCIS (2021a, 2021b) reviews raised questions regarding the maturity of the VERA-2R as a risk assessment tool, as well as the adequacy of its underlying evidence base, and noted concerns raised by stakeholders about the accuracy of the tool in predicting the future risk of an individual engaging in violent extremism. The issues raised in these reports form the basis for the current review.

Terms of Reference

There were three principal tasks outlined in the Terms of Reference. These were:

- Identify and describe violent extremism risk assessment tools currently available to support risk assessments of convicted terrorist offenders, including the VERA-2R.
- Assess each tool's suitability to assist an expert to conduct an assessment of the risk of an offender for:
 - a Division 104 control order; or
 - a Division 105A order application to be made (or that has been made), of committing a serious Part 5.3 (Terrorism) offence (these legislative references are to Division 14 and Division 105A of Part 5.3 of Chapter 5 of the Schedule to the Criminal Code Act 1995).
- Review current risk assessment frameworks, including the use of Structured Professional Judgement, to assess the risk of violent extremist offending and consider how violent extremism risk assessment tools might be improved.

To adhere to the Terms of Reference, and directly address the questions guiding this review, the report is organised according to these three areas of focus, drawing on findings from the literature review and stakeholder interviews (see below).

Issues outside of scope

This report focuses on the use of risk assessment tools in relation to Divisions 104 and 105A of the Criminal Code. In establishing this review, the Terms of Reference explicitly note that the review will be informed through consultation with key stakeholders and experts in the development and implementation of risk assessment tools (see *Review methods* section, below). This review therefore considers a range of risk assessment tools for violent extremism implemented in Australia. This review does not consider the implementation of violent extremism risk assessment tools for purposes other than Divisions 104 and 105A of the Criminal Code. In addition, as set out in the Terms of Reference, the Department of Home Affairs has completed a review relating to mandating participation in CVE programs; as such, this element of the PJCIS recommendation was not considered as part of this review.

Independent validation of any violent extremism risk assessments was out of scope of this review. This included the collection or analysis of data relating to individuals who have committed acts of violent extremism with a view toward understanding the predictive accuracy of these assessments. Additionally, the review focuses on violent extremism risk assessment tools and does not consider risk assessment tools designed to measure the likelihood of generalised violence among offenders.

Finally, Division 104 and 105A proceedings, including the manner in which risk assessment outcomes are considered by the court, are clearly out of scope for this review. We note the Independent National Security Legislation Monitor (INSLM) is also conducting a review of Division 105A of the Criminal Code and that, as part of this review, has called for submissions on matters related to risk assessments in these proceedings. It is likely that there will be some overlap with respect to the issues covered in our review and those addressed by the INSLM.

Key definitions

Radicalisation and violent extremism are difficult notions to define due to the considerable variability between individuals in how and why they occur and how violent extremism may be enacted. As a result, there is little consensus regarding agreed upon definitions for these terms. While there are functioning definitions employed at national, regional and international levels, radicalisation and violent extremism remain diverse phenomena which, with the development of emerging ideologies and issues, will continue to defy neat definition (see Grossman et al. 2016; Horgan & Boyle 2008; Sedgwick 2010). Despite this, there are some general themes that remain consistent. We define radicalisation and violent extremism in a way that is consistent with recent Australian definitions; we also define risk assessment relating to its function and intention regarding violent extremism.

Radicalisation

While each definition of radicalisation varies in scope, a common underpinning theme suggests that radicalisation is a process involving gradual movement away from mainstream thinking, with an individual developing extremist beliefs that may result in violence. Certain definitions of radicalisation emphasise the process of developing extremist attitudes and beliefs, while others focus on the lead-up to individual and/or group involvement in acts of extremist violence (Neumann 2013).

The Living Safe Together program, one of Australia's flagship CVE initiatives, provided a functioning definition of radicalisation in Australia. For the purpose of this review, radicalisation is defined using terms from the Living Safe Together program, as follows:

A complex process that can occur for people across a diverse range of ethnic, national, political and religious groups. The process involves a series of decisions which, in certain circumstances will end in an act of violent extremism. As a person radicalises, they begin to develop and adopt attitudes and behaviours that seek to substantially transform the nature of society and government. These attitudes differ significantly from how most members of society view social issues and participate politically. (Living Safe Together 2015: 5)

Violent extremism

Violent extremism is a broad notion, encompassing a range of methodologies and motivations for violence. It is difficult to develop a definition of violent extremism, as there are a range of behaviours, motivations and outcomes that are associated with it. However, there are a number of key actions or behaviours that are commonly associated with violent extremism. These include:

- acts of, or support for, illegal or antisocial violence, which can include terrorism, violent demonstrations and public disorder, attacks on individuals or property, hate crimes, and verbal and online aggression and harassment; and
- which have an aim of advancing the goals of a political, socio-economic, religious or other belief system (Angus 2016; Harris-Hogan 2017).

It is important to note the distinction between thoughts and behaviours and between extremism and violent extremism. It is clear that not all those who radicalise will commit an act of violence and not all those who are considered to be extremists will go on to be violent. For this review, we prefer the definition provided by the *Australian Counter-Terrorism Strategy*, as follows:

A willingness to use unlawful violence, or support the use of violence by others, to promote a political, ideological or religious goal. Violent extremism includes terrorism, other forms of politically motivated violence and some forms of communal violence (eg racially motivated violence). (Council of Australian Governments 2015: 7)

Risk assessment

In the context of violent extremism, risk assessment tools are used to help inform the determination of the risk posed by an individual. Outcomes may include an estimation of the likelihood of an individual committing an act of violent extremism or an indication regarding how far along the process of radicalisation an individual is (van der Heide, van der Zwan & van Leyenhorst 2019). While commonly used risk assessments can help inform the level of risk posed, the ultimate goal is to determine how individuals can be managed most effectively and what responses or resources are required in order to reduce this risk (Adam-Troian, Tecmen & Kaya 2021; Decety, Pape & Workman 2018).

Practically, risk assessments typically involve a practitioner considering a set list of indicators to determine the degree to which they are present for the individual being assessed and how they may interact at a given point in time (van der Heide, van der Zwan & van Leyenhorst 2019).

Review methods

This review draws on two primary data sources. First, we conducted a comprehensive review of published and unpublished studies related to the development, accuracy and use of violent extremism risk assessment tools. Second, we conducted semi-structured interviews with experts in the field of violent extremism risk assessment to supplement and contextualise findings from empirical studies.

Literature review

The literature search was undertaken in collaboration with the AIC's JV Barry Library. The search was limited to English-language theoretical, conceptual and empirical research, including both primary studies and reviews. This search primarily focused on peer-reviewed academic literature; however, where relevant grey literature was identified it was also included. While this is an emerging area of research, and a considerable proportion of literature was published in recent years, we primarily rely upon research published between January 2015 and September 2021. Noting similarities in relation to the violent extremism threat environment, Australian studies were considered alongside studies from New Zealand, the United States, the United Kingdom, Canada and Europe. Follow-up searches were undertaken independently by the authors, with a focus on literature published between 2010 and the time of writing in 2022. Foundational work published prior to 2010 that discusses risk assessment tools was also included. This methodology was developed to ensure comprehensive coverage and an up-to-date account of the field.

Stakeholder interviews

With specific regard to consultation, the Terms of Reference stated that:

The review will consult agencies and individuals with experience conducting risk assessments for Division 104 and Division 105A proceedings (of Part 5.3 of Chapter 5 of the Schedule to the *Criminal Code 1995*) or for similar purposes. Violent extremism risk assessment tools are used for a variety of purposes by a range of practitioners with varying expertise. Noting that risk assessments in Division 105A proceedings are conducted by experts for the purpose outlined in the Division, consultation in relation to uses other than purposes similar to Division 104 and Division 105A proceedings is outside the scope of this review.

The review may consult the authors of the violent risk assessment tools.

Interviews were undertaken with stakeholders who were involved in the process of assessing risk for violent extremism, from researching and developing the tools to the implementation of those tools. This is a relatively small field; however, these individuals offer a wealth of experience relevant to the review. Interview participants were identified in consultation with the CVE Branch of the Department of Home Affairs, given the branch's role in training and management of risk assessment implementation at the national level. These individuals fell into three groups, as follows:

- practitioners involved in the delivery of risk assessments;
- academics and practitioners involved in the research, design and validation of risk assessments; and
- individuals involved in management and policy relating to risk assessments.

An array of questions were posed to each of these groups (see Appendix for the interview questions). Questions focused on the delivery and suitability of specific risk assessments with which the participant had experience. Participants were asked about the Structured Professional Judgement model, in which a blend of practitioner judgement and actuarial risk assessment is implemented, and its suitability for assessment of current and emerging risk factors. Questions regarding the research, design and validation of risk assessments, and the current status of risk assessments use in Australia, were asked of interview participants with relevant expertise. Finally, questions relating to views on current approaches to risk assessment and their suitability for the current threat environment and for emerging ideologies were also posed. Questions were framed within the context of Division 104 and Division 105A proceedings.

It is important to note that this is a role-diverse field. For example, we sought to identify a cross-section of expertise featuring practitioners, researchers and policymakers in this field. However, it was quickly apparent that a large proportion of individuals in this field have roles and responsibilities that span more than one of these disciplines. For example, authors of these tools may have a background as a practitioner, while also having experience in research. Alternatively, practitioners or policymakers often have some limited experience in research, and often researchers have experience in the implementation of risk assessments in practice. As a result, while this review makes use of information from a highly experienced stakeholder group, we categorise stakeholders based on their primary role at the time of the interview, self-identified by that stakeholder.

Interviews were conducted primarily via Microsoft Teams by a member of the research team (due primarily to COVID-19 restrictions), with another researcher taking notes. One interview was conducted in person, following the same interview protocol, at the request of the participant.

Sixteen interviews were conducted for this review. Half the interview participants identified themselves as practitioners whose primary role was the implementation of risk assessment tools in a Structured Professional Judgement environment. Risk assessment for violent extremism comprised a significant proportion of their professional, day-to-day activity. Thirty-eight percent of participants identified themselves as researchers; however, half this group had prior experience in designing or authoring a risk assessment tool relating to violent extremism. Thirteen percent of participants were professionals in policy implementation or management roles relating to violent extremism. Some practitioners also noted their involvement with policy implementation and management. There was considerable diversity of experience in the field of violent extremism risk assessment among interview participants.

Finally, it should be noted that every stakeholder contacted by the research team agreed to be interviewed, with the exception of two agencies. These agencies had expertise in the legal field relating to Division 104 and Division 105A of the Criminal Code. However, both of these agencies declined to be interviewed, reporting that they believed it would be a potential conflict of interest to provide information to this review.

Limitations

This review was necessarily conducted within a 20-week time frame, from initially seeking ethics approval to the completion of the final report. This is a relatively short time frame to consider a field of research, review relevant literature, undertake interviews with relevant experts, and consider the large volume of material that relates to risk assessment in this context. This material included the training documentation, case studies, and training manual for the VERA-2R, provided to the AIC prior to submission of this report. While the brief time frame is a limitation, we believe this had little impact on the findings of this review in terms of addressing the main issues related to the use of VERA-2R and violent extremism risk assessment tools more generally in Division 104 control orders and Division 105A post-sentence orders. We note also that the scope of this review did not allow for consideration of data on the implementation or outcomes of risk assessment tools considered in this report or the training processes for implementing these tools (including, but not limited to, the VERA-2R).

Violent extremism risk assessment tools for convicted terrorist offenders

Terms of Reference 1: Identify and describe violent extremism risk assessment tools currently available to support risk assessments of convicted terrorist offenders, including the Violent Extremism Risk Assessment Version 2 Revised (VERA-2R).

Violent extremism risk assessment tools that are commonly implemented in Australia include the VERA-2R, the TRAP-18, the Radar assessment tool and the ERG 22+. These tools have all been developed for different purposes and in different contexts; as a result, they feature different domains against which risk is assessed.

These risk assessments can consider the risk and protective factors for the onset of or recidivism in violent extremism. Prior to describing these risk assessment tools, and to help contextualise findings with respect to the suitability of these tools for Division 104 and Division 105A proceedings, research into the risk and protective factors for violent extremism is summarised.

