Rapid Evidence Assessment:
An international review of terrorist recidivism

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1. Introduction

This rapid evidence assessment (REA) responds to the request for an international review of terrorist recidivism. Recidivism has long been studied in the discipline of criminology in relation to a wide array of crime types. While there is no universally accepted definition of recidivism, the term is typically used to refer to circumstances in which an individual engages in further criminal behaviour following some type of formal criminal sanction (e.g., imprisonment). Nuances exist as to whether an individual needs to return to commit the same criminal behaviour for which they received the original formal sanction, whether the individual must be reconvicted (and thus a new formal sanction imposed) before they can be considered a recidivist, and the length of time that needs to have passed between the initial (or index) and subsequent offence. In addition, recidivism of offenders who have been detected for terrorism related crimes is sometimes measured only for subsequent terrorism related offences but has also been considered for other unrelated offences such as armed robbery and drug related offences. The requirement for a formal sanction to be reimposed to meet the threshold of recidivism is in contrast to the concept of 're-egagement', which is much broader in scope and denotes a return to a particular criminal activity after a period of disengagement, regardless of why this came about or whether it was detected (e.g., by police). On other occasions, the term 're-offending' has been used, which could refer to recidivism or re-egagement depending on the methodology of the particular study. In this report, the primary focus is recidivism although we also consider re-egagement.

Both recidivism and re-egagement have considerable utility in the context of terrorism, such as actors who have been convicted for terrorist offences like being a member of a terrorist group (e.g., Altier et al. 2019). Research has focused on recidivism of terrorists in a range of countries, including the United States (e.g., Fahey, 2013; Denbeaux & Taylor, 2013; Hodwitz, 2019; LaFree, Jiang & Porter, 2019; Office of the Director of National Intelligence, 2019; Wright, 2019; Altier, Boyle & Horgan, 2020, 2021), Israel (e.g., Carmel et al, 2020; Hasisi et al, 2020), and several European countries such as the Netherlands (e.g., Bakker, 2006: van der Heide & Schuurman, 2018; Renard, 2020). Research has also been conducted using comparative analyses of terrorist recidivism between countries and a range of terrorist groups (e.g., Renard 2020; Silke and Morrison 2020). One such study concluded that 'the available evidence strongly suggests that re-offending rates for released terrorist prisoners is surprisingly low' (Silke and Morrison 2020, p. 6). In another study, Altier et al. (2019) reviewed 185 terrorist events based on 87 English-language autobiographies published between 1912-2011. The authors made some relevant comparisons between terrorists and other types of offenders (e.g., gang members), concluding that similar risk factors of recidivism apply. For example, across crime types the risk of recidivism declines with age and with increases in socio-economic status. They note, however, that future research needs to be mindful of the differences in the way recidivism is measured and the extent to which these differences impact meaningful comparisons between countries as well as terrorism and other crime types.

In accordance with the requirements of this REA, we conducted a rapid review of the literature on recidivism – and to a lesser extent re-egagement – in the context of violent extremism. We focus predominantly on recidivism but include re-egagement in our search to ensure comprehensive coverage of the research questions. This report outlines the research questions and method before turning to: a) definitions of recidivism; b) definitions of terrorist recidivism; c) reviewing the evidence on recidivism from terrorism; and d) identifying potential predictors of terrorism based on this review.

Research questions:
The research questions guiding the literature review are directly aligned with the REA:

- What is 'terrorist recidivism' and how does this differ from more general definitions of recidivism, if at all?
- What does international research tell us about general recidivism and terrorist recidivism rates? Are there any commonalities and/or disparities between the two?
- Are there differences in terrorist recidivism rates dependent on the role the person was in?
- Are there any themes, gaps and opportunities identified in research which should be considered in an Australian context to answer the questions above?

Method
As described in Appendix 1, thirty-two articles examining terrorist recidivism were included in the review. Of these, 10 used original datasets developed using data from surveys and interviews conducted with convicted terrorists, government officials, prison staff, de-radicalisation program staff, journalists, academics, and family and friends of convicted terrorists. Another 10 articles drew from existing data, such as government and publicly available data, and also reviewed judiciary files of individuals with terrorism convictions to establish databases of known terrorists. For example, Fahey (2013) established a database of detainees released from Guantanamo Bay Detention Centre. Eight articles specifically assessed the effectiveness of de-radicalisation programs. Of the eight articles, three assessed effectiveness of programs by examining recidivism rates in individuals who had undertaken the programs, whilst the other articles evaluated the programs without specifically measuring recidivism rates. Almost all of the studies in the review used a mix method approach and included a combination of quantitative and qualitative analysis techniques, including thematic analysis, logistic regression, and analysis of covariance. For example, Altier, Boyle and Horgan (2021) used a mix of thematic analysis to analyse autobiographies and interview transcripts and logistic regression analyses to examine risk factors.

