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RESEARCH REPORT

An Examination of Risk Assessment Tools Developed for Radicalized Individuals and their Application in a Correctional Context

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**An Examination of Risk Assessment Tools Developed for Radicalized Individuals and their
Application in a Correctional Context**

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Executive Summary

Key words: *radicalization, violent extremists, terrorism, risk assessment.*

Radicalization to violence is a relatively rare, though high-impact event. Despite radicalized offenders comprising less than 1% of the Canadian federal offender population, research has demonstrated that they differ from the general offender population on a number of risk indicators and characteristics relevant for identification, intervention, and future risk determinations. Therefore, most researchers in the area of terrorism and violent extremism contend that general and violent risk assessment tools are not applicable to radicalized violent extremists. Rather, the use of extremism-specific risk assessments that are informed by the differing indicators and characteristics of violent extremists have been encouraged (Pressman & Flockton, 2012a). The primary purpose of the current report is to consolidate the research to date regarding the available extremism-specific risk assessments. Specifically, the reliability, validity, and the applicability of these tools within the Canadian correctional context are assessed.

In establishing risk factors, indicators, and characteristics associated with violent extremism, a number of research challenges have been identified. The small base rate of violent extremist behaviour has made it difficult to obtain samples large enough for statistical analyses. An accurate profile of violent extremism is difficult to establish as despite relations between terrorism and violent extremism, they are regarded as heterogeneous phenomena within the literature. Despite these issues, a number of broad characteristics of violent extremists have been identified. However, more research is needed to support these identifications in order to deduce a much-needed level of specificity. Given these limitations, the available evidence precludes the ability to identify any tool as being superior to others for assessing violent extremism.

Each risk assessment tool identified is unique and offers a slightly different lens through which to assess violent extremists. The available empirical evidence for extremism-specific risk assessment tools is limited and still relatively preliminary. Most of the tools have been developed and validated using publicly available information, such as case studies and samples of known terrorists. Though the current tools are promising, more extensive testing is required to validate their utility. External independent reviews, increased adherence to reporting guidelines, and more research with offender samples will provide further confidence in the legitimacy of these assessments.

Overall, violent extremists make up a very small proportion of the Canadian offender population. The risk indicators identified within the literature and the risk assessments developed currently lack extensive empirical testing to provide definitive understandings and conclusions on radicalization and violent extremism, particularly within a correctional context.

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Introduction

Radicalization to violence is a relatively rare, though high-impact event. As an offence category, terrorist events perpetrated by groups or lone actors are a relatively rare event (Spaaij, 2010). Indeed, radicalized offenders make up less than 1% of the Correctional Service of Canada's (CSC) federal offender population (Stys, Gobeil, Harris, & Michel, 2014; Skillicorn, Leuprecht, Stys, & Gobeil, 2015). Notwithstanding the low frequency of terrorist offences and the low recidivism rates of offenders engaged in terrorism (Silke, 2014), it is important to identify such offenders and determine their risk of future violent extremism. Risk assessment tools are essential and informative at each stage in the correctional process: intake, incarceration, and release. It has been recommended that regardless of the offence, offenders should be assessed for the presence of ideological motives in the commission of their crimes (Pressman & Flockton, 2012b). Accurate assessments of motive can add to the utility of risk assessments by providing additional information to be used in security classification, placement, programming, conditional release decisions, and any progress or change in ideology over time (Pressman & Flockton, 2012b).

However, across 15 countries, it has been found that the majority of correctional facilities utilize the same intake and assessment procedures with radicalized and extremist offenders as they do with general offenders (Axford, Stys, & McEachran, 2015). The applicability of general violence risk assessment tools to the assessment of risk for extremist violence and terrorism has been hotly debated. Most researchers have argued that general violence risk assessments are not applicable to radicalized extremists as they have been found to differ from general and violent offender populations (Borum, 2015a; Dernevik, Beck, Grann, Hogue, & McGuire, 2009;

Pressman, 2009; Pressman & Flockton, 2012b).

Terrorist involvement encompasses a wide range of activities, attack methods, ideologies, and pathways to participation (Dalgaard-Nielsen, 2010; Horgan, 2017). Additionally, the risk factors identified within the literature are many and lack the empirical research needed to deduce a much-needed level of specificity (Borum, 2015b; Gill, 2015; Sarma, 2017). The purpose of the current report is to consolidate the research to date regarding the identification and risk assessment of radicalized, terrorist, and extremist individuals. The challenges of assessing violent extremists and terrorists will be identified and discussed in relation to their effect on the development of valid risk assessment tools. The most common characteristics and risk indicators identified within the literature will precede a discussion of radicalized offenders in correctional facilities, particularly Canadian federal corrections. The most prominent risk assessment tools for assessing terrorists and violent extremists will be presented. Particular attention will be paid to the evidence regarding the reliability and validity of these tools. Discussions will further centre on the applicability and utility of this research in a correctional context. Recommendations and suggestions for future research will also be offered.

Terminology

The terminology and descriptors used in the literature on radicalized individuals is wide and varied. Some researchers make specific distinctions among the commonly-used identifiers, while others apply them interchangeably. The most common terms used include radical, extremist, terrorist, right-wing, left-wing, authoritarian, foreign fighter, homegrown, and political soldier. Additionally, legal definitions and qualifiers for each vary among jurisdictions. In a similar vein, terrorism, violent extremism, and radicalization are not synonymous as violence is not always a defining characteristic across these identifiers (Borum, 2015a; Horgan, 2017).