Risk and protective factors for violent extremism

Early empirical work in this field focused on the development of an offender profile for violent extremists. However, this task proved difficult, as there were multiple possible pathways through which an individual might radicalise or commit an act of violent extremism (Gill, Farnham & Clemmow 2021). While some common steps and factors were identified, these were shown to differ from person to person. Many factors may lead to, or contribute to, an act of violent extremism, however no single factor will always lead to an act of violent extremism (Clemmow et al. 2020; Corner, Bouhana & Gill 2019; Hafez & Mullins 2015; Heinke & Persson 2016; Jensen, Atwell & James 2020; Klausen et al. 2020; McGilloway, Ghosh & Bhui 2015). For this reason, research focuses on the factors, behaviours and characteristics that are associated with an act of violent extremism, and how strongly they are associated with such an act, with a view toward establishing risk and protective factors for an act of violence.

The interaction of risk and protective factors for violent extremism forms the foundation of the assessment of risk. Some risk factors only become important in the presence of others or in the absence of certain protective factors, while some factors fluctuate in importance over time as individuals progress along a pathway toward radicalisation or violent extremism. Further, some factors are more important for certain groups or cohorts than for others, and factors that are important for the onset of violent extremism may be different to those that are important for reengagement in extremism.

The following discussion of risk and protective factors is divided into three broad categories—sociodemographic factors (Table 1), attitudinal or psychological factors (Table 2), and contextual factors (Table 3)—and features examples of risk and protective factors identified through empirical research. This evidence base is rapidly developing. In a recent systematic review of risk and protective factors for cognitive and behavioural radicalisation, 127 studies were examined and 101 risk and protective factors analysed (Wolfowicz et al. 2021). Half of these studies were published between 2018 and 2020. Importantly, that review distinguished between radicalised attitudes, intentions and behaviours. The review below is especially focused on risk factors for extremist behaviours.

Sociodemographic factors

| Table 1: Summary of sociodemographic risk and protective factors for violent extremism | |
|---|--|
| Risk factors | Description |
| Being young and male | Co-occurring factors of being young and male elevated risk |
| Being male | Separate to being young, being male was singularly considered to be a risk factor |
| Low socio-economic status | This includes actual or perceived socio-economic disadvantage |
| Unemployment or underemployment | Underemployment includes part-time, casual or intermittent employment |
| Level of education | Depending on ideology, a higher level of education or a lower level of education may be considered a risk factor |
| Military service | A history of military service was considered to elevate risk |
| Protective factor | Description |
| Ageing (ie getting older) | Individuals may age out of risk categories |

Source: Desmarais et al. 2017; Wolfowicz et al. 2021, 2020

Age and gender are the most commonly examined and supported risk factors for violent extremism (Desmarais et al. 2017; Wolfowicz et al. 2020). Young men are thought to be susceptible to violent extremism for several reasons, including a greater propensity for aggression, impulsivity and vulnerability to antisocial peers (Carlsson et al. 2020; Heinke & Persson 2016; Koehler & Fiebig 2019; Loeber & Farrington 2014). While young men tend to be the most susceptible to radicalisation, there are, of course, exceptions (Meloy & Gill 2016). While the evidence for sociodemographic factors associated with violent extremism is strong when compared with other domains, effect sizes are commonly quite small; this is largely a reflection of empirical research in this area being either weak or in very early phases (Allan et al. 2015; Bondokji, Wilkinson & Aghabi 2017; Wolfowicz et al. 2020).

Research has indicated that most individuals involved in violent extremism were subject to some form of socio-economic disadvantage (Desmarais et al. 2017; Ljubic et al. 2020; McGilloway, Ghosh & Bhui 2015; Stankov et al. 2020) or struggled to meet their material needs (Baldino & Lucas 2019; Harpviken 2021). However, the root cause of this disadvantage is unclear. For example, it may be representative of the age of violent extremists, who tend to be young. However, it may be that the individual's perception of their disadvantage may be more important than actual status. In particular, if an individual feels they have been unfairly denied the opportunity to improve their circumstances, this may emerge as a source of grievance and contribute to the likelihood of radicalisation (Løvlien 2021; Nivette, Eisner & Ribeaud 2017). While socio-economic status is often linked to violent extremism, as with other sociodemographic factors, the effect size tends to be small (Wolfowicz et al. 2020).

Research has shown that violent extremists are more likely to be unemployed or underemployed (Desmarais et al. 2017; Glazzard, Jespersen & Winterbotham 2015; Jensen, Yates & Kane 2020; LaFree et al. 2018; Lobato et al. 2019; Nivette et al. 2021; Shanahan 2019; Weenink 2019). Of note, loneactor terrorists are more likely to be unemployed than the general population (Clemmow et al. 2020). Much like socio-economic disadvantage, a lack of employment can become a source of grievance that drives radicalisation to violent extremism (Vergani et al. 2020). Certainly, grievances may result if there is a perception of discrimination among minorities within the job market leading to unemployment or underemployment (Wolfowicz et al. 2021). Agnew (2016) explains that even perceived strain, rather than actual strain, can be a risk factor for radicalisation. For example, personal (eg economic) or community-level (eg discrimination) strain may, to some extent, explain the association between employment and violent extremism. Unemployment also provides more time and opportunity for exposure to violent extremist material and networks (Vergani et al. 2020).

There is limited consensus regarding the role of education in the risk of violent extremism. Some research reports that violent extremists, particularly right-wing extremists, may be less educated, and in particular less likely to have undertaken or completed tertiary education (Jakubowska, Koreniowski & Radkiewicz 2021; Jensen, Yates & Kane 2020). However, other studies (LaFree et al. 2018; Stankov et al. 2020), particularly those examining Islamist terrorists (ICPC 2015; Klausen et al. 2020; Shanahan 2019), have found no differences in education between individuals who do, and individuals who do not, commit an act of violent extremism.

In contrast, Wolfowicz et al. (2021) note that level of education has been identified as a significant risk factor for radical behaviour among Islamist extremists, with a higher level of education associated with a greater likelihood of engaging in violent extremist behaviour; however, this may not be the case for Islamist extremism in the West (Gambetta & Hertog 2017). It is difficult to determine how education levels may influence violent extremism; research appears to suggest that the effect may not be linear—among some violent extremists from some ideologies education may be a risk factor, while among others it may be protective.

Violent extremists are often home-grown, meaning they were born and became radicalised in the countries where they commit acts of violent extremism (Crone & Harrow 2011; ICPC 2015; Vergani et al. 2020). Having migrated to a country was not shown to be a significant risk factor for extremism (Wolfowicz et al. 2021). Some evidence suggests that violent extremists are more likely to be second- or third-generation immigrants (Harpviken 2021; Jah & Khoshnood 2019; Pauwels & Svensson 2017; Weenink 2019). However, this evidence is mixed, with some suggestion that there is no association between parents' nationality and terrorism (Desmarais et al. 2017).

Military service has been infrequently examined; however, some find support for this as a risk factor for violent extremism. Military experience was shown to be a common characteristic among loneactor terrorists from the US and Europe (Gill, Horgan & Deckert 2014); however, other scholars have not identified past or current military service to be a statistically significant factor for extremist behaviours (Wolfowicz et al. 2021).

In regard to protective factors, few sociodemographic variables have demonstrated a significant association with violent extremism. Research does show, however, that as individuals age they tend to be less involved in violent extremism, demonstrating that age is a protective factor (Wolfowicz et al. 2021). One study of American terrorists found that the propensity for violent offences appeared to reduce after the age of 35 (Klausen, Morrill & Libretti 2016).

Attitudinal and psychological factors

Table 2: Summary of attitudinal and psychological risk and protective factors for violent extremism

| Risk factors | Description |
|---------------------------------|--|
| Low self-control | Low ability to regulate thoughts and behaviours. Relates to traits like impulsivity or anger management issues |
| Extremist ideology | An extreme system of ideas and ideals. Typical extremist ideologies include, for example, jihadism and the far-right |
| Radical attitudes | The support or justification for radical violence |
| Personal injustice | Feeling that the individual or group is treated unjustly most of the time |
| Personal or political grievance | Dissatisfaction with personal or political situations |
| Mental health | Including declining mental health, and diagnosed psychological illness |
| Religiosity ^a | The importance of religion in daily life and activities. This is operationalised in research through variables such as frequency of prayer, attendance at places of worship and religious group membership |
| Protective factors | Description |
| Law abidance | Belief and actions that reflect following of, and abidance by, the law |
| Law legitimacy | Represents an individual's respect for the government, law and authorities |

a: This risk factor has been examined in research literature and is typically found to have either a weak or no effect
Source: Desmarais et al. 2017; Dyrstad & Hillesund 2020; Wolfowicz et al. 2021, 2020

Self-control, in particular low self-control, has been shown to be significantly related to extremism behaviours, particularly among right-wing extremists but also for Islamist and issue-based extremists (Wolfowicz et al. 2021). Lone-actor terrorists have been shown to be significantly more likely to display low self-control (Clemmow et al. 2020; Nussio 2017).

Identifying with an extremist political group or having certain ideologies, including extremist ideologies, has also been associated with the perpetration of terrorist attacks (Desmarais et al. 2017). At the core of violent extremist ideologies is a narrative that: 1) describes a transgression, injustice or threat against a particular group; 2) attributes blame for this to some clearly identifiable target; and 3) advocates violence against this target as a morally or instrumentally justified response (Carlsson et al. 2020; Desmarais et al. 2017; Glazzard, Jespersen & Winterbotham 2015; Hafez & Mullins 2015; ICPC 2015; Monahan 2012; Webber & Kruglanski 2018). The ideology of extremists is rarely clear-cut. Similarly, radical attitudes, which are generally quite individualised in nature, are one of the more commonly investigated risk factors for violence extremism and have been shown to have a moderate association with extremist behaviour (Wolfowicz et al. 2021).

Personal injustices have also been linked to radical behaviour outcomes (Wolfowicz et al. 2021). Personal injustices or the perception of discrimination against an individual or a group can be a source of strain that increases negative emotions. There has also been some empirical support for the relevance of personal or political grievances in the perpetration of terrorist attacks (eg Porter & Kebbell 2011; Thomas, McGarty & Louis 2013).

According to a systematic review of factors associated with violent extremism, mental health has generally been supported as an important risk factor (Wolfowicz et al. 2021); however, there are some mixed results within research. While some studies show that psychological illnesses are associated with violent extremism (Garcet 2021; LaFree et al. 2018), others find little or no association (Angus 2016; Corner & Gill 2020; Harpviken 2021; Koehler & Fiebig 2019; McGilloway, Ghosh & Bhui 2015). Differences may result from the type of extremism being examined. Lone-actor terrorists, for example, are more likely to have a diagnosed mental disorder than the general population (Clemmow et al. 2020; Smith 2018).

Studies have examined various aspects of religiosity, such as frequency of prayer, place of worship attendance, and religious group membership. The findings are unclear, with some research concluding it is a risk factor, and other research considering the relationship as too weak to conclude either way (Desmarais et al. 2017; Hirsch-Hoefler, Canetti & Eiran 2016; Løvlien 2021). Further, of the few studies that have examined religion other than Islam, including Judaism, Christianity and Hinduism, results did not support a connection to a terrorism outcome (Desmarais et al. 2017). Ultimately, religious affiliation does not appear to be a meaningful or widely applicable risk factor for violent extremism.

Regarding attitudinal and psychological protective factors, according to Wolfowicz et al. (2021, 2020), the strongest protective factors for radical behaviours were a sense of law legitimacy (ie respect for government/law/authorities) and law abidance (ie belief that there is a duty to follow and abide by the law). These have been supported in other studies (Baier, Manzoni & Bergmann 2016; Lösel et al. 2018). These factors did not appear to operate differently across diverse ideological backgrounds. However, despite being the strongest protective factors, the effect sizes were small.

Contextual factors

| Table 3: Summary of contextual risk and protective factors for violent extremism | |
|--|--|
| Risk factors | Description |
| Incarceration | Being incarcerated for an offence, either related to violent extremism or not |
| Criminal history | Having a history of offending, either related to violent extremism or not |
| Radical family and/or peers | Having a close relationship with a radical individual |
| Online contact with radicals | Engagement with online radical communities, groups or individuals |
| Recent job loss | A recent loss of employment |
| Protective factors | Description |
| Professional or academic engagement | Fosters attachment to a community, and bolsters critical thinking and a sense of empowerment/self-esteem |

Source: Van Brunt, Murphy & Zedginidze 2017; Wolfowicz et al. 2021, 2020

Criminality has been shown to be related to diverse forms of violent extremism. Findings are mixed with regard to criminal histories. Although a few studies note that many violent extremists have no record of prior criminal behaviour (Heinke & Persson 2016; ICPC 2015), having a criminal history appears to be statistically related to engaging in violent extremism (Wolfowicz et al. 2021, 2020). Further, there is some evidence that lone actors are more likely to have a criminal conviction than the general population (Clemmow et al. 2020).