The sample sizes included in the studies were varied. For example, sample sizes ranged from fewer than 100 to over 1,500. The composition of samples also varied. Of studies that specified violent extremists within the sample, four examined jihadi extremists, four were a mix of left-wing, right-ring, Islamist and nationalist extremists, and one study examined the Liberation Tigers of Tamil Eelam. Most of the literature examined terrorist recidivism rates in the United States (e.g., Fahey, 2013; Denbeaux & Taylor, 2013; Hodwitz, 2019; LaFree, Jiang & Porter, 2019; Office of the Director of National Intelligence, 2019; Wright, 2019;

Altier, Boyle & Horgan, 2020, 2021), followed by three articles in Europe (e.g., Bakker, 2006: van der Heide & Schuurman, 2018; Renard, 2020), two in Israel (e.g., Carmel et al, 2020; Hasisi et al, 2020), and two in Indonesia (e.g., Striegher, 2013; Cragin, 2017). The remaining countries and continents examined in the research were Sudan (e.g., El-Said, 2015b), Yemen (e.g., Striegher, 2013), Saudi Arabia (e.g., Striegher, 2013), Sri Lanka (e.g., Webber et al, 2018), Colombia (e.g., Kaplan & Nussio, 2018), Algeria (e.g., Cragin, 2017), Pakistan (e.g., Abbasi, 2014), Singapore (e.g., Ramakrishna, 2014), and Australia (e.g., El-Said, 2015a). This variation in sample composition and geographic location make comparisons across studies somewhat difficult.

2. General recidivism

<u>Defining recidivism</u>
To understand recidivism amongst those convicted of terrorism offences, it is important to first understand recidivism as it is applied more broadly. Generally, recidivism is defined as re-offending, typically marked by new criminal activity after some type of formal sanction (e.g., a prison sentence; see Payne, 2007: 4). There are, however, a range of definitions and measures of recidivism, making recidivism a complex and contested concept (Weisbery, 2014: 799). This complexity is evident in the varying thresholds that are used for recidivism. Sometimes the threshold for recidivism is rearrest but the threshold can be set higher such as reconviction, or even a return to prison (Moore & Eikenberry, 2021: 345). Using a lower threshold may mean that recidivism estimates are higher because more offences are detected (e.g., compare "arrested" with "sentenced to prison" as the criterion threshold).

The literature on general recidivism is often organised into two categories: (1) violent recidivism (e.g., homicide, robbery, and sexual offences) and (2) non-violent recidivism which is often referred to as 'general' recidivism (e.g., drug, and property offences, and breaches of parole conditions). Recidivism rates are often reported as either violent recidivism or non-violent (or general) recidivism rates. Violent crime usually encompasses sexual offences, although sexual recidivism can be measured separately. Sexual recidivism refers to offences such as sexual assault, rape, and child sex offences (see Williams-Taylor, 2011).

We now provide a very brief overview of recidivism rates across the different crime categories. For example, O'Connell, Visher and Lin (2020: 1001-1002) found that in the first year following release, violent recidivism occurred at 38.9 per cent, in comparison to a recidivism rate of 50.8 per cent for property offences and 42.8 per cent for drug offences (both general / non-violent recidivism). Interestingly, research from the United Kingdom found that general recidivism was the most common re-offending type following release from prison. Coid et al (2007: 4) found that breaches of parole conditions as the most common offence at 19 per cent, with driving offences a 12 per cent, and drug offences at 8 per cent. Obstructing justice, harassment and public order offences were less common. Violent recidivism, such as robbery, burglary and theft made up 4, 6, and 17 per cent of recidivism respectively following the release from prison (Coid et al, 2007: 4).

Williams-Taylor (2011: 55) refer to an established distinction between generalist and specialist offenders. Specialist offenders tend to stick to the same crime type, whereas generalist offenders engage in a range of crime types. This means that specialist offenders are likely to re-offend by engaging in the same crime type, whereas it may be harder to predict how a generalist offender may re-offend. For example, Hanson and Morton-Bourgon (2005) examined 82 studies on sexual recidivism and found a variety across crime types for recidivists. They noted that 36.2 per cent of sex offenders engaged in general recidivism, with 14.3 per cent engaging in violent recidivism, and 13.7 per cent re-offending sexually (Hanson & Morton-Bourgon, 2005, as cited in Williams-Taylor, 2011: 54).

There is considerable variability in the literature across these two categories of recidivism, particularly in terms of measuring recidivism. Examining recidivism in terms of violent recidivism and non-violent or general recidivism is key for several reasons. First, it allows law enforcement agencies, policy makers, and criminologist to estimate the likelihood of re-offending amongst violent offenders. Second, it allows for the tracking of escalation in offending, particularly in non-violent offenders who then go on to commit violent crimes. Third, it allows for the identification of predictors of recidivism within and across both categories which can be used in isolation or in combination with each other to predict recidivism of individual offenders.