Terrorism is seen as the final step in a process known as radicalization. Researchers tend to agree that radicalization results from a process of distinct phases rather than a single event (Borum, 2011; Cole, Alison, Cole, & Alison, 2009; Silber & Bhatt, 2007; Vidino, 2011). Radicalization refers to the process of adopting extremely rigid beliefs, opinions, and worldviews that are generally socially condemned and associated with justification of violent means to achieve goals (Hafez & Mullins, 2015). CSC defines a 'radicalized offender' as, "an ideologically motivated offender, who commits, aspires or conspires to commit, or promotes violent acts in order to achieve ideological objectives" (Correctional Service Canada, 2012). It is imperative to note that an individual can radicalize without going on to commit violent extremism and radicalization is not a necessary precursor to terrorist involvement. Either can exist in isolation (Borum, 2015a).

Identifying the pathway from ideology to violent action is a necessary first step in the evolution of risk assessments for violent extremists as the goal of risk assessment is to determine the likelihood of future violence. It is expected that individuals who are radicalized are likely to engage in the planning or implementation of terrorist acts (Silber & Bhatt, 2007). Establishing indicators and risk factors for those more likely to continue on to violent action is essential in differentiating between the benign radical and the violent actor, which will result in more valid and reliable risk assessment tools.

Terrorists and violent extremists are similar in that they both commit violent acts intended to cause harm, further a particular ideological cause or goal, coerce or intimidate their chosen target, and influence public opinion (Pressman & Flockton, 2012b). Violent extremism varies and can result from a number of ideological motivations including religious causes, racism, anarchy, homophobia, environmental causes, animal rights, or pro-life beliefs (Stys &

Michel, 2014). Terrorism is violent action committed for political, religious, or ideological reasons that is intended to have a psychologically damaging component toward society or powerful decision makers (Pressman & Flockton, 2012b; Public Safety Canada, 2017). However, not all violent extremism contains the intention of public fear and terror (Pressman & Flockton, 2012b). They are distinct constructs, often related, though not always demonstrating a reciprocal relationship. Terrorists are a subset of violent extremists; all terrorists are violent extremists, but not all violent extremists are terrorists (Pressman & Flockton, 2012b). As such, risk factors that apply to violent extremists will apply to terrorists (Pressman & Flockton, 2012b). Given that terrorists are subsumed under the violent extremist category, that term will be favoured throughout this report to refer broadly to both violent extremists and terrorists. They will be distinguished when discussed in isolation. Terrorism, radicalization, and violent extremism are also differentiated from other violent individuals and groups – such as drug cartels – by the presence of specific political and ideological motivations (Flanigan, 2012).

The research on terrorism and violent extremism is further disaggregated into those who act alone or in very small groups, and those who are members of larger groups and organizations. The lone actor literature also includes varied terminology such as far-right loner, lone actor, lone wolf, lone wolf packs, and small-cells. The term lone actor will be used throughout the remainder of this report to refer to all of the above.

Challenges in Assessing Violent Extremists

The study of radicalized individuals is still a fairly new and undeveloped area of research and as such, the literature base is currently limited. In addition, the majority of the current research available is theoretical in nature, with a very limited empirical research base. One of the main reasons for the lack of empirical evidence is the low base rate of terrorist and violent

extremist incidents (Gill, 2015; Sarma, 2017). Radicalization to violent action is not a common occurrence; therefore, low base rates preclude the ability to develop a precise profile of a violent extremist, which makes accurate estimations of risk difficult. Any profile developed would likely result in a large number of false positives and false negatives whereby some individuals may be mislabelled as violent extremists or actual violent extremists may evade detection (Borum, Fein, Vossekui, & Berglund, 1999). Moreover, research with violent extremists may be difficult to obtain as long sentences prevent the ability to assess recidivism rates (Pressman & Flockton, 2012b) and death in action is also a likely possibility. Captured extremists may be reluctant to participate in research studies (Pressman & Flockton, 2012b), especially if they are radicalized and must interact with an individual considered to be a part of the 'outgroup'. Additionally, despite the presence of ideological motives, some terrorists and violent extremists may be convicted and sentenced for only general violent offences, such as manslaughter (Pressman & Flockton, 2012b). Such instances may affect the research on violent extremists, as offenders that should be assessed or interviewed are excluded because their file information is not properly aligned with their offence. Without an adequate research base to draw from for violent extremists, results and understandings must be interpreted cautiously.

There is no individual profile that perfectly captures all violent extremists (Dalgaard-Nielson, 2010; Hamm & Spaaij, 2015; Szlachter et al., 2012). It is agreed upon in the literature that this group is heterogeneous in nature; thus, increasing the scope of the problem for researchers (Dernevik et al., 2009). Violent extremists vary in gender, age, attack method, level of involvement, ideology, motivation, and personal trajectory to radicalization and violent action. Numerous roles and general personality profiles have also been posited (Barrett, 2011; Borum, 2015a; Horgan, 2017; Nesser, 2004). This further demonstrates the complexity of violent

extremists as each role and profile may have unique risk factors, indicators, behaviours, and motivations (Borum, 2015a; Sarma, 2017). As such, any assessment tool developed may not apply universally to the wide variability within this group.

The literature suggests a very large number of potential risk indicators and proposes a multitude of pathways to violent extremism. This prevents specificity, making it difficult for risk assessment tools to properly identify those that could be considered a threat. Moreover, some research has demonstrated that risk indicators may be temporally situated resulting in cohort effects that change over time, demonstrating a more dynamic than stable influence (Gill, Horgan, Corner, & Silver, 2016). Additionally, there have been differences found between those considered lone actors and those who operate in groups. However, others have argued that the lone wolf typology should be abandoned as individuals in this conceptualized typology may not differ as much as previously thought (Schuurman et al., 2017).