Prior incarcerations had the strongest effect among criminal history variables, when looking at extremist behaviours in a large systematic review of research literature (Wolfowicz et al. 2021). Additionally, lone-actor terrorists are more likely to have been imprisoned than the general population (Clemmow et al. 2020). Jah and Khoshnood (2019) found that 12 percent of lone-actor terrorists in their sample were radicalised while in prison. The association between incarceration and engaging in violent extremism could represent the general criminality among those who engage in violent extremism, or it could be that these individuals radicalised while in the prison environment. The latter is discussed widely in research, including discussions of how the prison environment can help galvanise extremist movements, bringing together individuals at risk of radicalisation, seasoned violent extremists, and potential recruits, enabling them to organise, grow, and share resources and knowledge (Rushchenko 2019). Findings show that prisoners can become radicalised by having regular contact with other violent extremist prisoners who introduce them to violent extremist ideologies and recruit them into groups (Kenig 2019; Thompson 2016).

Evidence shows that being around or knowing radical individuals is a risk factor for violent extremism (Hafez & Mullins 2015; Spalek 2016; Wolfowicz et al. 2021, 2020). More specifically, violent extremists are more likely to have radical family members or peers. Such family or peers can model, normalise or desensitise the individual to radicalism. Further, they may actively impart extremist ideals, influence exposure to extremist content, foster isolation

from alternative influences and ideas, and serve as a gateway to membership in more formal extremist groups. In line with this, some research has found that seeking out or even creating a network of like-minded individuals is a precursor to radicalisation and may include converting family members and friends (National Institute of Justice 2018). In essence, it appears unclear whether being associated with radical individuals is a precursor or a result of radicalisation. What is clearer, however, is that having relationships with radical individuals speeds up the radicalisation process toward violent extremism.

Having online contact with radicals has been shown to have a similar effect (Wolfowicz et al. 2021). One study, for example, highlighted how online contact with extremists is significantly associated with political violence (Pauwels & Schils 2014). As with radical in-person associations, online violent extremist peers and networks can provide access to violent extremist content, companionship with like-minded individuals, recruitment opportunities, and an identity and sense of purpose, and can normalise and reinforce violence.

A recent job loss has been discussed as being an antecedent to extremist violence (Meloy & Genzman 2016; Singh 2020). Losing a job may be perceived as a personal failure or a major setback and can form part of a pathway toward violent extremism (Meloy & Genzman 2016; Van Brunt, Murphy & Zedginidze 2017). Empirically, this has been supported for lone-actor terrorists, who more often experienced a recent job loss than the general public (Clemmow et al. 2020).

Professional or academic engagement works as a protective factor (Van Brunt, Murphy & Zedginidze 2017). This operates by fostering community engagement, by engaging in critical thinking, and by building a sense of empowerment and self-esteem, all of which would work against radicalisation toward violent extremism. This was supported by Wolfowicz et al. (2021), who identified that feeling an attachment to school was a protective factor for extremist behaviours; however, the effect size was small.

Risk assessment tools for violent extremism

The assessment of violent extremism risk is a difficult task, largely due to the variability in risk factors, research findings, and characteristics relating to violent extremists. As a result, there is some difficulty in identifying and applying a common set of indicators equally across the varieties of extremism (Garcet 2021; Monahan 2012). It is difficult, for example, to account within the confines of a single tool for the variety of motivations and ideological backgrounds for violent extremism (Garcet 2021). Current evidence highlights some promising risk assessment tools, which we review in this and subsequent sections. We focus on four Structured Professional Judgement tools that have been designed and implemented in Australia and internationally. These are the VERA-2R, the TRAP-18, the Radar and the ERG 22+. See Table 4 for a summary of the features of these four tools.

| Table 4: Summary of key features of the VERA-2R, TRAP-18, Radar and ERG 22+ risk assessment tools | | | | |
|--|---|---|--|---|
| | VERA-2R | TRAP-18 | Radar | ERG 22+ |
| Developed by | Pressman, Duits, Rinne & Flockton | Meloy | Barrelle & Harris-Hogan | Lloyd & Dean |
| Country of origin | Canada & Netherlands | United States & Europe | Australia | United Kingdom |
| Goal | Support the professional judgement of risk assessment and risk management of terrorists and violent extremists | Assess individuals who potentially may engage in lone-actor terrorism | Assess client risks and needs across several domains and help guide the development of intervention goals | Assessment of risk for those convicted of, or susceptible to, extremist offending To inform proportionate risk management Increase understanding and confidence among frontline staff and decision-makers, and facilitate effective and targeted intervention |
| Number of indicators | 45 | 18 | 27 | 22+ |
| Domains | <ol style="list-style-type: none"> 1. Beliefs, attitudes and ideology 2. Social context and intention 3. History, action and capacity 4. Commitment and motivation 5. Protective factors 6. Additional indicators | <ol style="list-style-type: none"> 1. Proximal warning behaviours 2. Distal characteristics | <ol style="list-style-type: none"> 1. Ideology 2. Social relations 3. Actions of the individual | <ol style="list-style-type: none"> 1. Engagement 2. Intent 3. Capability |
| Target audience | Violent extremists or those 'on the radar' | Individuals who potentially may engage in lone-actor terrorism | Radicalised individuals in and outside the prison context | Individuals convicted under terrorist legislation in England and Wales |

Table 4: Summary of key features of the VERA-2R, TRAP-18, Radar and ERG 22+ risk assessment tools

| | VERA-2R | TRAP-18 | Radar | ERG 22+ |
|------------------|--|---|----------------------------------|---|
| Settings for use | Judicial decisions, corrections, law enforcement agencies, probation, and security services that are confronted with violent extremists and terrorists | Mental health, intelligence, law enforcement and security professionals | Upon detection of radicalisation | Qualified forensic psychologists or probation officers who are experienced in complex risk assessment |

Source: Lloyd & Dean 2015; van der Heide, van der Zwan & van Leyenhorst 2019

These four tools use similar indicators, and items, to consider violent extremism risk. The primary points of difference include the target audience. Some focus on the early stages of radicalisation (Radar) or individuals at risk of offending (TRAP-18), while others are intended for those who have already been involved or engaged in violent extremism (ie ERG 22+). Additionally, some have a more focused approach, while others claim applicability to a wide range of cases and in a wide variety of settings (ie VERA-2R).

Stakeholder perspectives

Interview participants provided a range of perspectives on the types of risk assessments employed to measure risk of violent extremism. These views were focused primarily on the four risk assessment tools discussed in the previous section. Eighty-one percent ($n=13$) of participants had experience with the VERA-2R, 50 percent ($n=8$) had experience with the TRAP-18, 31 percent with the Radar ($n=5$) and 19 percent ($n=3$) had experience with the ERG 22+. Evidently the majority of participants were experienced with and focused on the use of VERA-2R—which is unsurprising given it has been adopted as the primary risk assessment tool as part of the HRTTO regime—however, the majority of participants also had experience with more than one risk assessment tool. While details on the content and development of each tool are provided in the next section, this section considers the types of cases and settings in which participants suggested these tools should be implemented.

What types of cases are these tools designed to assess and in what setting?

As noted above, the majority of participants had experience with the VERA-2R, identifying this tool as providing a broad risk assessment for a range of ideological motivations for violent extremism. Participants noted there were few domains relating to specific religious or ideological motivations in this tool and that this was appropriate given it was intended for a wide range of backgrounds, age groups and ideologies. Importantly, participants identified that the VERA-2R has been applied to emerging ideologies and risk groups, including incels, and that the current iteration features domains that consider young people.

Participants commonly noted that the first iteration of the VERA-2R, known as the VERA, was developed within a prison setting. Early iterations of this tool were developed using case studies of prisoners who had committed acts of violent extremism, and it was initially used to assess and manage risk in the prison environment. The VERA has been revised twice, resulting in its current version, the VERA2R. Participants were of the view that the initial and subsequent versions of the VERA were most appropriate for use among individuals who had already committed an act of violent extremism, particularly within correctional settings. There was some concern among participants that there had been some scope creep and that there had not been sufficient validation to be confident in its use outside of corrections.

Experience with the TRAP-18 was identified by 50 percent ($n=8$) of participants. The TRAP-18 was developed with the intention of assessing risk of lone-actor violent extremism. Participants agreed that this tool was not suitable for use in considering group-level factors as risks for violent extremism. However, participants noted that it was useful in considering grievance-fuelled violent extremism and was capable of considering diverse religious and ideological motivations. It had also demonstrated some usefulness relating to foreign fighters and school shooters in the US. The TRAP-18 was designed to be implemented in the radicalised, pre-crime phase, with one participant estimating that 80 to 90 percent of cases assessed using the TRAP-18 were in the investigative phase. It is noteworthy that the TRAP-18 has demonstrated efficacy in assessing risk among emerging ideologies. Participants noted that the narrow focus of the TRAP-18 was somewhat offset by its usability in investigative settings by a diverse group of professionals. This was facilitated by its length—the TRAP-18 is less than half the length of the VERA-2R—allowing the expediency often required in the pre-crime phase.

The Radar was developed for use as a case management tool for intervention providers; however, it has been implemented in the risk assessment and management process. Participants reported that the Radar was developed, and continues to be useful, in the assessment of suitability of individuals for intervention, particularly in community settings. Participants who regularly used the tool recommended that it be employed on a regular basis in the case management process to inform decision-making and to provide a mechanism for ongoing monitoring of risk. In particular, this process was described as a method for evaluating the readiness, or likelihood of success, of reintegration of an individual into the community. The Radar features domains designed to understand the needs of an individual as they are associated with violent extremism and to provide a pathway toward addressing these needs in case management settings. While this tool was designed for general guidance, participants noted that it was relatively flexible, in that it could be adjusted based on specific programs that an individual is undertaking. Although some participants noted the use of the Radar in prison settings, participants with expertise delivering this assessment principally recommended its use in community settings rather than during incarceration.

The use of the ERG 22+ is limited in Australia; however, it was included in this review on the recommendation that evidence for its efficacy is relatively robust. This may be a reflection of the comparatively narrow scope of the ERG 22+. Compared with the other risk assessment tools included in this review, the ERG 22+ was designed to apply to violent extremism emerging

from Islamist ideologies only. In addition, it was designed to be implemented in prison settings, rather than community settings, and not for use in pre-crime risk assessments. However, one participant raised concerns that the use of the ERG 22+ had expanded beyond prison settings and that it was being used for individuals outside of the original scope of the tool. The scope of the ERG 22+ is specific, in that it was developed in relation to risk factors specific to an ideology, and has primarily been used in the UK.

The majority of participants that had employed more than one risk assessment tool noted the differing developmental pathways of each tool, with some being developed in community settings and some in prisons before being used in other contexts. However, it was a common theme among participants that certain risk assessments may be used outside of the settings in which they were designed or to assess risk among populations other than their intended group. The use of more than one risk assessment tool in the assessment process was commonly related to the need to cover all factors that participants, particularly practitioners, considered to be important. The ways in which these risk assessments were implemented, as reported by participants, will be discussed in later sections, with particular reference to the Structured Professional Judgement model.

Other risk assessment tools

Several other risk assessment tools have been developed and/or used for violent extremism, extremism or radicalisation. While these tools are worth noting, and are discussed here, they are considered to be less suitable for the purposes of Division 104 control orders and Division 105A post-sentence orders than the tools discussed above. For this reason, we only briefly highlight these additional tools in Table 5.

While these tools do not have a high level of suitability for Division 104 control orders or Division 105A post-sentence orders when used in isolation, they may be useful if used in tandem with other more appropriate risk assessment tools. This would likely have to be assessed on a case-by-case basis. Meloy, Mohandie and colleagues (2015) advocate for multi-method assessment practices and have recommended that TRAP-18 be used in combination with other tools such as the VERA-2R or the Multi-Level Guidelines (MLG) in order to produce a more thorough and accurate assessment.