Measuring recidivism
Studies differ in whether they measure recidivism as reoffending that involves any criminal offence or crime type versus reoffending that involves the same offence as the original conviction. The original conviction (or the most recent conviction) is often referred to as the 'index offence' and criminal justice agencies and courts are usually interested in predicting the risk that an individual will commit another offence after being sanctioned for that index offence. For example, the literature on sexual offence recidivism tends to focus on new sexual offences following a sexual index offence. Previous research has noted variation in homicide recidivism rates, with some studies measuring recidivism as commission of another homicide following release from prison rather than measuring recidivism as any new violent offence or any new offence (see for example, Liem, 2013: 21). This methodological variation in measurement can greatly impact observed recidivism estimates. One challenge of this variability in measurement is that some studies include breaches of orders such as parole and may therefore be dependent on factors such as the nature and intensity of supervision. Recidivism based on parole breaches represents a comparatively low threshold for recidivism. Thus, it is important to explore the varying definitions of recidivism before examining recidivism rates.

Another difference in the measurements of recidivism is the time period examined between the official sanction (e.g., release from prison) and the subsequent offence. Studies vary in this observation period (or 'time at risk'), which consequently impacts on the reported recidivism rates (see Jayne, 2007: 6-8). For example, some studies may collect recidivism

data over a 12-month period. whereas other may examine new offences over a 5-year or even 10-year period. These variations in methodology will affect the observed recidivism rates.

We now turn to the three primary categories of recidivism as established by the research reviewed for this REA. First, recidivism for any criminal offence. Second, recidivism for an offence that is the same type of offence as the index offence. And third, measuring a specific type of recidivism.

2.1 Recidivism for any criminal offence

As mentioned previously, recidivism can be defined more broadly as any subsequent offence following an official sanction (such as a prison sentence), resulting in reconviction or reincarceration, or it can be defined more narrowly as a new offence of the same type as the original offence (see Liem, Zahn & Tichvasky, 2014; Chan et al, 2015). Breaches of parole conditions are sometimes included as recidivism.

2.2 Recidivism for the same offence as the index offence

In this category recidivism is defined as commission of a new crime that is the same crime type as the original conviction. Many studies examine the recidivism rates of those who are incarcerated for a specific offence type (e.g., a sexual offence), are then released from prison, and then commit the same offence type upon release (see Liem, 2013; Budd & Desmond, 2014).

2.3 Measuring specific categories of recidivism

The third category of recidivism defines recidivism as re-offending that involves a specific crime type, whereby the type of re-offending is clearly defined. For example, recidivism rates may be collected for any new criminal offence, a violent offence, or a sexual offence. Doing so allows for a more specific, accurate and comprehensive assessment of re-offending. For example, Moore and Eikenberry (2021: 351) measure recidivism in three different ways to encompass re-offending by engaging in the same crime type, re-offending by engaging in a different crime type, and breaches of parole. They refer to these measures as overall recidivism, new recidivism, and technical recidivism.

3. Defining terrorist recidivism

Much like the literature on general recidivism, there are variations in how terrorist recidivism is defined and measured. Observed differences in recidivism rates are often related to variations in methodology across studies. In the terrorism literature on recidivism, re-offending / recidivism refers to committing another crime following a previous offence, while re-engagement typically refers to the return to terrorist activity by a formally disengaged terrorist, where this re-engagement is not necessarily a criminal offence. Re-engagement is also used to define the *reconnecting* of previously disengaged individuals with known terrorists or terrorist organisations (e.g., forming ties with known terrorists, joining known

terrorist groups). Re-engagement, therefore, does not necessarily involve a new criminal offence, making 're-engagement' broader than recidivism, despite the terms sometimes being used interchangeably.

One implication of these variations in definitions and measurement is inconsistencies in observed recidivism rates and difficulties in comparing recidivism rates across crime types and within the same crime type. We now explore these issues in more detail.

3.1 Re-engagement with terrorist organisations as terrorist recidivism

The first approach defines terrorist recidivism in terms of re-engagement or the re-radicalisation of individuals who were previously disengaged (see Abbasi, 2014; See, 2018). According to these definitions, a terrorist recidivist can be someone who re-engages with an extremist organisation or actor following a period of disengagement but does not necessarily engage in violent extremism. These studies therefore measure terrorist recidivism by the re-engagement with terrorist organisations or known terrorists. Some scholars argue that re-engagement does not always result in recidivism, meaning re-engagement can exist without re-offending (see Renard, 2020, Altier, Boyle & Horgan, 2021: 837). As this approach is broad, encompassing terrorist recidivism in a more general sense, it would be anticipated that reported recidivism rates would be higher in comparison to other approaches.