Obtaining empirical research on the topics of radicalization, terrorism, and violent extremism is fraught with challenges and obstacles. Impediments include low base rates, low participation rates, varied terminology, lack of a cohesive profile, multiple trajectories to action, and a vast heterogeneity. All of these factors hinder the ability to grow this research base in a timely manner. Additionally, much of the current research has been conducted retrospectively using case studies of known terrorists, de-radicalized individuals, and current violent extremists. Very little longitudinal research has been conducted, precluding the ability to infer causality. However, this does not negate or invalidate the empirical findings thus far. A large number of indicators and risk factors for radicalization and violent extremism have been identified and will be discussed in turn.

Characteristics of Violent Extremists

A review of the extant literature on radicalized individuals has consistently demonstrated that there is a lack of a cohesive profile that can identify those at risk of committing violent extremist offences (Gill, Horgan, & Deckert, 2014). A myriad of factors are related to the evolution of a violent extremist. Much of the research on violent extremists has focused on identifying core characteristics with the express intent of developing risk assessments based on those characteristics. While a number of risk indicators have been identified, it is important to note that indicators should not be considered as predictive, given low base rates prevent estimations of prevalence (Gill, 2015). Rather, they are best used to prioritize cases for monitoring, management, or intervention among identified individuals of concern (Gill, 2015).

Radicalization has been found to develop from both internal and external factors (Botha & Abdile, 2014; Knight, Woodward, & Lancaster, 2017). The following factors are representative of adult violent extremists in particular. Research has demonstrated that while youth violent extremists exhibit many of the same risk indicators as adult violent extremists, they may also present with slightly different risk factors, which may be especially true in conflict zones (Botha & Abdile, 2014; Campelo, Oppetit, Neau, Cohen, & Bronsard, 2018).

Demographic. The majority of violent extremists have been found to be young males (Gill et al., 2014; Hamm & Spaaij, 2015; Horgan, Shortland, Abbasciano, & Walsh, 2016; Lafree, Jensen, James, & Safer-Lichtenstein, 2018; Scott, 2017). The younger age could be attributed to organizational recruitment methods that often target younger individuals as they are non-threatening, inconspicuous, and generally easy to manipulate (Peracha et al., 2012). However, lone actors have been found to be older, less educated, more often unemployed, and

more often have a criminal record than those operating within groups (Gruenewald, Chermak, & Freilich, 2013a, Hamm & Spaaij, 2015). Some research has found that having a military background can be a risk indicator, particularly among lone actors (Gill et al., 2016; Gruenewald et al., 2013a; Horgan et al., 2016; Lafree et al., 2018).

Psychological. In terms of psychological characteristics, two of the main factors identified include mental health and personal identity. Mental illness has not been found to correlate with group violent extremism, for either adults or youth (Borum, 2014; Campelo et al., 2018; Cole et al., 2009; Gruenewald et al., 2013a, 2013b; Monahan, 2012; Pressman & Flockton, 2012a). However, it has been found that mental health issues appear significantly more frequently among those who act alone (Gruenewald et al., 2013a; Hamm & Spaaij, 2015; Spaaij, 2010). One of the most widely acknowledged psychological risk factors are grievances often associated with a perceived sense of injustice and humiliation (Borum, 2014, 2015a; Campelo et al., 2018; Doosje et al., 2016; Knight et al., 2017; Lloyd & Dean, 2015). The grievances for lone actors are often personal combined with social, political, or religious ideology (Hamm & Spaaij, 2015; Spaaij, 2010).

For radicalized individuals operating within groups, a sense of identity, belonging, and responsibility appear to be important factors for joining and remaining in terrorist organizations (Besta, Szulc, & Jaśkiewicz, 2015; Borum, 2014; Botha & Abdile, 2014; Campelo et al., 2018; Dalgaard-Nielsen, 2010; Knight et al., 2017). Identity fusion¹ and group identification have been found to predict the acceptance and justification of violence to protect a country or change a social system (Besta et al., 2015). Immigrants to western countries, particularly second and third

¹ Identity fusion is when an individual identifies with a group so strongly that their personal and social selves merge and the individual feels 'one' with the group (Gómez & Vázquez, 2015).

generation immigrants, often have a conflicting sense of identity as they attempt to balance between western modernity and the traditional cultural identity of their home country (Bartlett & Miller, 2012; Dalgaard-Nielsen, 2010). For these individuals, an extremist ideology may be appealing as it provides a rigid identity with norms, structures, and rules that reduce identity ambiguity (Bartlett & Miller, 2012; Webber et al., 2018). Personal feelings of insignificance leading to a quest for meaning, purpose, and closure have also been associated with increased extremist attitudes and political beliefs (Borum, 2014; Webber et al., 2018; Webber & Kruglanski, 2018).

Social. It has been widely demonstrated that an individual's social circle is highly influential in the process of radicalization (Aly & Striegher, 2012; Bartlett & Miller, 2012; Borum, 2015a; Botha & Abdile, 2014; Campelo et al., 2018; Cole et al., 2009; Dalgaard-Nielsen, 2010; Hamm, 2007; Lafree et al., 2018; Vidino, 2011). This is not surprising given that antisocial peers have been found to be a strong predictor of criminal behaviour in general, as supported by the 'central eight' risk/need factors² (Andrews & Bonta, 2010). For instance, parents have been found to play less of a role in the transfer of political ideals; instead, peers appear to be more influential (Botha & Abdile, 2014). The proliferation of technological advances, internet, and social media have also been implicated in radicalization as casual social interactions can increase exposure to ideological beliefs and extremist individuals, even for those considered to be lone actors (Angie et al., 2011; Bockler, Hoffman, & Zick, 2015; Gill et al., 2016; Hamm & Spaaij, 2015; Holt, Freilich, Chermak, Mills, & Silva, 2018; Schuurman et al., 2017). However, social influences may be less influential for lone actors as social exclusion has been identified as a

² The central eight risk/need factors are the major predictors of criminal behaviour.

potential catalyst for this group (Hamm & Spaaij, 2015).