Table 5: Other risk assessment tools for violent extremism and their suitability for Division 104 control orders and Division 105A proceedings

| | Details | Suitability issues |
|--|---|--|
| Historical, Clinical, and Risk Management (HCR-20) | A comprehensive set of professional guidelines for violence risk assessment and management | While this has been used to assess the risk of violent extremism, it was developed for general violence and therefore would be better used as a supplementary tool for relevant cases, as opposed to being used in isolation |
| Multi-Level Guidelines (MLG) | Structured Professional Judgement guidance for the assessment and management of group-based violence | Not specific to violent extremism. However, may be used as a supplementary tool for relevant cases |
| Radicalisation Assessment Monitor (RAM) | Assesses risk and protective factors to determine the level of radicalisation of an individual | Does not include a set of indicators, but rather is a scan of symptoms |
| Risk Assessment for Violent Extremists (RAVE) | Includes a checklist of 31 'cognitive' risk indicators and a software program which visualises the scored factors | Has a narrow focus on cognition which is covered by other tools such as VERA-2R, TRAP-18 and ERG 22+ |

Source: Cook, Hart & Kropp, 2013; Dean & Pettet 2017; van der Heide, van der Zwan & van Leyenhorst 2019

Interview participants were asked whether they were aware of any emerging risk assessments that may be better suited to the current risk environment. While 44 percent ($n=7$) of participants provided a response, only 25 percent ($n=4$) could identify an alternative risk assessment. First, it was noted that practitioners commonly implement several risk assessments together. While the use of a variety of tools in any given assessment was common among practitioners interviewed in this review, it was important that the metrics included in each individual tool were not specifically designed to be used in conjunction with any other given tool. More importantly, we cannot be certain of the efficacy of these tools in conjunction with one another; there is no current research that considers any given violent extremism risk assessment tool when used in conjunction with any other given risk assessment tool. As such, while we asked whether there are any other risk assessments in development, known to participants in this review, it is important to note that a combination of risk assessments may function differently than any tool used in isolation.

Separately to the use of combinations of risk assessment tools, 19 percent ($n=3$) of those interviewed identified the MLG as a promising assessment for risk of violent extremism. The MLG, as identified in Table 5, is a tool used in the Structured Professional Judgement process for the assessment and management of group-based violence. This tool was developed in Canada and was not initially intended for violent extremism. However, participants noted that while the majority of risk assessments common in Australia consider individuals, the MLG may be a useful emerging addition that includes group-level characteristics in the estimation of risk. One participant, in particular, noted that the focus on individuals was a weakness of the tools commonly employed in Australia. While the MLG has had limited use, and this has primarily been in Canada, it was the most common alternative risk assessment identified by participants as emerging in this area.

Summary

Several key risk and protective factors for violent extremism were discussed across three broad domains: sociodemographic factors, attitudinal and psychological factors, and contextual factors. Evidence regarding the association between these factors and violent extremism tended to be mixed. Overall, with the exception of being male and young, sociodemographic variables received the least support (ie they tended to have small effect sizes). Attitudinal, psychological and contextual factors generally had greater evidence for their association with violent extremism, but some findings were still mixed. This is likely reflective of the diversity among violent extremist populations. A smaller group of protective factors were identified (ie ageing, law abidance, perceptions of law legitimacy, and academic and professional engagement); however, these commonly garnered limited empirical support as effect sizes were generally small. That said, this is a rapidly developing body of evidence, with the majority of studies having been published since 2018.

Commonly used national and international risk assessment tools, including the VERA-2R, TRAP-18, Radar and ERG 22+, were discussed. The key features of these tools and others were highlighted. While varied in their focus and goals, they weigh up indicators to assist practitioners in drawing conclusions regarding the risk of an individual engaging or re-engaging in violent extremism, and help to inform case management. The suitability of these tools for Division 104 control orders and Division 105A post-sentence orders is discussed in the next section.

Suitability of risk assessment tools for Division 104 control orders and Division 105A post-sentence orders

Terms of Reference 2: Assess each tool's suitability to assist an expert to conduct an assessment of the risk of an offender for a Division 104 control order, or a Division 105A application to be made (or that has been made).

This section draws on the review of published literature and stakeholder interviews to assess the suitability of different risk assessment tools for use in Division 104 and 105A proceedings. In doing so, it considers a range of metrics that are key to assessing the efficacy of risk assessment tools. These are briefly summarised in Table 6.

| Table 6: Types of reliability and validity considered in assessing the efficacy of risk assessment tools | |
|--|---|
| Reliability | Description |
| Test–retest | The extent to which measures or scores are consistent across time |
| Interrater reliability | The extent to which different assessors are consistent in their assessments or judgements |
| Validity | Description |
| Face validity | The extent to which a tool appears, as a whole, to measure the construct of interest |
| Construct/content validity | The extent to which the indicators account for the construct of interest |
| Criterion validity | The extent to which individuals’ scores on a measure are correlated with other variables that one would expect them to be correlated with |
| Concurrent validity | The extent of agreement between two different assessments |
| Discriminant validity | The extent to which scores on a measure are not correlated with measures of variables that are conceptually distinct (eg the tool can discriminate between violent extremists and non-violent extremists) |
| Predictive validity | The extent to which scores on the measure have ‘predicted’ a future outcome (eg the ability of a risk assessment tool to predict violent extremism outcomes) |

Source: Adapted from Chiang, Jhangiani & Price 2015

Violent Extremism Risk Assessment Version 2 Revised (VERA-2R)

Design of the VERA-2R

VERA-2R is the third generation of the VERA tool, which was initially created in 2009 as a Structured Professional Judgement ‘guide’. It was developed based on research findings, discussions with experienced forensic clinicians, and the known characteristics of individuals who were involved in or convicted of violent extremism or terrorism-related offences (Pressman 2009). The VERA was designed to be used with individuals that had previously committed extremist violence or had been convicted of terrorist-related offences; as a result, it was most appropriately applied in prison settings. Following feedback from experts working in law enforcement, corrections and forensic psychology, the VERA was revised into the VERA-2 (Pressman & Flockton 2012). Again, and based on consultation with experts holding operational knowledge and having had experience with terrorists, the tool was revised into its current version: the VERA-2R (Pressman 2016). Items included in each iteration of the VERA were supported by terrorism researchers (Kruglanski et al. 2009; Monahan 2012; Sageman 2004; Saucier et al. 2009) and were judged to have face validity by correctional and security experts based on ‘lessons learned’ (Pressman & Flockton 2014). Table 7 provides details on each iteration of the VERA.

The VERA-2R was originally designed to be used with those who had previously been convicted of violent extremist offences (Pressman 2016); however, it has been employed more broadly than this with individuals who are considered to be ‘on the radar’ for violent extremism. The VERA-2R has been employed in relation to a range of ideological and issue-based violent extremists (ie religious, political or socially motivated), in diverse settings, and is used across gender and age groups. It also allows for the continued monitoring and supervision of violent extremists as assessments can be done over time to track changes in risk and protective factors. Importantly, the VERA-2R tool is used by professionals from a variety of disciplines provided they have undergone training, which is a departure from broader risk assessment tools that are typically designed to be used by psychologists (Pressman 2009).

Table 7: Details of VERA, VERA-2 and VERA-2R

| | Items | History |
|---------|---|---|
| VERA | 28 items including: 20 risk factors aggregated into three domains (attitudes/mental processes; contextual/social factors; and historical factors), 5 protective factors, and 3 demographic items | The first iteration of the VERA was developed in prison settings, using information from incarcerated individuals |
| VERA-2 | 31 items including: 25 risk factors aggregated into four domains (beliefs and attitudes; context and intent; history and capability; commitment and motivation), and 6 protective factors | Updated based on feedback from terrorism experts |
| VERA-2R | 45 items including: 28 risk factors aggregated into four domains (beliefs, attitudes and ideology; social context and intention; history, action and capacity; and commitment and motivation), 6 protective factors, and 11 additional indicators, which may contribute to violent extremism when in combination with other indicators | Updated further based on additional research into the indicators |

Source: Pressman 2016, 2009; Pressman & Flockton 2014

Evidence for efficacy of the VERA-2R

There is only a small body of work that has considered the efficacy of the VERA and its subsequent versions, summarised in Table 8. Some empirical work regarding the VERA-2R is forthcoming, but current available evidence is limited, with few studies having investigated the efficacy of the latest version of the VERA (ie VERA-2R). This was acknowledged in the PJCS (2021b) review, where it was stated that the adoption of the VERA-2R as the primary assessment tool for the HRTTO regime was based on a review of relevant literature *and* based on the advice of professional psychologists.

Published studies on the VERA and its subsequent versions provide limited evidence regarding the validity or reliability of the tool. In addition, there is little evidence in terms of the appropriateness of the indicators with samples who became radicalised or engaged in violent extremism in Australia. The applicability for Australian violent extremists of the risk indicators

emerging from the VERA-2R is therefore unclear. Research into this tool is particularly difficult as the content is not widely or publicly available and, as a result, independent research into its validity is not possible. This is in part a consequence of the measures in place to ensure the integrity and efficacy of the use of the tool in practice, including relevant court protection orders, which are designed to prevent prospective offenders from being able to ‘game’ the assessment.

Table 8: Key evidence regarding the efficacy of the VERA, VERA-2 and VERA-2R

| Study | Method and findings |
|---|--|
| Beardsley & Beech (2013) VERA | Conducted case studies for five terrorists by applying the VERA. Concluded that the majority of indicators in the VERA appeared relevant and important for the assessment of risk. Further, these authors noted that the tool was easily applied to the diverse terrorists in the sample. |
| Hart et al. (2017) VERA-2 | Assessed content overlap for VERA-2 and other risk assessment tools. Concluded that VERA/VERA-2 added value to the current field of risk assessment tools as it had indicators that differed from HCR-20 and MLG. Additionally, these authors stated that VERA-2 may be useful for detailed assessments as the indicators reflect different aspects or facets of extremist desires, beliefs and attitudes. |
| de Bruin, Duits & Kempes (forthcoming) VERA-2R | Tested interrater reliability with two assessors using a Dutch sample of convicted terrorist offenders (<i>n</i> =30). Overall, found good to excellent interrater reliability for the indicators and the resulting Structured Professional Judgement findings. However, six indicators were identified that had low interrater reliability. |

The limited research base supporting the VERA-2R was acknowledged by interview participants. Where these studies do exist, they have featured small samples and are narrowly focused in terms of the types of validity that might be expected to have been assessed. The body of research considering the VERA-2R is more limited than, for example, that of the TRAP-18. Interview participants supported the need for additional research into the VERA-2R but also acknowledged the barriers that exist, particularly for independent researchers. These included difficulty in obtaining data to consider the validity of the VERA-2R, with restrictions around access to the tool itself, and the limited ability to use data emerging from implementation of the tool. Participants noted that the majority of research into the tool is undertaken by the authors of the tool or their colleagues, or with the express endorsement of these groups. They suggested that there was a need to undertake research and evaluation, independent of the authors of the tool or their colleagues, into the varying types of validity of the VERA-2R as a whole and the domains within the instrument. At present, little is known about the accuracy of the VERA-2R, particularly as it might relate to Australian samples.

Suitability of the VERA-2R for Division 104 control orders and Division 105A post-sentence orders

The VERA-2R has undergone a process of refinement, emerging from correctional settings to be used in a wider range of settings and relating to a broad range of ideological motivations and risk domains. While it is evident that there is some concern regarding the body of research into the validity of this tool, the independence of research that currently supports it, and the availability of data for researchers to independently measure the validity of the tool, there were an array of perspectives on VERA-2R's usefulness specifically relating to Division 104 control orders and Division 105A post-sentence orders.

Fifty-six percent ($n=9$) of participants commented on the use of the VERA-2R for Division 104 and Division 105A proceedings. Several participants stressed that risk assessment was a component of the recommendations made by practitioners and should not be considered in isolation from the professional judgement of a practitioner making an expert assessment. Further, as one participant noted, while risk assessments are important as a tool to aid in decision-making, the ultimate decision was made by the court. The majority of participants provided a response that echoed these sentiments, with most suggesting that VERA-2R was useful in the decision-making process, albeit largely as a guide. While noting the limitations of the research around VERA-2R, several participants suggested that it was the best available tool for assessing the risk of future acts of violent extremism. Interview participants regularly highlighted the importance of the professional judgement of the practitioner and the use of multiple instruments in any given assessment. In line with these caveats, participants noted that the outcomes of the risk assessment, given the Structured Professional Judgement model, may be contingent on the practitioner implementing the tool.

There was a general—but not universal—view that the VERA-2R was appropriate for use in Division 105A post-sentence orders. One participant noted that there was not yet enough strong, independent empirical evidence for or against the suitability of VERA-2R in these processes. The majority of practitioners suggested that, in undertaking the considerably difficult task of making recommendations in relation to Division 105A, the VERA-2R provided useful and informative guidance. Ultimately, there was a general consensus among participants that the VERA-2R was useful in aiding decision-making in relation to both Division 104 and Division 105A proceedings.