3.2 Re-offending as terrorist recidivism

The second approach defines recidivism as any re-offending following a period of disengagement, which is commonly marked by a formal sanction such as incarceration. This re-offending may be characterised by a conviction following a period of disengagement (see Renard, 2020; Altier, Boyle & Horgan, 2021). The re-offending does not specifically need to be terrorism related and can include any criminal offence. Therefore, recidivism can include breaches of parole conditions, violent crime such as assault, or further terrorist offences. Whilst it appears to be common amongst the terrorist recidivism literature to only measure the re-offending of terrorism-related offences, several studies in the analysis did include other types of offences. When re-offending involving other (non-terrorism related) crimes was measured, the specific offence type was usually specifically stated.

3.3 Re-engagement in criminal violent extremism as terrorist recidivism

The third approach defines recidivism as re-engagement in violent extremist activity, following a period of disengagement; however, this re-engagement is not necessarily marked by a conviction or incarceration (see Cragin, 2017; Wright, 2019). This definition allows for the inclusion of those who have engaged in criminal terrorist activity or are suspected of re-engagement but have not been convicted or reincarcerated for such engagement. Official data, particularly from the United States, includes 'suspected' recidivism rates in addition to 'confirmed' recidivism rates. This has the potential to increase observed recidivism rates

(compared with other approaches) and it remains unclear how the suspected cases are determined.

Overall, there is no universal definition and measurement of terrorist recidivism, and as a result, there is a large variation in what is measured as terrorist recidivism. This impacts on the reported recidivism rates and makes it challenging to compare rates.

4. Recidivism rates and violent extremism

Recidivism rates refers to the portion or percentage of individuals who re-offend following an index offence. Recidivism rates, however, are highly dependent on the measurement and methods used to determine recidivism rates, such as the types of offences being measured, the sample characteristics of the group of offenders under study, and the time period over which the re-offending is measured (see Ruggero, Dougherty & Klofas, 2015). For example, studies examining recidivism rates over a two-to-three-year period may find smaller (or larger) recidivism rates compared to studies with larger time periods. Additionally, sample size is also an important factor as recidivism rates may be distorted when very small sample sizes are used (as is often the case in terrorism research). It is therefore crucial to consider the sample size in conjunction with the reported recidivism rates to assess the generalisability of the findings.

To examine terrorist recidivism rates, the findings of the research studies reviewed were categorised into those that employed *treated* and *untreated* samples. The treated category refers to samples of individuals who had participated in a rehabilitation or deradicalisation program, whereas the untreated category refers to samples of individuals who were incarcerated but not specifically involved in any treatment. By separating the research studies into these categories, comparisons can be made both within each category and between categories. This enables more accurate comparisons by taking into consideration intervention methods and the effectiveness of such methods. The table below provides a summary of results of the articles reviewed in the analysis that directly report a recidivism rate. For treated offenders, recidivism rates ranged from 4.5% to 20%. For untreated offenders, recidivism rates varied from 1.5% to 90%.

Table 1. Recidivism rates

Treated/untreated	Recidivism rates (%) / and sample size (N)	Citation
Treated		
	10-20%[1]	Striegher (2013)
	7.5% (79)	El-Said (2015b)
	4.5% (189)	van der Heide and Schuurman (2018)
Untreated		
	90%[2] (4,900) 40%[3] (1,215)	Cragin (2017)
	67.5% (87)[4] 58.3% (87)[5]	Altier, Boyle and Horgan (2021)
	21.45% (1557)[6]	Hasisi et al (2019)
	17.2% (26,667)[7]	Carmel et al (2020)
	17% (729)	Office of the Director of National Intelligence (2019)
	10.3% (58)	Bakker (2006)
	8.8% (558)	Fahey (2013)
	6.5% (189)[8]	Wright (2019)
	2.3% (557)	Renard (2020)
	1.6% (247)[9]	Hodwitz (2019)

4.1 Treated samples

Those in the treated category refer to a total of 10 studies that examined samples of individuals who had undertaken de-radicalisation or rehabilitation programs (see Horgan & Taylor, 2011; Horgan & Altier, 2012; Striegher, 2013; Abbasi, 2014; Ramakrishna, 2014; Horgan, 2014; El-Said, 2015a,b; van der Heide & Schuurman, 2018; Webber et al, 2018).