Behavioural. In assessing risk for terrorism, behavioural indicators may be particularly informative given their observable nature. Both group and lone actor extremists have been known to communicate their grievances, beliefs, and intentions to others (Borum et al., 1999; Gill et al., 2014, 2016; Hamm & Spaaij, 2015; Horgan et al., 2016; Meloy & Gill, 2016), though this behaviour may be decreasing in recent cohorts (Gill et al., 2016). Travelling abroad, especially to conflict zones, is also a behavioural indicator that has been associated with violent extremism (Cole et al., 2009; Knight et al., 2017).

Attitudes. A number of attitudes, beliefs, cognitive styles, and worldview orientations have been correlated with radicalization and violent extremism. Authoritarianism, dogmatism, apocalypticism, and fundamentalism have been found to affect a propensity toward violent extremism (Besta et al., 2015; Borum, 2014, 2015a; Campelo et al., 2018; Szlachter et al., 2012). Intolerance towards others, especially in terms of opposing beliefs and religions, and a sense of superiority coupled with an ‘us vs. them’ mentality is common (Cole et al., 2009; Doosje et al., 2016). Cognitive appraisals³ and attributions of events such as externalizing, personalizing, hostile and assumptive attributional styles, and confirmation bias can both precede and result from extremist involvement (Borum, 2014). Normative pro-violence attitudes and the justification of violence to achieve goals have also been demonstrated as risk factors (Borum, 2015a; Cole et al., 2009; Nivette, Eisner, & Ribeaud, 2017; Szlachter et al., 2012; Webber &

³ Cognitive appraisals and attributions refer to the way one perceives an event or situation as positive, negative or neutral and how they explain the cause(s) of the event (Lazarus & Folkman, 1984; Penn, Sanna, & Roberts, 2008). *Externalizing* refers to perceiving an event as due to someone else or the situational circumstances rather than oneself; *Personalizing* is attributing failure to others rather than circumstances or the self; *Hostile attribution bias* refers to believing others have hostile intent through their words and actions; *Assumptive style* involves jumping to conclusions quickly without seeking additional information; *Confirmation bias* is selectively focusing on information that confirms pre-existing beliefs while disregarding disconfirming information (Borum, 2014).

Kruglanski, 2018).

Motivations. Aly and Striegher (2012) demonstrated that religion is not always the primary motivator for joining an extremist group. Interviews conducted with current and former violent extremists have revealed several motivating factors for joining extremist organizations. For some, thrill, sensation, and adventure seeking are enough to propel one to engage in violent extremism (Bartlett & Miller, 2012; Borum, 2014; Campelo et al., 2018). Motivation to engage in certain behaviours is often personal and reflective of one's current position within the social strata. The motivational pull of engaging in extremist behaviour has been found to differ significantly among extremists and can change over time (Barrett, 2011). Initial motivation for joining such groups may vary; however, it has been found that commitment to the group ideology or cause may intensify with continued participation and group cohesion (Barrett, 2011). In determining initial motivations, it may be possible to intervene, disengage, or de-radicalize an individual before they become increasingly ideological and more strongly dedicated to the group cause.

Some research has established theoretical general motivational profiles dependent upon individual pathways and motives towards violent extremism (Barrett, 2011; Dalgaard-Nielsen, 2010; Nesser, 2004). Most groups have a strong, charismatic leader who is devout in their beliefs and ready to engage in violence to achieve their goals (Barrett, 2011; Nesser, 2004). Motives for those joining established groups vary from personal reasons such as strong political beliefs, the search for a concrete identity, or the promise of material gain and status, which has also been demonstrated elsewhere (Bartlett & Miller, 2012; Borum, 2014; Botha & Abdile, 2014). Others join due to social influence or for the ability to commit criminal behaviour (Barrett, 2011; Nesser, 2004). While a single violent extremist profile may be impossible to determine, the use

of general motivational personality profiles may assist in refining the study of violent extremists. By establishing general combatant profiles and counter-recruitment procedures, preventive agencies can establish targeted risk indicators, protective factors, and treatment interventions aimed at the motivational and personality factors unique to each profile (Barrett, 2011).

Protective Factors. An individual can be considered radicalized but not necessarily continue to commit terrorist offences. To have a complete understanding of the process and risk of radicalization and subsequent action, researchers should consider those that are resistant to radicalization or do not proceed to commit violent acts (Gill, 2015). Research on protective items is currently lacking, though some have attempted to identify the characteristics of those that do not commit extremist violence. While some have argued that resistance is merely the absence of identified risk factors, others have concluded that it is a separate process deserving of individualized attention (Cragin, 2014). Cragin (2014) identified four mid-level factors hypothesized to lead to resistance and disengagement: moral repugnance of killing others, perceived costs, perceived ineffectiveness of violence, and absence of reinforcing social ties.

Profile of Radicalized Offenders in Canadian Federal Corrections

To date, CSC has completed several exploratory studies that focus on radicalized offenders. Radicalized and violent extremists represent less than 1% of the Canadian federal prison population (Skillicorn et al., 2015; Stys et al., 2014). While radicalized offenders make up a very small proportion of the Canadian federal offender population, security and front-line staff have demonstrated a broad understanding of this population and those susceptible to radicalization (Stys et al., 2014). However, correctional staff have indicated that they would benefit from more formalized definitions, indicators, and policies regarding this population (Stys et al., 2014).