Terrorist Radicalisation Assessment Protocol-18 (TRAP-18)

Design of the TRAP-18

The TRAP-18 was developed to assess the risk of individuals engaging in lone-actor terrorism. The tool includes eight warning behaviours and 10 distal characteristics (see Meloy 2017) that were identified based on empirical research in tandem with casework with a range of violent extremists (Meloy et al. 2012; Meloy, Mohandie et al. 2015, Meloy & O’Toole 2011). The eight proximal warning behaviours represent behavioural antecedents that may indicate an individual is at imminent risk of engaging in lone-actor terrorism. The distal characteristics are more dynamic and are supported by terrorism literature. These are not necessarily indicative of an immediate threat, but include commonly observed characteristics in individuals with the potential to be violent extremists. The TRAP-18 is a useful tool for the assessment of risk for an imminent attack despite the challenges with such an endeavour. However, some authors have recommended the TRAP-18 be applied in conjunction with additional assessment tools to bolster its usability and efficacy (Meloy & Gill 2016).

Evidence for efficacy of the TRAP-18

Evidence regarding the efficacy of the TRAP-18 is comparatively far more abundant and comprehensive than evidence regarding the VERA-2R. This is likely due to the TRAP-18 having been developed well before the VERA, as well as differences in concerns over security, its proper use, and intellectual property (RTI International 2017). As shown in Table 9, the TRAP-18 tool has demonstrated good interrater reliability (eg Challacombe & Lucas 2018; Meloy, Roshdi et al. 2015) and criterion validity with diverse samples of terrorists (eg Meloy & Gill 2016; Meloy, Roshdi et al. 2015). Further, 10 of the indicators were shown to be significantly different between attackers and non-attackers, highlighting the tool’s discriminant validity (Meloy et al. 2019).

The empirical evidence supportive of the TRAP-18 is encouraging, though more independent research is required to support the efficacy of the tool (Singh 2013). Of note, most empirical research supportive of TRAP-18 has been conducted by the author of the tool. Further, as with VERA, there is little evidence to support the applicability of the included indicators for Australian populations or samples.

Table 9: Key evidence regarding the efficacy of the TRAP-18

| Study | Finding |
|--|---|
| Meloy, Roshdi et al. (2015) | Tested interrater reliability and content validity using a sample of 22 individuals who carried out acts of terrorism in Europe. Demonstrated good interrater reliability across all variables. Further, the individuals in the sample were positive for 72 percent of the TRAP-18 variables, supporting content validity for individuals who acted alone as well as in autonomous cells. |
| Challacombe & Lucas (2018) | Demonstrated reasonable validity and interrater reliability using two raters and a sample of 58 US-based individuals or groups associated with the sovereign citizen movement. Specifically, found that the TRAP-18 was able to successfully postdict violent behaviour for those in the sample. Interrater reliability was good for the proximal and distal characteristics and for the full set of indicators. |
| Meloy & Gill (2016) | Tested criterion validity with a sample of lone-actor terrorists from the UK and Europe. Findings demonstrated that 70 percent of the individuals in the sample were positive for at least half of the TRAP-18 indicators. Four indicators appeared to differ across Islamic extremists, right-wing extremists and single-issue terrorists; however, the other 14 did not. Differences were identified between successful attackers and thwarted attackers. |
| Meloy et al. (2019) | Examined discriminant validity using non-random samples of convenience who had either carried out a lethal terrorist attack or were identified as at risk of doing so. Half of the TRAP-18 indicators had a moderate or large significant difference between the examined samples. |
| Goodwill & Meloy (2019) | Analysed data from a sample of North American terrorist attackers ($n=33$) and non-attackers ($n=23$) to examine discriminant validity. Identified clustering and co-occurrence for most of the proximal warning behaviours among the attackers sample but not for the non-attackers. There was less clustering and fewer associations among the distal characteristics, and these characteristics were present in both samples. |
| Meloy et al. (2021) | Conducted a time sequence analysis on 125 lone-actor terrorists from primarily Europe and North America. Findings demonstrated that almost all distal characteristics preceded the proximal warning behaviours. |
| Fernández García-Andrade et al. (2019) | Used the TRAP-18 to predict future violent incidents of an extremist nature in a sample of 44 patients with severe mental illness in situations of social exclusion and with a prison history. Stated that TRAP-18 could be a useful tool among this cohort. Findings indicated high predictive validity ($AUC=1.00$, $p=.018$). |
| Brugh, Desmarais & Simons-Rudolph (2020) | Applied the TRAP-18 to 77 jihadism-inspired lone-actor terrorists in Europe and the US, using only publicly available information. Findings highlighted the difficulty in completing TRAP-18 using only public information. Only four indicators were positively related more often than they were absent/unknown. |

Of all the risk assessment tools considered in this review, the TRAP-18 features the most research, especially peer-reviewed research, both into the individual constructs that make up the tool and concerning its overall validity. Interview participants indicated that they had confidence in the use of TRAP-18, in appropriate settings, because of the extent of research into the tool. They noted it was particularly useful in the process of law enforcement investigations. However, the majority of interview participants that commented on the evidence for efficacy of the TRAP-18 noted that, as with other tools in this review, there remained a need for research with larger sample sizes, as well as independent research and studies that consider predictive validity.

Suitability of the TRAP-18 for Division 104 control orders and Division 105A post-sentence orders

The TRAP-18 was designed for a specific group and setting. It was designed to measure lone-actor terrorism, in the pre-crime setting, for which evidence suggests it has relative success. However, while lone-actor violent extremism is in scope for this review, and may feature in the decision-making for Division 104 or 105A proceedings, pre-crime phases are unlikely to be the subject of such proceedings. Indeed, most of the recent control orders have been sought for convicted terrorist offenders after they were released from custody. It is unlikely that the TRAP-18 is suitable, at least in isolation or as the primary assessment tool, for making decisions in this context.

Interview participants did suggest that the TRAP-18 may be useful in ongoing monitoring. This tool features a set of temporally proximal and temporally distal warning behaviours. When proximal warning behaviours are observed, an act of lone-actor violent extremism may be imminent. In this way, the TRAP-18 may be useful in monitoring processes, in the event that a Division 104 order was granted, as a means of identifying whether there are any concerning changes in behaviour that may indicate elevated risk. This appears to be a reasonable prospect, consistent with the research into the TRAP-18 and the intended group and settings in which it may be used. However, in relation to decision-making for Division 104 or 105A proceedings, it appears that TRAP-18 is unsuitable.

The key caveat to this finding is that we cannot be sure of the efficacy of the TRAP-18 when it is used in conjunction with other tools for the purpose of informing decisions as part of the HRT0 regime. It is possible that constructs within the TRAP-18 could contribute to better decision-making when used in combination with other tools compared with the use of any of those tools in isolation. However, to consider this possibility, independent research is required.

Radar

Design of the Radar

The Radar was developed in Australia based on Barrelle's (2015) pro-integration model, which explains the disengagement of extremists. Radar is used in assessing the risk of violent extremism and the potential for diverting individuals prior to initial engagement in extremist violence. It targets individuals early in their radicalisation trajectory with an aim of disrupting and reversing this trajectory (van der Heide, van der Zwan & van Leyenhorst 2019). As such, it differs from the VERA-2R and the TRAP-18 as it is used to identify high-risk individuals who would benefit from prevention programs, as opposed to predicting the risk of violent extremist actions.

Practically, it involves an initial screening assessment, including 15 indicators across three dimensions: ideology, social relations and action orientation. Each of these dimensions represents an area of an individual's life where they may experience significant change during the radicalisation process. The 15 indicators are gauged for their intensity, which may be ranked as minor, moderate or major. This indicates how far along the radicalisation process the individual may be, and acts as a measure for change over time. Three protective factors are also considered, which are familial support, societal engagement and historical violence, or lack thereof. If needed, an in-depth assessment is done using 27 indicators across the same three domains from the screening tool.

Suitability of the Radar for Division 104 control orders and Division 105A post-sentence orders

In consultation with the CVE Branch of the Department of Home Affairs, the Radar was included in this review, and was raised during the interviews with key experts in this field. Twenty-five percent ($n=4$) of participants provided a response regarding the suitability of the Radar for decisions in relation to Divisions 104 and 105A of the legislation. Without exception, participants urged that the Radar should not be used to inform decisions in relation to this legislation. They noted that the Radar was not developed in prison settings and was developed as a case management tool rather than a risk assessment tool. The aim of the Radar was to guide the implementation of appropriate interventions and to guide the management of those at risk of violent extremism. As such, it is clear that the Radar is unsuitable for decisions in relation to Division 104 control orders and Division 105A post-sentence orders.

Extremist Risk Guide 22+ (ERG 22+)

Design of the ERG 22+

The ERG 22+ was developed by Lloyd and Dean (2015) through casework with convicted violent extremists and an examination of government-commissioned literature reviews on terrorist offending. The authors identified factors across three areas (engagement, intent and capability) that were common influences or were part of common pathways towards violent extremism. In sum, 22 risk factors were included in the tool, with scope for additional case-specific factors (ie 22+ factors). The authors explain that users of the tool should be experienced with professional guidelines and have a level of political awareness in the area of extremism. This may include fully qualified forensic psychologists and experienced probation officers. To administer the ERG 22+, an interview takes place with the individual being assessed, and the 22 factors are consulted for their relevancy. Other relevant factors are also considered. Each factor is rated as not present, partly present or strongly present, and the evaluator can indicate whether each factor could act protectively.

Practically, the ERG 22+ has been used in the UK to inform decisions about sentence planning, relocation, intervention, reintegration, parole, release, recall, licence conditions and supervision (Lloyd & Dean 2015). As of 2015, all 150 convicted extremist offenders from diverse ideological backgrounds had been assessed with the ERG 22+, helping to inform decisions about their management, supervision and monitoring. The ERG 22+ is not used widely outside of the UK.

There are some key differences between the ERG 22+ and the VERA-2R. For example, VERA tends to understand violent extremism through the lens of ideology, whereas the ERG focuses more on identity (Herzog-Evans 2018). Further, the ERG 22+ was designed to accommodate those who have not been convicted of a violent extremist offence (ie non-violent extremists; Lloyd & Dean 2015), while the VERA-2R's goals are slightly different, focusing more on violent extremist offenders. The ERG 22+ was developed using UK cases of violent extremism and may not apply well to extremist populations in other settings if they differ significantly from those found in the UK (Herzog-Evans 2018). Finally, a strength of the ERG 22+ over the VERA-2R is that it has fewer items and does not necessitate access to as much classified data.

Finally, it is also worth noting that the ERG has been adapted into the Extremism Risk Screen (ERS), which is a shortened version of the ERG designed to be used with offenders with no previous convictions for extremist offences (Lloyd & Dean 2015). The ERS supports prison and probation officials' assessment of an offender's possible involvement or interest in extremist groups, causes or ideas.

Evidence for efficacy of the ERG 22+

Key evidence regarding the efficacy of the ERG 22+ tool is presented in Table 10. Very few studies were identified. As with evidence regarding the VERA-2R, this may be due to concerns regarding security, proper use or intellectual property. While interrater reliability is supported (Powis et al. 2019), some room for improvement has been identified in relation to construct validity (Powis, Randhawa-Horne & Bishopp 2019).

Table 10: Key evidence regarding the efficacy of the ERG 22+

| Study | Finding |
|--|--|
| Powis et al. (2019) | Two experienced researchers rated 50 randomly selected convicted extremist cases using the ERG 22+. High levels of interrater reliability were found. Thirty-three trained practitioners rated two test cases specifically developed for the study against 'gold standard' ratings. Interrater reliability for the case studies was moderate, and considerable variations were identified between the raters. |
| Powis, Randhawa-Horne & Bishopp (2019) | Examined 171 ERG 22+ assessments. Identified two factors that would benefit from further refinement as they did not cluster into domains. Reliability analyses revealed good overall internal consistency for the tool. However, findings indicated low internal consistency for some of the examined domains. |

Interview participants were not able to comment on the efficacy of the ERG 22+, but noted the limited evidence available. This is likely due, in combination, to the limited use of the ERG 22+ in Australia and the focused nature of the tool in assessing risk among specifically jihadist ideologies.