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[1] Recidivism rate of participants of a de-radicalisation program in Saudi Arabia, total number of participants unknown

[2] Recidivism rate amongst Arab Afghans returning to Algeria

[3] Recidivism rate among Afghans returning to Indonesia

[4] Re-engagement rate of those who were incarcerated

[5] Re-engagement rate of those who voluntarily disengaged

[6] 21.45% recidivism rate in the first year after release, 35% in the second year, 35% in the third year, 55.3% in the fourth year, 60.2% in the fifth year

[7] Overall rate. Found 6.8% recidivism rate in first year following release, 14.1% in the third year after release, 17.3% recidivism rate five years after release

[8] Four of 31 released from prison re-offended, only two re-offended in violent extremism

[9] Nine individuals in total recidivated, five of which were still incarcerated at the time of the second offence

Research on terrorist recidivism rates amongst those who had been treated (i.e., rehabilitated or participated in a de-radicalisation program) are mixed. Three out of the four studies specifically examining recidivism rates in individuals who had completed a rehabilitation or de-radicalisation program found relatively low recidivism rates. Van der Heide and Schuurman (2018) found that of 189 individuals who had completed a Dutch deradicalisation program between 2012-2018 eight had re-engaged in criminal terrorism offences, putting the terrorist recidivism rate at 4.2 per cent. They also noted that three individuals engaged in criminal activity that was not terrorism-related; with these activities included, the recidivism rate increased to 5.8 per cent (van der Heide & Schuurman, 2018). Similarly, El-Said (2015b) examined participants of a deradicalisation program between 2007 and 2008 and found that of the 79 participants, only six were known to have re-engaged in criminal terrorist activity, making the recidivism rate 7.5 per cent. It is noted that an additional five individuals were being closely monitored for recidivism but had not committed another offence. Both studies used a similar methodology and interviewed participants of the rehabilitation program, as well as staff involved in delivering the program. One key difference between the study by El-Said (2015b) and van der Heide and Schuurman (2018) is the time period of examination, with the former using a larger timeframe to measure recidivism.

In contrast, Striegher (2013) criticised three de-radicalisation programs in Yemen, Saudi Arabia, and Indonesia for high recidivism rates. They reported that the Saudi Arabian program had a recidivism rate between 10-20 per cent (Striegher, 2013). The total number of program participants in the Saudi Arabian deradicalisation program is unknown, as is the period of examination. The lower recidivism rates reported for those who had received treatment could be simply due to the deradicalisation and rehabilitation of program participants. However, van der Heide and Schuurman (2018: 222) argued that these lower rates could also be because many participants in their study were awaiting trial and therefore were motivated to demonstrate good behaviour. Moreover, another limitation is that the period under examination was the period in which individuals were under supervision, a period over which the likelihood of recidivism may be low due to restrictions or close observation by criminal justice staff (van der Heide & Schuurman, 2018: 222).

4.2 Untreated samples

Those in the untreated category refer to individuals who have not explicitly undertaken a rehabilitation or de-radicalisation program. Interestingly, the overall terrorist recidivism rates amongst those incarcerated were lower than anticipated. For example, recidivism rates for individuals incarcerated in correctional facilities, including Guantanamo Bay Detention Centre, were found to vary from 1.6 per cent to 17.1 per cent, a reasonably wide fluctuation in observed rates (see Fahey, 2013; Hodwitz, 2019; Carmel et al, 2020). Data released by the United States Office of the Director of National Intelligence (2019) reported a recidivism rate of 21.6 per cent among those released from Guantanamo Bay prior to 2009, with rates showing a significant reduction (4.6 per cent) in the following years. Similarly, Hodwitz (2019) found a recidivism rate of 1.6 per cent among 247 individuals released from incarceration for terrorist offences in the United States.

In contrast, some research has reported higher recidivism rates amongst those released from prison for terrorist offences, ranging from 21 per cent to as high as 67.5 per cent. Hasisi et al (2020) measured recidivism in the five-year period following release of individuals processed for security offences in Jerusalem between 2004 and 2007. They found a recidivism rate of 21.5 per cent in the first year after release, which increased each year thereafter, to 60.2 per cent five years after release (Hasisi et al, 2020). Similarly, Carmel et al (2020) employed a comparable methodology, examining all individuals processed with security offences in Israel between 2004 and 2017. They measured recidivism over a five-year period following individual's release and reported an overall recidivism rate of 17.1% (Carmel et al, 2020). Altier, Boyle and Horgan (2021) examined recidivism rates from a diverse sample of 87 terrorists belonging to nationalist, left and right-wing, Islamist extremist organisations.

These lower rates of reported recidivism could be due to the close supervision and monitoring of those released in comparison to non-terrorist offenders (Silke and Morrison 2020: 5). However, the recidivism rate of individuals incarcerated for non-violent offences, such as property and drug crime, are comparable to the studies that reported higher terrorist recidivism rates. For example, Chan et al (2015) reported a recidivism rate of 21 per cent in the first year of release from prison. They found that this increased in the second year after release to 68 per cent, and again to 87 per cent in the third year following release (Chan et al, 2015: 132).