Despite small numbers, Canadian radicalized offenders do demonstrate some differences when compared to the full population of CSC inmates (Stys et al., 2014). It has been found that radicalized offenders in CSC custody are less likely to be Canadian citizens, less likely to be of Indigenous descent, less likely to have served a prior federal sentence, less likely to have had a prior prescription for psychotropic medication, less likely to have histories of substance abuse, and less likely to be assessed as high need or low reintegration potential when compared to the general population of offenders (Stys et al., 2014). Furthermore, this population have been found to be significantly younger at sentencing, more likely from a visible minority (i.e., other than White, Black, or Indigenous), and more likely to have a language other than English or French as their mother tongue (Stys et al., 2014). Additionally, they were found to be more educated and more likely to be employed upon admission to CSC custody (Stys et al., 2014). Radicalized offenders often do not present with high mental health needs or poor institutional behaviour compared with general offenders (Stys et al., 2014). However, a high proportion of radicalized offenders have been assessed as having needs in the associates, attitudes, and personal/emotional domains (Stys & Michel, 2014). Ideologically motivated radicalized offenders have been identified as possessing more violent extremist needs when compared to non-ideologically motivated radicalized offenders (Stys & Michel, 2014). This suggests that non-ideologically motivated radicalized offenders may be more similar to the general offender population than their ideologically motivated counterparts (Stys & Michel, 2014).

With reference to motivations for extremism, it has been found that 30% of Canadian federally sentenced radicalized offenders had purely ideological motives, 17% had purely criminal motives, and 53% were motivated by a mixture of the two (Stys & Michel, 2014). The most common ideological motives included promoting political change or responding to a group

grievance (Stys & Michel, 2014). Those who committed the most serious crimes and those regarded as leaders were often identified as having purely ideological motives for their actions (Stys & Michel, 2014). The most common non-ideological motives were identified as material gain and friendship (Stys & Michel, 2014).

As previously discussed, identifying individuals holding violent extremist views is important for intervention and the prevention of potentially violent acts. This applies to both individuals in the community and those in custody. CSC identifies offenders belonging to a Security Threat Group (STG) as:

Any formal or informal ongoing inmate/offender group, gang, organization or association consisting of three or more members. Most security threat groups encountered in a correctional setting fall into one of the following basic categories: street gangs, prison gangs, outlaw motorcycle gangs, traditional organized crime, Aboriginal gangs, white supremacy groups, subversive groups, terrorist organizations and hate groups (Correctional Service Canada, 2016).

Scott (2017) used administrative data from the offender intake assessment, which each offender completes upon arrival at CSC facilities, to develop an assessment of susceptibility to group-based influence. A comparison of STG and radicalized offenders with non-STG offenders was used for scale development and validation. From 300 potential variables, Scott (2017) identified 17 indicators clustered into four subscales: violence and victims, employment history, antisocial history and attitudes, and criminal history. Items were summed to create a total score, predictive of likelihood of STG involvement. Final analyses revealed high predictive accuracy, with the antisocial history and attitudes subscale being the strongest indicator. The results suggested the final variables may be especially useful for identifying individuals at risk of

becoming involved with a STG.

Applicability of Current Risk Assessment Tools for Extremist Individuals

Specialized risk assessment tools for the identification of radicalized individuals and those at risk of committing extremist violence are few in number and lack extensive empirical testing (Borum, 2015a). It is widely acknowledged that an empirical, actuarial tool is unlikely to be developed due to the low base rate of terrorism, which would result in an unstable and unreliable estimation of risk (Borum, 2015a; Cole et al., 2009; Sarma, 2017). The majority of the current tools available are based on structured professional judgement (SPJ) guidelines, which is advocated as the most appropriate method for assessing future risk for this type of offence (Borum, 2015a; Monahan, 2012; Sarma, 2017). Risk assessments in general, and for radicalized extremists in particular, need to take a case formulation, holistic, person-centered approach by integrating all available information, based on the available empirical evidence (Borum, 2011, 2015a; Dernevik et al., 2009; Sarma, 2017). Information regarding an identified potential threat should be gathered from as many sources as possible, such as how the individual came to be of interest, credibility of source information, the individual's history and current situation, political and social environment, attack-related behaviours, ideology, motive, level of organization, capability, and target selection (Borum et al., 1999; Silke, 2014).

Not all individuals who are radicalized will go on to commit violent crimes. Some individuals can hold extremist views without acting on them. Radicalization becomes problematic when the individual crosses the boundary from ideology to action. Therefore, it is important to identify those who may need monitoring (i.e. radicalized) and those who are at high risk of committing a violent act (i.e. violent extremist). The most common and most researched risk assessment tools for extremism include the Violent Extremist Risk Assessment (VERA;

Pressman, 2009), Extremism Risk Guidelines (ERG 22+; Lloyd & Dean, 2015), Multi-level Guidelines (MLG; Cook, Hart, & Kropp, 2013), and the Terrorist Radicalization Assessment Protocol (TRAP-18; Meloy, Roshdi, Glaz-Ocik, & Hoffman, 2015).

Violent Extremism Risk Assessment (VERA; Pressman, 2009). The VERA is a SPJ tool developed for use with individuals convicted of or have a history of extremist violence. The purpose of the VERA is to assess the likelihood of future violent extremism. It is considered a complementary tool to be used in conjunction with other risk assessment tools appropriate for the current individual (Pressman & Flockton, 2012a). It was revised in 2010 and became the VERA-2 following feedback from the implementation of the initial version in a high-security prison in Australia (Pressman & Flockton, 2012a). The most current iteration, the VERA-2R (Pressman, Rinne, Duits, & Flockton, 2016) includes more dynamic variables associated with violent extremism that allow for the assessment of changes in risk over time. The VERA has also been modified and used with a digital risk indicator protocol for assessing extremism through online behaviour and content (Pressman & Ivan, 2016), an important step with the growing usage of online social media applications.

The VERA-2R contains 34 indicators within 5 domains: (a) Beliefs, Attitudes, and Ideology, (b) Social Context and Intention, (c) Historical Factors, Action, and Capability, (d) Commitment and Motivation, and (e) Protective Indicators. Items are rated on a 3-point scale based on degree of presence: 0 = low, 1 = medium, 2 = high. It can be completed either by interview or file review and may be administered by a single individual or through a multi-disciplinary team approach. It is intended to be used by trained individuals (e.g. psychologists, correctional staff, law enforcement, etc.) who are responsible for monitoring and managing violent extremists (Pressman & Flockton, 2012a). The assessor estimates the individual's level of

risk using all available information in conjunction with ratings on the tool.