Suitability of the ERG 22+ for Division 104 control orders and Division 105A post-sentence orders

There was limited publicly available research considering the ERG 22+, and few participants in this review had implemented this instrument within an Australian context. One participant compared the VERA-2R and the ERG 22+, suggesting that while the VERA-2R is broadly informative, the ERG 22+ was more useful within the subject matter that it was designed to consider. This is a relatively intuitive finding, in that the ERG 22+ was designed for use in prison settings, and to be primarily implemented among offenders of jihadist ideology who had committed a prior act of violent extremism. That said, the ERG 22+ has been applied to other ideological backgrounds, such as far-right, far-left, and gang-affiliated groups (Dean et al. 2018). The ERG 22+ is likely to be effective and informative for decisions relating to Division 104 and 105A proceedings, but may only be suitable for terrorist offenders of jihadist ideology. It should not be implemented for decision-making outside of this group, at least not without considerably more research into the suitability of the tool with other samples.

Summary

This section detailed the development and practical application of the VERA-2R, TRAP-18, Radar and ERG 22+. Of note, VERA was originally developed in a prison setting; however, over the subsequent revisions of this Structured Professional Judgement tool, its scope has widened considerably. The latest revision, VERA-2R, is used in diverse settings with different types of violent extremists (eg lone actors or group-based offenders) from a variety of ideological backgrounds. The TRAP-18 was designed to assess the risk of lone-actor terrorism, particularly the risk of an imminent attack. The Radar is most applicable in the early stages of radicalisation to help inform early intervention. Finally, the ERG 22+ is used to inform decisions about management, supervision and monitoring of offenders, typically for convicted violent extremist offenders in the UK.

With the exception of the TRAP-18, research evidence regarding the efficacy of these tools is sparse. Research tends to be limited due to the difficulties surrounding researching violent extremism. For example, most studies have small sample sizes due to the low base rate of violent extremist offending. With these limitations in mind, there is some evidence of content validity for VERA, the usefulness of the VERA-2 tool, and interrater reliability for the VERA-2R. Research regarding TRAP-18 has supported content validity, interrater reliability, post-predictive validity and discriminant validity. Finally, publicly available empirical research for the ERG 22+ has demonstrated mixed results regarding internal consistency and interrater reliability.

It is possible that there has been further research into these tools that has not been made publicly available; however, for the purposes of this review we can only consider research that is available. It is a significant limitation of this knowledge area that the tools themselves are subject to licensing agreements and that the data emerging from those tools is not available for independent research into the validity of these assessments. While there is considerable research into the TRAP-18, this tool is not, when used without other tools, applicable to the settings and individuals that may come under consideration for Division 104 and 105A of the Criminal Code.

Ultimately, the VERA-2R and the ERG 22+ were assessed as being the most suitable of the available tools to assist an expert in assessing the risk of an offender for a Division 104 control order or a Division 105A application. However, it is a notable confounding factor that these instruments are often used in combination as part of a Structured Professional Judgement model, and the implications of this for the efficacy of the tools (individually or collectively) is largely unknown. It is possible that there may be some utility to the TRAP-18 in these settings in combination with other tools. The ERG 22+ appears to be suitable for Division 104 and 105A proceedings; however, it has a strong but not exclusive focus on Islamist extremism (Hart et al. 2017). By simple elimination, it appears that the VERA-2R is the better of the available risk assessments for use as part of the HRTTO scheme. However, questions remain regarding the validity of the tool. There does not appear to be sufficient independent research into any of these four tools. Indeed, there is a lack of research generally. For reasons outlined elsewhere in this review, including lack of independence of the studies and lack of availability of the data, some of the findings from this research must be viewed carefully. With this in mind, and noting the need for further research into its validity, the VERA-2R remains the most suitable tool for informing decisions relating to Divisions 104 and 105A of the Criminal Code.

Current risk assessment frameworks, including the use of Structured Professional Judgement

Terms of Reference 3: Review current risk assessment frameworks, including the use of Structured Professional Judgement, to assess the risk of violent extremism offending and consider how violent extremism risk assessment tools might be improved.

Current risk assessment frameworks

Risk assessments for violent extremism are used to estimate the likelihood of engagement or reengagement in violent extremism. Assessments focus on numerous factors, including individuals' behaviour and environments, and the prevalence of prior violence or other problematic activities. However, given the considerable heterogeneity in the profiles of offenders, their underlying ideology and the timing and settings in which they may be subject to an assessment, the Structured Professional Judgement model is currently preferred in most jurisdictions. This approach differs from relying on the unstructured judgement of clinicians or relying solely on the outcomes of actuarial risk assessments, and draws on aspects of both approaches. Functional approaches to the assessment of violent extremism risk fall into three broad categories:

1. *unstructured clinical judgement*, which involves the intuitive professional judgement of practitioners;
2. *actuarial risk assessment*, which involves the use of validated tools that estimate risk based on a set of factors; and
3. *Structured Professional Judgement*, which bridges the gap between unstructured and actuarial approaches and involves a systematic application of professional judgement and consideration of empirically supported risk factors (Borum 2015; Dean & Pettet 2017; Meloy 2018; Murray, Mueller-Johnson & Sherman 2015).

Unstructured clinical judgement involves a practitioner estimating risk based on their experience and expertise (Dean & Pettet 2017). Assessors have discretion in selecting risk and protective factors to consider, how to weigh and conceptualise them, and how to interpret the available information to come to a decision. These approaches rely heavily on the competency and judgement of practitioners and are inherently vulnerable to being subjective and impressionistic. Violent extremism risk assessments based on unstructured clinical judgement, as with other types of crime, tend to vary between different practitioners. Evidence shows that these approaches are prone to significant error due to subjective bias that results in the incorrect assessment of factors and a lack of consistency and appropriateness in weighing the importance of certain factors (Dean & Pettet 2017; Scurich 2016; van der Heide, van der Zwan & van Leyenhorst 2019). Importantly, risk assessment approaches that rely solely on unstructured clinical judgement have been shown to be less accurate and less reliable than alternative, more formal approaches (Dean & Pettet 2017).

Actuarial risk assessment involves using a tool developed using statistical models of factors supported by research as being predictive of the likelihood for future offending. It typically involves assigning numeric values to a checklist of factors and calculating a level of risk (eg low, medium or high) through standard equational procedures (Murray, Mueller-Johnson & Sherman 2015). This standardised approach addresses some of the concerns around unstructured clinical judgement approaches by removing room for biases. However, in assessing the risk of violent extremism, some have argued that actuarial approaches cannot work (eg Sarma 2017). This is for a number of reasons, including a lack of data availability due to the low base rate of violent extremism, which does not allow for the development of statistically derived risk factors that can be consistently applied. Further, violent extremism involves a complex range of motivations (eg social, political, religious) and typologies (eg group-based, lone-actor, cyber), and the associated factors differ significantly between individuals, making it a challenge to integrate these into a single tool.

Structured Professional Judgement can be viewed as the middle ground between unstructured clinical judgement and actuarial risk assessment (Borum 2015; Meloy 2018). These forms of assessment involve practitioners drawing on their experience and expertise, while being guided by a set of factors. The set of factors is not assessed in a checklist style, as with actuarial assessment, nor are they typically given numeric values to calculate a summative level of risk. Rather, practitioners critically analyse client information against a set of indicators to form a conclusion regarding the extent of risk and the client's management and intervention needs. This approach requires qualified and experienced practitioners, and can be time and resource intensive (Logan 2017); however, it is widely argued that Structured Professional Judgement approaches offer appropriate flexibility and are therefore best equipped to capture the complex nature of violent extremism (Dean & Pettet 2017; Sarma 2017)

In sum, Structured Professional Judgement approaches are considered the best fit for violent extremist risk assessment as they balance the need for flexibility while controlling the biases associated with human judgement. Structured Professional Judgement approaches feature most prominently in modern risk assessment for violent extremism. Assessing the risk for violent extremism is a complex undertaking that goes beyond simply identifying the risk for offending. Approaches are also designed to aid in a comprehensive process through which intervention needs are identified and the impact of treatment is measured (Hart 2020).

Structured Professional Judgement—The preferred model

Interview participants were asked which of these three models—unstructured clinical judgement, actuarial risk assessment, or Structured Professional Judgement—were optimal. Every respondent identified that Structured Professional Judgement was the optimal model for assessing the risk of violent extremism. Participants described unstructured clinical judgement as an archaic method of assessing risk, with significant problems regarding consistency and the factors considered most important in making decisions, resulting in overall poor outcomes both for individuals subject to the assessment and for the final decision.

Overall, actuarial risk assessment models were considered to have merit, but were seen to encounter considerable difficulty within this field. Participants identified barriers to developing such models resulting from the low base rate of violent extremism in the population. Given the small number of violent extremism events, the volume of data from which such a risk assessment could be developed is severely limited. Similarly, participants noted that this was not a homogenous offending group; rather, it is a group with diverse behaviours, motivations and ideologies, and it is difficult to predict behaviour in this context solely from a data-driven process.

Structured Professional Judgement was considered to be the optimal model for assessing risk of violent extremism. Participants attributed this to the nuanced nature of violent extremism and violent extremists. Structured Professional Judgement provides a framework for an assessment, allows for consideration of differences between cases and the variability in motivation and ideological background, and provides the flexibility to adapt to changing threat environments. Notably, Structured Professional Judgement was identified as an essential model when considering groups that deviated from the intended design of risk assessments. For example, it was considered to be essential when assessing radicalised youth below the age of 18.

While Structured Professional Judgement was clearly identified as the optimal model for assessing risk of violent extremism, both in the literature and among interview participants, it is still at an early stage of development within this context. Participants pointed out that Structured Professional Judgement was in its infancy as a process and, while clearly the preferred process for assessment, there remains a need for ongoing research and evaluation to develop best practice.

Challenges and criticism of risk assessment for violent extremism

While the Structured Professional Judgement model remains the preferred approach, both in the literature and among those interviewed for this review, there remain some ongoing challenges to estimating the likelihood of violent extremism. These apply irrespective of the model adopted. The heterogeneous nature of violent extremism poses a challenge for risk assessment as it leads to uncertainty about how to specify an outcome for the assessment of risk (Sarma 2017). There are many different forms of violent extremism, and individuals' involvement includes a spectrum of activities (eg direct action, and operational, organisational and logistical support; Borum 2015). The distinction between engagement in violent extremism and involvement has been discussed in the literature (eg Borum 2015; Sarma 2017). For this reason, a challenge for the developers of risk assessment tools is to specify an outcome that is meaningful and appropriate for the population in question. This may explain why available tools are so varied. Some, for example, aim to predict the risk of radicalisation for those early in the process, and some focus on the risk of re-engagement among violent extremist offenders; some focus on the imminent threat of lone-actor terrorism, and some apply primarily to group-based extremism.

Similarly, challenges arise due to the diversity of radicalisation pathways that people follow and the lack of a one-size-fits-all approach, which means risk factors feature more or less prominently in the backgrounds of different individuals (Borum 2015; Garcet 2021; Hamm & Spaaij 2015). However, it should be acknowledged that there are certain risk factors that appear important for most violent extremists, regardless of type or ideology, such as being young and male, and having an association with other violent extremists (Carlsson et al. 2020; Hamm & Spaaij 2015). Beyond these risk factors, though, the evidence base relating to risk and protective factors for individuals' propensity for violent extremism is not solid given the empirical challenges outlined earlier. Thus, the selection of indicators may be arbitrary (Sarma 2017). Further, there is little guidance within risk assessment tools on determining the relevance of the risk and protective factors for individual cases, or how these factors integrate with each other to influence the outcome (Logan 2022). This is likely because we do not have solid evidence about the relative weight or clustering of risk and protective factors (Crenshaw 2007; Gill 2015; Hafez & Mullins 2015; Haggerty & Bucierius 2020; Staring 2014).

Regardless of these criticisms and the fallibility of current approaches to risk assessment, it remains the case that current methods have demonstrated greater efficacy than unstructured clinical judgement—that is, the decision-making of expert clinicians alone (van der Heide, van der Zwan & van Leyenhorst 2019).

Risk assessments for violent extremism are under-researched and lack demonstrated validity. For the VERA-2R, for example, there are studies that attest to the credibility and usability of the tool; however, despite its widespread use, it lacks a substantial amount of empirical evidence to support its validity (Honnvall 2018). This is the case for most violent extremism tools, and includes a lack of sufficient evidence to support predictive validity (ie the tool predicts the intended outcome), concurrent validity (ie the tool's relationship to similar tools) and discriminant validity (ie ability to distinguish between those who engage in the outcome and those who do not).