As portrayed by the data, there is a wide variation across reported recidivism rates within the literature, both within and across treated and untreated categories. These differences can be explained by the lack of a universally applied definition of recidivism and significant variations in methodology. For example, variations in the period at-risk can have significant impacts on recidivism findings. For example, if two studies examine recidivism in identical ways except that one study uses a 10-year period at-risk and another uses only a 2-month period, differences in recidivism as measured may not represent "real" differences. As highlighted, significant variations in the definition and measurement of recidivism, or re-engagement, exist throughout the extant research, further impeding the capacity to draw meaningful comparisons between recidivism rates. This is particularly evident as some studies defined and measured recidivism as re-engaging with known terrorist organisations and individuals, whilst others defined it as re-offending, either general re-offending or only terrorist-related offences. This is in addition to variations in political and cultural context which may impact on recidivism rates and particularly comparisons between contexts. For example, Cragin's notes that the high recidivism rate observed in those returning home to Algeria was most likely due to the civil war at that time (Cragin, 2017: 306). Furthermore, studies examining terrorist recidivism in the United States would be expected to yield different results to those examining terrorist recidivism in Israel (see Fahey, 2013; Hodwitz, 2019; Hasisi et al, 2020; Carmel et al, 2020).

Another factor impacting reported recidivism concerns the size and composition of the data sample. Variations in samples also greatly impacts reported recidivism rates. As the sample

sizes range from less than 100 to over 26,600, the smaller sample sizes may not provide an adequate cross-section. For example, of the studies reporting lower recidivism rates, two examined recidivism amongst detainees in Guantanamo Bay Detention Centre and, as a result, the sample size is smaller. This is in comparison to studies examining recidivism rates within entire cities or states, such as Hasisi et al (2019) and Carmel et al (2020), with much larger sample sizes. Drawing comparisons of recidivism rates between studies examining rates within specific cities, states, and countries and those examining rates of inmates of specific detention facilities is challenging. It is therefore not surprising that the studies with larger sample sizes also reported higher recidivism rates. There are also variations in who the samples are made up of. A number of studies examined a variety of violent extremists, including nationalists, right-wing and left-wing extremists, and Islamist extremists (see, for example, Altier, Boyle & Horgan, 2021). As such, these studies over a broad cross-section of violent extremists, whereas several studies only examined the recidivism rates of jihadi extremists (see, for example, Bakker, 2006). These factors make it challenging to draw meaningful comparisons of recidivism rates.

5. Recidivism predictors

'Recidivism predictors' can be thought of as factors that are related to recidivism outcomes. They are factors that, when present in a person's history, can be used to predict recidivism with some specified probability. Predictors in the recidivism context can be thought of as similar to factors that are used to calculate insurance premiums. Because young people (say, under 25) are statistically more likely to be involved in a car accident they tend to pay higher insurance premiums that people of an older age.

Andrews and Bonta's (2010) seminal work on risk factors of recidivism identifies the 'Central Eight', which are eight central predictors of recidivism. The Central Eight includes two subcategories, the Big Four and the Moderate Four. The 'Big Four' risk factors are strong predictors of recidivism and include antisocial factors such as behaviour, personality, cognition and peer groups. (Andrews & Bonta, 2010: 58-59).
The Big Four factors are:
1. History of antisocial behaviour
2. Antisocial personality patterns
3. Antisocial cognition
4. Antisocial associates

More specifically, these risk factors within the Big Four include a variety of indicators of criminal behaviour. Having a history of antisocial behaviour may include a lengthy criminal history, particularly if criminal activity began at a young age (Andrews & Bonta, 2010: 58). Antisocial personality patterns include aggression, irritability, impulsivity, and a disregard for others and the needs of others (Andrews & Bonta, 2010: 58). Antisocial cognitions relate to risky thinking patterns, and antisocial beliefs and values. In this context, individuals with antisocial cognition may blame victims and view crime favourably, particularly if crime has been reinforced as a beneficial activity (Andrews & Bonta, 2010: 59). Lastly, antisocial

associates are individuals or peer groups who encourage antisocial behaviour and criminal activity, and therefore acts as a negative influence (Andrews & Bonta, 2010: 59).

The remaining four risk factors are referred to as the 'Moderate Four'. While these factors are strong predictors of recidivism, they are not as strong as the Big Four and are centred around the individual's environment. The Moderate Four include family and marital circumstances, education and employment, a lack of pro-social leisure and recreation, and substance abuse (Andrews & Bonta, 2010).