Beardsley and Beech (2013) applied the VERA to case studies of five known terrorists. The sample scored high on the indicators of alienation, perceived injustice, lack of empathy, dehumanization, social influence, support for violence, and anger at political decisions and actions of the country. They found substantial interrater reliability and declared the items were easy to apply.⁴ Ideology, grievances, affiliations, and moral emotions have been identified by others as potent risk indicators, all of which appear in the VERA-2 (Monahan, 2012; Pressman & Flockton, 2012a).

Multi-level Guidelines (MLG; Cook, Hart, & Kropp, 2013). The MLG is a SPJ measure that was developed for threat assessment specialists to assess the risk of group-based violence. While not developed specifically for the correctional context, this tool may assess the risk of radicalization during incarceration as well as upon release, especially for those already convicted of extremist-related offences. The MLG assesses both individual and group dynamics, with the objective of evaluating one's risk of violence in a group context (Hart et al., 2017). The current version includes 16 risk factors divided into four domains: (a) individual, (b) individual-group, (c) group, and (d) group-societal. The individual domain assesses factors relevant to people as individuals, regardless of any groups they belong to. The individual-group domain assesses an individual's identities, attitudes, and roles associated with group membership. The

⁴ For categorical data, Cohen's Kappa was used as a measure of interrater reliability. Kappa ranges from 0-1.00, with larger values indicating better reliability. Cohen (1960) and Landis and Koch (1977) suggested that Kappa results be interpreted as follows: 0 as poor, .01 to .20 as none to slight, .21 to .40 as fair, .41 to .60 as moderate, .61 to .80 as substantial, and .81 to 1 as almost perfect agreement. The Kappa values for each of the items were .76 or greater and the level of agreement between the two raters was 85.7%.

group domain assesses group processes and structure outside of the individual person. The group-societal domain assesses variables related to the broader social framework in which the group is embedded and operates within. The MLG is not terrorism specific and can be used with a wide range of groups such as gangs, new religious movements, clans, organizations, and terrorist groups (Hart et al., 2017). While this tool is used to assess the vast majority of terrorist incidents, it is group focused and thus excludes features of lone-actor terrorism. However, the MLG can be used to analyze whether a terrorist attack should be considered group-based or individual-based.

Items are rated on a 3-point scale based on presence (no evidence, possible/partial evidence, definite evidence) and relevance to perpetration of violence (low, moderate, high). Three final opinions are provided at the end of the assessment. The first is an opinion on the overall prospect that the individual will commit group-based violence in the future (also called case prioritization). The second is on the likelihood regarding the risk that any group-based violence committed by the individual will result in serious or lethal physical harm. The third is an opinion regarding the risk that the individual will commit imminent group-based violence. The MLG is available for purchase by the general public and there is no requisite training to use it. It can be completed by a single individual or a group of assessors.

Testing of the MLG among criminal justice and mental health professionals has found that it has practical utility and is easy to both understand and use (Cook, 2014). However, interrater reliability for individual items had a large range, from poor to excellent.⁵ Reliability

⁵ For continuous data, Intraclass Correlation Coefficients (ICC) were used to measure interrater reliability. ICCs vary between -1 and +1 and they were interpreted using guidelines for strength of agreement developed by Chichetti and Sparrow (1981): less than .40 is poor, .40 to .59 is fair, .60 to .74 is good, and greater than .75 is excellent.

estimates for domains, total score, and conclusory opinions were found to be comparable to other SPJ tools demonstrating the MLG is a reliable tool across diverse sets of cases. Interrater reliability estimates for the second version of the MLG also ranged from poor to excellent (Hart et al., 2017).

When comparing the MLG with the VERA-2, only 12 of the 16 MLG risk factors overlapped with VERA-2 indicators, with 8 of the 16 having moderate to high overlap (Hart et al., 2017). The individual and individual-in-group MLG domains overlapped substantially with VERA-2 items, with the group and group-in-society domains having little to no overlap. However, items in the group and group-in-society domains were not accounted for by items in the VERA-2. This suggests that while the tools measure some similar constructs, there are some unique contributions in the MLG. This preliminary research is not sufficient to make determinations of assessment superiority and both tools may be essential for assessing extremist violence (Hart et al., 2017). The VERA-2 is more targeted towards extremist ideology while the MLG is targeted towards group-based violence. The two assessments may complement each other in necessary ways. Like others previously discussed, Hart and colleagues (2017) also encourage a multi-assessment approach.

Extremism Risk Guidelines (ERG 22+; Lloyd & Dean, 2015). The ERG 22+ was developed by the National Offender Management Service (NOMS) of England and Wales and has been implemented within NOMS since 2011 (Lloyd & Dean, 2015). It has also been completed on all convicted extremists in custody and in the community (Lloyd & Dean, 2015). It was developed for use with convicted terrorists, extremist offenders, and other offenders when there is a justifiable concern about their potential for engaging in any future extremist offences (Lloyd & Dean, 2015). The goal of the ERG 22+ is not to identify the presence of risk indicators,

but rather to identify pathway influences and motives. This helps determine how participating in extremist behaviour may have developed as well as the most appropriate path to facilitate disengagement (Lloyd & Dean, 2015). The ERG 22+ is used to inform sentence planning, offender movement, intervention strategies, reintegration plans, parole, release, special conditions, as well as supervision (Lloyd & Dean, 2015). Offenders of credible concern may also be first assessed using the Extremism Risk Screen (ERS), a shortened version of the ERG 22+, to decide if further investigation is required (Lloyd & Dean, 2015).