The lack of sufficient evidence regarding validity is typically attributed to violent extremism being a rare occurrence, and to difficulty in including representative control groups and difficulties in accessing information on violent extremists due to the security that often surrounds this information (Hamm & Spaaij 2015; RTI International 2017). Additionally, due to concerns for public safety and national security, individuals identified as at high risk of offending are unlikely to be released or go without intervention (Douglas, Nicholls & Brink 2016). This means that assessments are not able to be validated as such individuals are given little opportunity to offend (Monahan 2015; RTI International 2017). Further, given the low base rate for engaging in violent extremism, validation studies within the general community are an impossibility.

Finally, criticisms have been made about the function and implementation of risk assessments for violent extremism. Importantly, some tools have been used to assess individuals that they were not originally designed to assess, or for whom they have not been properly validated (Geurts 2017; Sarma 2017). Validating tools for specific cohorts, however, would face the same challenges as broad validation research on tools, particularly the lack of a sufficient sample size to validate such tools within a sub-sample of an already too small population.

Ultimately, many of the criticisms of violent extremism risk assessment tools could be addressed with a continued and increasing focus on validating tools, particularly if this validation research was done consistently, across time, and with a diverse range of cohorts. However, this would, of course, require overcoming the outlined challenges this presents.

Improving violent extremism risk assessments

When asked about areas in which violent extremism risk assessments could be improved, 81 percent ($n=13$) of participants identified areas in which these tools could be improved. These responses fell into three categories: consistency, the introduction of protective factors alongside risk factors, and validation of the instruments. Participants indicated that, in order to improve confidence in the outcomes of these tools, each of these three factors required consideration.

Consistency

Among those who suggested improvements to these risk assessments, 39 percent ($n=5$) argued for a greater focus on consistency. These participants believed that there was a lack of consistency between practitioners in how the domains of the risk assessments were implemented. However, the reason for this lack of consistency was less clear. The length of tools, particularly the VERA-2R, was noted as an impediment. The VERA-2R was identified as time-consuming, with one participant noting that they may receive multiple referrals per week, meaning the time taken to implement the VERA-2R was a considerable impediment to using it in decision-making. Another participant noted that the lack of consistency between cases may emerge from unclear descriptions of the domains within the assessment. This participant suggested that the VERA-2R could benefit from better descriptions of the items within the instrument and of the aspects of risk that those items were intending to measure.

Participants suggested that independent research could be undertaken into the extent that assessment tools were implemented with consistency. These statements were made with particular reference to the VERA-2R. Given the extent of its use in the Australian context, better understanding of how the VERA-2R has been applied, whether it has been applied consistently, and how to improve consistency in its application, would help to increase the confidence of end users and consumers of VERA-2R risk assessment outcomes.

Protective factors alongside risk factors

Protective factors were raised by 39 percent ($n=5$) of participants asked about improvements that could be made to these risk assessments. While it was noted that the VERA-2R is one of the only risk assessment tools to consider protective factors in assessing risk, participants suggested there was not enough emphasis on those protective factors. More specifically, they noted a lack of focus on whether these protective factors changed across time and whether these changes were sustained or variable. Protective factors were identified by participants as particularly important in considering Division 104 control orders and Division 105A post-sentence orders. One participant noted the issue of residual risk, and suggested that these risk assessments were not yet attentive to this issue. For example, individuals are likely to have setbacks, during which risk of violent extremism increases for a brief period of time. Dynamic instruments for assessing risk, which can adapt to short-term increases of risk, as a component of the longer process, were therefore considered important. While a setback may increase risk for a period of time, this participant suggested it should not be considered as a continuous risk factor, and that improving understanding of protective factors may improve understanding of these occurrences.

It is worth noting again that the number of risk factors for violent extremism identified through research substantially outweighs the evidence on protective factors. While the body of literature considering protective factors is emerging, it is clear that the assessment of risk is a delicate balance between factors that increase risk and factors that protect against risk of violent extremism. Again, this finding speaks to the importance of validation of the constructs within tools, and the availability of data for independent research to develop the knowledge area in relation to both risk and protective factors.

Validation

Validation was raised as a concern by most participants, as it was in the original PJCIS (2021a, 2021b) reviews. This issue related to a fundamental lack of information on the accuracy of the tools. While in response to other questions participants reported that these tools were useful, particularly in relation to the legislation considered in this review, the majority were also of the opinion that more should be done to understand the level of confidence that could be placed in the outcomes of risk assessments. However, this issue was primarily related to the diversity of subject matter. For example, participants suggested that more research should be undertaken into the risk factors that were relevant for specific ideologies or belief groups. Specific groups that were noted included youth, right-wing extremists, and individuals

that were radicalised online. There was uncertainty about which constructs within the risk assessments were valid for these specific groups. Further, there was concern regarding the validity of static constructs within these assessments. Participants noted that the threat environment and the profile of individuals being assessed may be rapidly changing, and there was concern regarding the validity of these tools to adequately respond to those changes.

Interrater reliability research was consistently raised among participants. This was related to the consistency in the application of instruments between cases, and between practitioners, which is currently unknown. Participants identified interrater reliability as an issue when implementing tools in different contexts and in the implementation of these tools in combination with one another. For example, where two or more tools are implemented in a Structured Professional Judgement setting for the purpose of risk assessment, there are questions as to whether the outcomes of these assessments will be consistent between cases or whether practitioners will reach similar conclusions. The impact of using multiple risk assessment tools, and the complexity this introduces, when little is known about the validity of constructs in individual risk assessments, is a key validation question requiring further research.

There was a general view that measuring and demonstrating predictive validity may be difficult to attain but worth aspiring to. While there are barriers to this—which have already been discussed in detail—this does not inhibit research into postdictive validity, face validity and interrater reliability. One participant related their comments regarding validity to the length of the VERA-2R, suggesting there was an even greater need for practitioners to understand the validity of the tool and the importance of individual constructs given this is the longest of the instruments that consider risk of violent extremism. Another participant suggested that validation studies may inform weighting within the VERA-2R, which could be used to advise practitioners which constructs were most important, particularly when used in conjunction with other tools.

It was clear that validation was an issue for the majority of participants. However, this issue does not mean there was hesitation in implementing the tools currently available to them. The concern principally related to the extent to which items within these instruments could be relied upon, whether this changed between settings, and the confidence that could be placed in the outcomes of these tools. Based on the literature review and interviews it appears that there is little reliable information on the validity of the risk assessments considered here. Where there is peer-reviewed research, it either features small sample sizes, has been conducted by the authors of the tool or their colleagues, or does not sufficiently consider the context in which these risk assessments are implemented, such as in conjunction with other instruments. Additionally, it is a limitation of this field that any research into these risk assessments must be endorsed, first to be undertaken and then to be published, by the authors of the tools as a result of licensing and confidentiality agreements. It is a fundamental and important issue in the field of risk assessment for violent extremism that further independent research be undertaken to validate these tools. As stated in plain language by two participants in this review:

I would like some validation data. I don't care if they identify things that are not great with it...I would much rather know that it is not a good tool for what we're using it for than to assume it is. [Participant 14]

We're 100 percent not happy with them because we like to work from a scientist-practitioner model. We want things to be based in evidence, right? And what we understand of the tools in this area is there's not a lot available in terms of quantitative data that they've got the validity and the reliability that we would usually see with psychometric assessments. [Participant 15]

Summary

Early approaches to risk assessment for violent extremism relied on unstructured clinical judgement. Modern approaches primarily use Structured Professional Judgement, which allows for flexibility while controlling for human biases, and offers greater reliability than alternative approaches. The Structured Professional Judgement approach is widely accepted in the literature as the most appropriate risk assessment framework for violent extremism. Participants interviewed as part of this review universally supported this view, identifying Structured Professional Judgement as superior to both unstructured professional judgement and actuarial risk assessment approaches.

Challenges for the development and use of violent extremism risk assessment tools include the diversity within violent extremist populations, which makes it difficult to identify and consistently apply a set of indicators. Similarly, the heterogeneous nature of extremist populations leads to challenges regarding specifying an outcome of interest (eg radicalisation, engagement, reengagement) for risk assessment tools. Participants highlighted three important areas in which risk assessments for violent extremism may be improved. First, a greater understanding of the consistency with which these tools are implemented between cases and between practitioners is required. Second, participants suggested that a greater focus on protective factors, alongside risk factors, may balance and provide greater nuance to these risk assessments. Finally, this review has identified a lack of sufficient empirical evidence regarding the validity of violent extremism risk assessment tools. While acknowledging the challenges in conducting validation research, such as the small base population size due to the rarity of violent extremism and security concerns when accessing information, the majority of participants advocated for expanding independent research into the validity of risk assessment tools, the domains within those tools, and the risk assessment process more generally.

Findings and recommendations

This review has considered the role of several risk assessment tools used in decision-making relating to violent extremism, with particular consideration given to how these tools may be used in Division 104 and Division 105A proceedings. These provisions within the Criminal Code allow for control orders to be made or for post-sentence orders to be imposed on individuals that are considered to be particularly high risk to the community for violent extremism. In consultation with the Department of Home Affairs, this review focused on the four principal risk assessments implemented in Australia: the VERA-2R, TRAP-18, Radar and ERG 22+. In the course of reviewing grey and peer-reviewed literature from the field, and undertaking in-depth, semi-structured interviews with experts and practitioners, several key findings have emerged, leading us to make the following recommendations.

Recommendation 1: The VERA-2R remains the most suitable risk assessment tool for use with Division 104 control orders and Division 105A post-sentence orders and should continue to be used, in conjunction with other suitable tools as appropriate, but it must be subjected to further scrutiny and, in particular, validation.

The principal finding of this review was that the VERA-2R and the ERG 22+ were found to be useful for informing decisions relating to Division 104 control orders and Division 105A post-sentence orders. However, this finding was accompanied with an important caveat. It was rare that these tools were used in isolation—in fact, practitioners reported the use of several risk assessments concurrently in the Structured Professional Judgement process. This was not a formalised process. Indeed, there was no empirical evidence, beyond passing suggestions, that any risk assessment should be used in combination with another. Further, there has been no attempt to identify which tools are best used in combination. Rather, this practice has been implemented in an ad hoc fashion by practitioners due to concerns that each individual risk assessment tool did not sufficiently account for all risk domains. For this reason, while this review can suggest that the VERA-2R and the ERG 22+ are the most suitable for use, and that the VERA-2R remains the tool with the broadest applicability, the review cannot recommend an individual risk assessment tool as offering superior performance for decision-making relating to Division 104 or 105A orders. That said, it was clear the Radar should not be used to inform decisions on control or post-sentence orders. It was not developed in this setting and it was

not intended for this task and, as a result, there should be no consideration given to the Radar as a risk assessment tool for informing decisions on these orders. Additionally, the TRAP-18 was designed for use in the pre-crime period, specifically among lone-actor violent extremists. The TRAP-18 is therefore also unsuitable for informing decisions relating to Division 104 and Division 105A of the legislation, at least in isolation.

Recommendation 2: Any risk assessment tool employed to inform expert assessments for Division 104 and 105A proceedings must be validated for, at a minimum, face validity, construct validity and interrater reliability. These validation studies must be undertaken by appropriately qualified researchers who are fully independent of the authors or the colleagues of the authors of these tools.

In reviewing the literature on violent extremism risk assessment, and undertaking interviews with experts in the field, it was immediately clear that there is a paucity of information on the efficacy of these risk assessments. While some, such as the TRAP-18, have been the subject of a larger body of research, there is exceptionally little research supporting the validity of others, including the VERA-2R. Pivotal, where research is undertaken into these risk assessment tools, it has almost universally been authored by the creators of those tools, or the colleagues of the tool developers. This presents a significant issue for the field of violent extremism risk assessment. Further, there is little evidence that these tools are accurate. Where research has been undertaken, the sample sizes are often small and the research is certainly insufficient to be considered generalisable. Ultimately, when making decisions that have considerable ethical implications for the judicial process, there should be an expectation that the tools used to inform those decisions be robust and highly effective. At present, the extent to which these risk assessments demonstrate validity for the measurement of risk for violent extremism to the threshold required for this type of decision is unclear.

To strengthen the research into violent extremism, risk assessment tools must be evaluated for—at a minimum—face validity, construct validity and interrater reliability. For research into these tools to have sufficient credibility, it must be undertaken by researchers who are fully independent of the authors of the tools and their colleagues. At present, research into these tools is dominated by the authors of these tools. This impinges on the perceived independence of this research and has been identified as artificially inflating validity estimates for risk assessment tools in other settings (eg violence risk assessment; Singh 2013).