The Moderate Four are:
1. Family and martial circumstances
2. School and work
3. Leisure and recreation
4. Substance abuse

Poor relationships with partners, spouses, and parents or difficult upbringings may act as risk factors (Andrews & Bonta, 2010: 59). For school and work, this relates to the quality of relationships in these settings. Andrews and Bonta (2010: 59) also detail that the risk/need factors in these settings include poor performance and the lack of satisfaction or reward associated with high performance. Leisure and recreation refer to engaging in prosocial activities for pleasure, rather than antisocial criminal activities (Andrews & Bonta, 2010: 59-60). Substance abuse includes addition and dependence on alcohol and/or drugs. They note that current substance abuse is a stronger risk factor than previous, historical substance abuse (Andrews & Bonta, 2010: 60).

Grieger and Hosser (2014) found the Central Eight were strong predictors for both general and violent recidivism in youth offenders. They reported a general recidivism rate of 74.9 per cent within the participant group and found a violent recidivism rate of 40.7 per cent (Grieger & Hosser, 2014: 624). Grieger and Hosser (2014: 624) noted that all risk factors from the Central Eight were significant predictors for violent recidivism. For general recidivism, all factors except for pro-social leisure and recreation were significant predictors (Grieger & Hosser, 2014: 624).

By understanding predictors of recidivism and undertaking risk assessment, individualised rehabilitation can be used to adequately address an individual's criminogenic needs that is in portion to the offender's risk of recidivism. This is based on the risk-needs-responsivity model, also proposed by Andrews and Bonta (2010). The risk principle involves pairing the level of support with the offender's risk of recidivism (Andrews & Bonta, 2010: 1). Offenders can therefore be categorised into low, moderate, or high risk based on this risk level. By doing so, rehabilitation and intervention methods can be directed towards those most at risk, ensuring these methods are most beneficial, rather than directing efforts towards those who are of low risk for recidivism. Evidence supports this, finding that addressing the needs of high-risk offenders leads to a reduction of recidivism (see Brogan et al, 2015: 279-281).

The need principle involves the assessment of individual's criminogenic needs by using the Central Eight risk/needs factors and tailors rehabilitation treatments based on this assessment (Andrews & Bonta, 2010: 1). For example, if it has been identified that an individual has a dependence on alcohol and this addiction contributes to their criminal behaviours, addressing this substance abuse and adequately supporting the individual in their sobriety will result in a reduction of their risk of recidivism (see Andrews & Bonta, 2010: 48-49).

The last principle, responsivity, uses cognitive social learning and behavioural intervention techniques to ensure individuals reap the full benefit of rehabilitation treatments (Andrews & Bonta, 2010: 1). Specific responsivity tailors these intervention techniques to the individual to further enhance the benefits (Andrews & Bonta, 2010: 50). Responsivity, however, does require individuals be motivated towards their rehabilitation for it to be effective.

6. Predictors of terrorist recidivism

In the analysis, several predictors of terrorist recidivism were identified, which we have categorised into the following categories:
- criminal history factors,
- group membership,
- lifestyle factors, and
- personality factors.

The categories were formulated to resemble categories of risk factors used in general recidivism (e.g., the Central Eight; Andrews & Bonta, 2010). Criminal history factors refer to prior criminal convictions, sentence length, and time at risk within the community. Having a prior conviction related to terrorist offences is a clear predictor of recidivism (Hasisi et al, 2020; Carmel et al, 2020). Within the general recidivism literature, previous criminal history has been one of the most robust predictors of recidivism (Andrews & Bonta, 2010). Carmel et al (2020) found that those who had previously been incarcerated twice for terrorism offenses had a recidivism rate of 30.4 per cent five years after their more recent release from prison. Moreover, having a violent criminal history has also been identified as another predictor of recidivism (Carmel et al, 2020). This was measured by examining an individual's prior convictions and criminal history record. Interestingly, Carmel et al (2020: 95-96) found that sentences of seven years or under reduced recidivism, whilst sentences over seven years were found to have slightly increased the risk of recidivism. A six-year sentence length saw the lowest rate of recidivism (Carmel et al, 2020: 96). Time at risk within the community is also a predictor of terrorist recidivism, which was measured by the number of years at risk. According to Fahey (2013: 464), for every year an individual is at risk of recidivism, the likelihood of recidivism increases by almost 31 per cent. This again, mirrors findings for general recidivism and violent recidivism.

Group membership and, more specifically, remaining affiliated or in contact with terrorist organisations or known terrorists or those with strong terrorist ties is another predictor of terrorist recidivism (see Hasisi et al, 2020; Carmel et al, 2020; Hakim & Mujahidah, 2020).

Current affiliation with a terrorist organisation has been found to significantly increase the recidivism risk (Hasisi et al, 2020). The maintenance of radical beliefs, views, and connections to known terrorists and terrorist organisations so places individuals at greater risk of recidivism, particularly if they held strong motivation for originally joining the terrorist organisation (see Kaplan & Nussion, 2018).