The current iteration of the ERG 22+ consists of 22 items within three domains: (a) engagement, (b) intent, and, (c) capability. Engagement encompasses a wide range of factors that are related to individual motivation to engage with and pledge allegiance to a group, cause, or ideology. These can include personal emotional factors, identity issues, social circle, perceived advantages, and mental health. Intent focuses on personal factors that contribute to an individual's willingness and readiness to offend including attitudes, as well as chosen actions and objectives. Capability assesses the individual's knowledge, skills, competencies, access to resources, criminal history and other factors that inform the "potential nature and lethality of an extremist offence" (Lloyd & Dean, 2015, p.46).

Items are rated based on the degree of presence observed: none, some evidence, or strong evidence (Lloyd & Dean, 2015). The '+' indicator allows for individualized assessment and professional judgement regarding additional variables not identified within the ERG factors, which may emerge as significantly relevant to a particular case. In addition, the assessor can determine the role specific indicators played in the current offence, how they could contribute to future offences, and any potential protective factors that could prevent future offending. It is recommended that the ERG 22+ be completed at regular intervals to assess change given that the

items are dynamic and therefore, potentially amenable to change (Lloyd & Dean, 2015). The ERG 22+ can only be completed by forensic psychologists or prison/probation officers who are experienced in complex risk assessment and have completed the requisite training. Training is completed over two days and includes application of the tool to practice cases. Assessors should have a level of knowledge about political violence, extremism, and terrorism to help inform their assessments (Lloyd & Dean, 2015).

The ERG 22+ has been found to be applicable with right-wing extremists, animal rights activists, female extremists, and gang members in the United Kingdom (Lloyd & Dean, 2015). In addition, positive outcomes were identified by correctional staff upon implementing the ERG 22+, such as increased procedural assessment clarity, legitimizing assessor actions related to risk management, increased professional efficacy, and improved partnerships (Webster, Kerr, & Tompkins, 2017). However, for sites without dedicated staff handling extremist offenders, increased workload for operational staff was identified as a negative outcome (Webster et al., 2017). Assessed offenders reported improved relationships with correctional staff and some reported an increased willingness toward positive change (Webster et al., 2017). Transparency about assessment purpose and results was identified as an important component of the process (Webster et al., 2017).

Terrorist Radicalization Assessment Protocol (TRAP-18; Meloy et al., 2015). The TRAP-18 is an investigative template for identifying individuals at risk of committing lone-actor terrorism. However, it should be noted that while lone actors are usually not direct members of an extremist group, they can identify with and be inspired by large ideological movements (Böckler et al., 2015; Gill et al., 2014; Horgan, 2017; Spaaij, 2010). The TRAP-18 includes 8 proximal warning behaviours and 10 distal characteristics indicative of a trajectory towards

violent extremism. The proximal behaviours include pathway, fixation with person or cause, identification with warrior persona, novel aggression, increased activities, leakage of plans to do harm, last resort behaviours, and directly communicated threat to target or authorities (Meloy & Genzman, 2016). The distal characteristics include personal grievance and moral outrage, framed by an ideology, failure to affiliate with extremist group, dependence on virtual community, thwarting of occupational goals, changes in thinking/emotion, failure of intimate pair bonding, mental disorder, greater creativity and innovation, and history of criminal violence (Meloy & Genzman 2016). Meloy and Gill (2016) suggest investigating an individual for proximal warning behaviours first as they are the most salient and may suggest the need for active management. In the absence of warning behaviours, distal characteristics can be assessed to determine if monitoring is needed. The indicators are intended to identify patterns of behaviour rather than discrete variables, which indicate increasing risk for targeted individual violent extremism (Meloy & Genzman, 2016). It is not intended to be a predictive tool but rather to guide case management efforts by identifying individuals in need of active management (i.e. one or more warning behaviours) or active monitoring (i.e. cluster of only distal characteristics). Identifying individuals of concern in the early stages of the radicalization process may provide opportunities for intervention as later stages may progress faster and be more impenetrable to intervention (Böckler et al., 2015). Items are rated as 'present' if pre-offence behaviour is found to be in line with pre-determined descriptions of each indicator.

The TRAP-18 has demonstrated good to excellent interrater reliability and content validity and has been found to be suitable for assessing lone actors and small cells of two or three people (Meloy et al., 2015). Meloy and Gill (2016) applied the TRAP-18 to 111 cases of known lone-actor terrorists from the US and Europe. Of the 111 participants, 70% had at least half of

the 18 indicators, with 70% or higher demonstrating four proximal warning behaviours and 78% or higher demonstrating four distal characteristics. The sample consisted of radical Islamic extremists, extreme right-wing terrorists, and single-issue terrorists. Across the various ideologies, no difference was found for prevalence of indicators, suggesting applicability of this tool with a wide variety of ideologies (Meloy & Gill, 2016). Five of the TRAP-18 indicators were also found reliable to discriminate among successful lone actors and those who were thwarted in their attempts: successful individuals were more likely to be fixated, creative and innovative, and have a history of failed intimate relationships. They were less likely to show final stage pathway behaviours, and less likely to be dependent upon a virtual community. On average, both lone actors and small cells demonstrated 13 out of 18 (72%) items. Much like other researchers, Meloy and Gill (2016) also suggest using a multi-method approach of utilizing additional assessment tools, such as the VERA and MLG.