Finally, the opportunity for independent research is restricted by the controls placed on the content of these risk assessment tools, the domains and questions used, the training materials and the data resulting from their implementation. As a result of this practice, research into a risk assessment tool must be endorsed by the author of the tool before it can be undertaken. This hinders the development of best practice and, ultimately, the quality of risk assessment that can be implemented.

Recommendation 3: Any use of risk assessment tools (including the VERA-2R), or consideration of the outcomes of Structured Professional Judgement processes, should be accompanied by a clear acknowledgement and communication that risk assessment tools in themselves are not predictive of the likelihood of violent extremism. The development or validation of risk assessment tools that are predictive of the likelihood of extremist or terrorist acts remains an important focus but will require a long-term strategy.

Based on the interviews, and a review of the website and manual for the VERA-2R, it is clear there is a need to distinguish between the role of the VERA-2R with a general population sample, and with those individuals who have been arrested and convicted for a terrorist offence. The website makes it clear that the VERA-2R is not designed to be predictive in some contexts, but is less clear about others. For example, at the time of writing, the VERA-2R website states:

The VERA-2R cannot predict who in the general population will become a violent extremist or terrorist.

The instrument does however offer a systematic professional analysis of the risk by applying relevant and transparent risk indicators for violent extremism.

The VERA-2R may be used to establish the risk status for detainees or persons under supervision in relation to violent extremism. It can also provide support for preventive programs and decisions on priorities for supervision of individuals. Regular and systematic re-assessments are possible due to the dynamic nature of various risk indicators.

Predictive validity is problematic due to the low base rate of terrorists and violent extremists. Moreover, extremists and terrorists may change their strategies, make unexpected decisions and use unpredictable triggers. Unpredictable and dynamic factors such as events at a personal, local or global level can also trigger unexpected violent acts.

The distinction here is important. It is clear that the VERA-2R is not designed to predict risk in the general community, but its use as a predictive tool for detainees or individuals under supervision is less clear from publicly available information. Certainly, some of the interview participants discussed the efficacy of the VERA-2R with reference to its predictive validity. That said, several participants stressed that these tools were not designed to be predictive. Indeed, while the task that these tools undertake may appear predictive, the tools are most commonly identified as Structured Professional Judgement guides rather than predictive risk assessments. The VERA-2R should not be considered a predictive risk assessment tool, and should not be implemented solely in an attempt to forecast the risk that an individual will commit a terrorist act (whether for the first time or as a repeat offender). Rather, it forms part of an overall

assessment made by the relevant expert. It is for this reason that we do not recommend that the VERA-2R be assessed for its predictive validity based on its current use. The distinction between a tool that is designed to predict risk, and one that is designed to manage risk, needs to be made clear and communicated to relevant stakeholders. It is therefore imperative that any use of risk assessment tools (including the VERA-2R) or consideration of the outcomes of a Structured Professional Judgement process in the context of Division 104 control orders and Division 105A post-sentence orders should be accompanied by a clear acknowledgement and communication that these risk assessments are not predictive of the likelihood of violent extremism. Further, for a tool that formulates and offers potential ‘risk scenarios’ as a product of its assessment—which is what the VERA-2R provides—the purpose and nature of these scenarios, including whether or not they are intended as predictions, must be clarified.

While this recommendation is based on a recognition that the VERA-2R is not a predictive risk assessment tool, if the tool were to be used to predict risk in any capacity, then steps need to be taken to validate it prior to this use occurring. There are, however, significant barriers to validating the VERA-2R for its predictive validity, which are acknowledged by the authors of the tool and other experts interviewed as part of this review. Given the low base rate of terrorism and violent extremism, overcoming these barriers to determine the predictive validity of VERA-2R would require a long-term strategy which could be incremental in scope. The first step could be an international validation study, in a sample of like countries, that capitalises on the larger sample of individuals who have been assessed using the VERA-2R. This could be followed by efforts to validate the tool in the Australian context, with a sample of individuals who have been arrested and convicted for terrorist offences and have been assessed using the VERA-2R. Any efforts to validate the VERA-2R and Structured Professional Judgement processes generally must use methods appropriate to these risk assessment approaches, in contrast to those that might be used to validate actuarial tools.

Finally, irrespective of any steps taken to assess the VERA-2R for predictive validity, the development of a predictive assessment for the risk of violent extremism should remain a goal of this field of research. While the risk assessment tools considered in this review may be refined for the task that they are intended (which is to guide the Structured Professional Judgement process), we recommend that the development of a predictive risk assessment tool be a wholly separate task. Consistent with the findings of this review, any predictive risk assessment tool should rely on the Structured Professional Judgement process, and not be an actuarial tool, noting that predictive validation of Structured Professional Judgement processes has been undertaken in other settings (eg De Vogel & De Ruiter 2007). A strategy for the development of a purpose-built predictive risk assessment tool should be considered by the newly funded Centre of Excellence for CVE Research, Risk Assessment and Training (see also Recommendation 7). This may require international collaboration across several years to achieve, and would likely draw on newly established or newly identified data, using contemporary analytical approaches.

Recommendation 4: A commitment should be made by agencies that fund this research that any research into risk assessment tools, including validation studies, be made fully public.

There was concern among interview participants that barriers to publicly releasing research on risk assessment tools would undermine efforts to build confidence among critics of violent extremism risk assessment and, more importantly, among those who rely on risk assessment outcomes to make decisions. There are two main barriers to public release. First, agencies that commission research into the validity of these risk assessment tools are not required to make that research public. Second, the licensing arrangements with the authors of these tools means that research is limited unless the authors support such research. Evidently, both of these factors limit the development of best practice in an exceptionally important area. In order to best understand the accuracy of these tools, the settings that they are best used in, and the amount of confidence that should be placed in their outcomes as part of the judicial decision-making process, a commitment must be made that all research undertaken in relation to risk assessment tools be made public. The obvious caveat applies that any information on risk assessment tools that may jeopardise the integrity and efficacy of the use of the tool in practice, or that is otherwise subject to court protection orders, should not be made public. But this is easily overcome and should not act as a hindrance to publication.

Recommendation 5: While Structured Professional Judgement was considered the optimal framework for risk assessment, empirical research is required to better understand whether it produces consistent findings and outcomes between cases and between practitioners.

There was little doubt that Structured Professional Judgement was the optimal approach to the assessment of violent extremism risk. This was evident from both the literature review and the interviews. However, it was less clear whether there was consistency in the way that tools were applied between practitioners and whether there were consistent findings and outcomes between practitioners and cases. For example, it was not clear whether there was consistency in the way that Structured Professional Judgement was implemented. Indeed, the combination of risk assessment tools appeared to differ from case to case. While this is undoubtedly necessary in some settings, it is unclear whether the inclusion of some risk assessments, and the exclusion of others, may influence the judgement of practitioners.

Given the variation in approaches both between cases and between practitioners, it could not be established whether there was consistency in the way in which Structured Professional Judgement was implemented in relation to Division 104 and 105A proceedings. While there is a clear necessity for flexibility in evaluating cases because of the different individual and situational characteristics, the extent to which practitioners relied on the risk assessment tool versus their own unstructured engagement with the individual in drawing conclusions was unclear. While we have recommended further research into the validity of risk assessments, it is an additional recommendation of this review that research be undertaken to understand the implementation of the Structured Professional Judgement process. Further, this research should consider the consistency of outcomes of this approach between practitioners and the influence of employing differing combinations of risk assessment tools. A model for best practice in relation to assessing risk in relation to violent extremism, specific to the Australian HRTTO scheme, could then be devised.

Recommendation 6: The Department of Home Affairs should take carriage of making relevant data available for the purpose of independent validation studies.

The CVE Branch of the Department of Home Affairs is, at present, custodian of training for the VERA-2R in Australia. In addition, a Centre of Excellence for CVE Research, Risk Assessment and Training was recently funded to sit within the Department of Home Affairs' CVE Branch. This makes the CVE Branch a key stakeholder in terms of training in, validation of, research about and implementation of risk assessment tools in Australia. Research into violent extremism risk assessment is pivotal in the Australian context and, while it requires open and independent research, it also requires the custodians of data to facilitate access. The CVE Branch is well placed to lead in this endeavour, given the branch currently facilitates training around and research into these tools. The department should ensure arrangements are established to provide access to the data generated by these tools, including as part of the training, with an express view toward undertaking validation studies. The feasibility of establishing a minimum dataset should be explored. This might also extend to facilitating access to data from external agencies, where agencies hold data that might assist with risk assessment research (including research into risk and protective factors, described below).

As part of this process, the Department of Home Affairs should establish a set of eligibility criteria for researchers to access any sensitive data (eg suitability of qualifications, knowledge of the field, security clearance, and appropriate independence from the tool authors), to ensure the security of data and quality of the research can be maintained. It is also recommended that the department engage independent reviewers to assess the quality of research applications proposing use of the data.

Recommendation 7: The recently funded Centre of Excellence for CVE Research, Risk Assessment and Training should lead the development and implementation of a strategy for the advancement of research into risk and protective factors for cognitive and behavioural radicalisation among Australian samples. This research can directly inform the regular review and, potentially, future refinement of existing risk assessment tools or the development of new tools.

While our review included a brief overview of risk and protective factors for violent extremism, the evidence base is rapidly developing. In a recent systematic review of risk and protective factors for cognitive and behavioural radicalisation, 127 studies were examined and 101 risk and protective factors analysed (Wolfowicz et al. 2021). Notably, half of these studies were published between 2018 and 2020.

We note that the VERA-2R has been revised on two occasions since it was originally developed. Given the significant and rapid advancement in the evidence base, the domains covered by the VERA-2R and other risk assessments should be routinely revisited and assessed in terms of their concordance with the latest evidence. The recent systematic review authored by Wolfowicz et al. (2021), which not only identified risk and protective factors across five domains related to radicalised attitudes, intentions and behaviours, but also the strength of their respective association, provides a useful foundation against which to review these tools.

Of particular note in the Wolfowicz et al. (2021) systematic review is that just four of the 206 samples (from the 127 studies) included in the review were from Australia. Not only is there a need for the validity of the VERA-2R and other risk assessment tools to be subject to further scrutiny with Australian populations and in the Australian context, there is a clear need for additional primary research into the risk and protective factors for both cognitive and behavioural radicalisation among Australian samples. This is especially important given the continually evolving threat environment described by the interview participants in this review. The newly funded Centre of Excellence for CVE Research, Risk Assessment and Training is well positioned to lead this endeavour. This requires developing a research strategy and priority research topics and a commitment to support high quality quantitative and qualitative research. The outcomes of this research can help inform the regular review and refinement of existing risk assessment tools for their specific tasks, and (based on this research or the outcomes of validity studies) the development of new risk assessment tools that demonstrate the ability to forecast risk of violent extremism.

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Appendix

Interview schedule

General questions

1. What is your role, and how does it relate to violent extremism and the assessment of risk?

General questions about violent extremism risk assessment

2. What are the most significant violent extremism threats in the current landscape?
3. In your opinion, what are the most important emerging threats for violent extremism in Australia?
4. How important do you think risk assessment is in the management of violent extremism risk in Australia?
5. What experience do you have with the Structured Professional Judgement model, and how suitable is it to violent extremism risk assessment in Australia?
6. Do you think the effectiveness of risk assessment in measuring violent extremist recidivism is impacted by treatment mandates? Are there any alternatives?

Questions about specific violent extremism risk assessments

7. Which violent extremism risk assessments do you have particular knowledge of that we can discuss further here? In particular, do you have experience with either the VERA-2R, TRAP-18, Radar, or ERG 22+?

[The following set of questions were asked for each initiative identified]

8. What types of cases was this risk assessment designed to assess?
9. In what setting is this risk assessment designed to be delivered? Eg prisons.
10. How is the initiative delivered? Eg actuarial assessment, Structured Professional Judgement.
11. How widely is the risk assessment implemented?
12. In your experience, how effective is this risk assessment?
13. Is this risk assessment suitable for emerging violent extremism threats, and ideologies?
14. Could this risk assessment be improved? How?
15. Has this risk assessment been validated, and if so, what evidence is there for efficacy?
16. How suitable is this risk assessment in making recommendations for the purpose of a s104 control order?
17. How suitable is this risk assessment in making recommendations for the purpose of a s105 application?
18. Are you aware of any alternative risk assessment models that may be better suited to the context in which you operate?

AIC reports
Research Report

Dr Timothy Cubitt is a Principal Research Analyst in the Australian Institute of Criminology's Serious and Organised Crime Research Laboratory.

Dr Heather Wolbers is a Senior Research Analyst in the Australian Institute of Criminology's Serious and Organised Crime Research Laboratory.

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