Conclusion. The tools discussed in this section are currently the most promising for the risk assessment of violent extremism and terrorism. Most of the measures that were reviewed were not developed or intended for a correctional context, which should be considered when determining the applicability and utility of these tools in correctional facilities. The empirical evidence for the utility of these tools is currently limited. A systematic review comparing the psychometric properties among scales used to assess radicalization and extremism found poor to moderate adherence of these tools to standardized reporting guidelines, thus calling available results into question (Scarcella, Page, & Furtado, 2016). Scarcella and colleagues (2016) identified 17 characteristics to adequately assess and report reliability and validity among published research. On average, the studies reported less than one third of the characteristics and the instruments reporting the fewest were those designed to be used by professionals (VERA-2

and ERG 22+). Additionally, most of the tools have been developed and validated using publicly available information such as case studies and samples of known terrorists (Scarcella et al., 2016). These tools are still considered to be in their infancy and more empirical testing is required. External independent reviews, more research with offender samples, and increased adherence to reporting guidelines will provide further confidence in the legitimacy of these assessments.

Discussion

The current report has consolidated a large amount of research on radicalization, violent extremism, and terrorist behaviour. While distinct constructs, they are highly interrelated. This research area is still relatively undeveloped as it lacks a large empirical evidence base. A number of factors hinder the ability to move forward. Terminology is varied with diverse definitions and qualifiers used. Consistent terms, qualifiers, and definitions are greatly needed to provide clarity and allow for appropriate comparison research. The relative rarity of radicalization and violent extremism makes for small sample sizes and the inability to generalize results. Additionally, access to research participants is limited due to death, downgraded convictions, and participation refusal. The limited evidence restricts the development of a cohesive profile. Many radicalization processes, pathways, trajectories, theories, roles, and risk indicators have been identified. All of these factors restrict specificity and certainty in any pool of results.

The most widely endorsed indicators for group radicalization and violent extremism include young age, male gender, the absence of mental health problems, well-educated, good employment history, identity confusion, and susceptibility to social influence. Indicators for lone action include older age, male gender, past criminal involvement, uneducated, unemployment history, presence of mental health problems, and preferred use of firearms. Grievances,

communication of beliefs and plans, extremely rigid beliefs and worldviews, and pro-violence attitudes have been identified as indicators for both groups. Motives vary widely but some of the most commonly cited include a search for identity and purpose, and factors related to personal gain.

Extremist ideology is often, though not always, a precursor to extremist violence. Identifying extremist ideology at its onset, before to the progression to violent extremist behaviour, provides opportunities for intervention and prevention. This applies both to those in the community and those in correctional facilities. It may be easier to intervene in earlier stages of ideology and identity searching before rigid beliefs become deeply engrained. As such, an assessment of susceptibility to group-based influence may be a valuable addition to the risk assessment process.

The general consensus in the literature is that general violence risk assessments may not be applicable to radicalized individuals and violent extremists. The risk indicators identified have been used to create specialized assessments. Risk assessment tools for the estimation of violent extremism involvement have been developed in recent years. The research available has been called into question recently; thus, precluding the ability to identify any tool as superior to the others. However, the current tools do show promise for future use following increased testing and implementation.

Radicalized offenders within CSC appear to closely mirror what has been found in other countries in terms of demographics and identified risk indicators. While CSC does not currently use a specialized assessment for radicalized offenders, the Service does address radicalized offenders through current case management practices that are individualized for each offender (e.g., correctional programs, psychological services, chaplaincy services etc.; Michel & Stys,

2014). Thus, radicalized offenders are provided the same intake assessments as other offenders and referrals to programs are made based on assessed need and level of criminal risk (Stys & Michel, 2014).

Recommendations and Future Directions

While the literature base concerning the assessment and identification of violent extremists has grown substantially (Horgan, 2017), there is still much that needs to be addressed, especially when it comes to offender populations. The appropriate identification, management, rehabilitation, and reintegration of radicalized offenders into mainstream society will continue to be a topic of contention for the foreseeable future. The challenges discussed throughout this report will need to be addressed in order for considerable progress to be made.

Prominent figures in the study of terrorism have provided a number of recommendations in continuing to develop this field further. Risk assessments for violent extremists should be contextually informed by ethnic background, cultural heritage, social conditions, and political conditions (Dernevik et al., 2009). Correctional staff have identified training related to philosophical and spiritual influences, such as those associated with the Islamic faith, as a vital component to completing risk assessment related to extremism (Webster et al., 2017). Assessors of risk assessment for violent extremism should also be educated and sensitive to cultural influences on communication styles, social perception and cognitive constructs (Dernevik et al., 2009). Furthermore, knowledge of current research and literature on radicalization, violent extremism, terrorism, political violence, and the political context of the various militant groups is also pertinent for assessors (Axford et al., 2015; Dernevik et al., 2009; Stys, McEachran, & Axford, 2016). Given the negative ramifications associated with false positive results, the research has also suggested the need for assessors to be trained, properly vetted, and supervised

(Richards, 2018; Sarma, 2017). Among criminal justice and mental health professionals attending training for the MLG, post-training self-report ratings showed significant increases in confidence, knowledge, and competence in assessing risk of group-based violence (Cook, 2014). In a pilot study for the ERG 22+ in UK prisons, offenders assessed with the tool were able to identify experience levels of the assessor by providing feedback on their professionalism and capability (Webster et al., 2017). Offenders noted that experienced staff established a more effective assessment dynamic and efficient delivery process (Webster et al., 2017). Offenders also encouraged assessment early in a sentence to avoid undue influence as some were pressured by other inmates not to participate (Webster et al., 2017).

In identifying specific risk factors related to violent extremism, it may be beneficial to look at cases temporally to determine if cohort effects are evident and to establish prevalence rates (Gill, 2015). This may be especially useful with technological advances facilitating knowledge transfer, dissemination of materials, recruitment, and planning behaviours. Research also needs to acknowledge women and youth as they may exhibit unique risk factors compared with the usual violent extremist offender (Richards, 2018). The risk assessment tools discussed herein need to be piloted in correctional facilities in order to gain more empirical evidence for the risk indicators identified (Stys et al., 2016).

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