Lifestyle factors can also play a role in increasing the risk of recidivism. The role of family has been identified as both a predictor of recidivism and as a deterrence. Being unmarried and experiencing social isolation from family and friends is found to be a predictor of recidivism (see Kaplan & Nussio, 2018; Carmel et al, 2020; Hakim & Mujahidah, 2020). This social isolation and social stigma from the community also increases one's risk of recidivism. Social isolation refers to being excluded from family and community events and gatherings, being seen as an outsider within the family, friendship group or community, and not finding a place within the local community. Social stigma refers to being labelled as a terrorist and thus excluded from the community due to fear (see Hakim & Mujahidah, 2020: 12). This social isolation and stigma increases the likelihood of individuals turning to their terrorist connections to feel a sense of belonging (Hakim & Mujahidah, 2020: 12). Like social isolation, Hakim and Mujahidah (2020: 10) found that after experiencing social stigma, individuals often withdraw socially by choice, which they identify as another predictor of recidivism. Unemployment or difficulties finding employment due to having a criminal record was identified by Hakim and Mujahidah (2020) as another predictor of recidivism. Kaplan and Nussion (2018: 82) found that obtaining a high school diploma whilst incarcerated reduced the risk of recidivism.

Conversely, having strong family ties and being a parent were identified as deterrence factors for recidivism (Kaplan & Nussio, 2018). Being able to form a new identity within the family and community through participating in community events and gaining employment reduces the risk of recidivism according to Hakim and Mujahidah (2020: 10).

Lastly, personality factors have also been identified as predictors of terrorist recidivism. Kaplan and Nussio (2018: 82) found a sense of powerlessness and low social status as predictors of recidivism, as individuals will attempt to gain their sense of power and status by reconnecting with terrorist organisations. Kaplan and Nussio (2018: 78) referred to this as having a preference for a violent lifestyle, measured by the roles individuals held within the organisations and for the motivations for joining the extremist organisation. They measured whether individuals reported feeling a sense of powerlessness or loss of status following their disengagement (Kaplan & Nussio, 2018: 78).

According to Monahan (2016: 521) the most common factors used in risk assessment are ideology, affiliation, grievance, moral emotions, and identity. Silke (2014) supports this, drawing on seven key factors that he argues are to be considered when determining terrorist risk assessment, all of which are dynamic factors. These include ideology, capability, affiliations, political and social environment, disengagement factors, behaviour in custody, and emotional factors. Silke (2014) argues that as ideology plays a key role in promoting

violent extremism, it needs to be assessed when determining the risk. Silke (2014: 8) explains that individuals' beliefs and attitudes should be matched to ideologies and movements, if applicable. This ideological alignment with terrorist movement alone is not enough, as individuals need to have the capability to act on these beliefs. Therefore, Silke (2014: 9) argues that the more skilled and experienced an individual is, the more capability they have and thus the greater the risk.

Group involvement facilitates a sense of belonging and friendship, and therefore, affiliations need to be considered when determining the level of risk, especially if individuals are choosing to associate with known terrorists (Silke, 2014: 9). Social and political environments can also foster these relationships, particularly as political unrest is often utilised by extremists for recruitment. Silke (2014: 9) argues that how individuals perceive the political environment is a strong indicator that can be used in risk assessment. Disengagement factors need to be considered when undertaking a risk assessment according to Silke (2014: 10-11). He outlines several factors that need to be considered, which including the age of the individual, whether they experienced a turning point (usually away from crime or terrorism), whether any negative emotions exist towards engaging in extremism or disillusionment with their organisation or the movement, and whether a shift in priorities or beliefs and values has taken place, particularly if the individual feels the political and social environment has changed (Silke, 2014: 10-11),

Lastly, behaviour in custody and emotional factors are the final factors that need to be considered in terrorist risk assessment according to Silke (2014). Behaviour in custody, such as acts of political protest, attempted escapes, violence towards other inmates and staff may indicate a commitment to the extremist movement. Additionally, participation in reform and rehabilitation programmes, in conjunction with good behaviour whilst incarcerated, may indicate a change in beliefs and disengagement (Silke, 2014: 10). Emotional factors, such as resentment, anger, sense of injustice, and morality salience all act as driving forces towards violent extremism (Silke, 2014: 9-10). To conduct the risk assessment, three types of data are used. These are interviews with those being assessed, specialised testing, and reviewing court and prison documents and police reports (Silke, 2014: 12).

While outside of the scope of this REA, it is worth briefly noting that risk assessment tools typically combine predictors to provide an overall assessment of risk. The field of assessment of terrorism risk is an emerging field that requires much more research. Current tools do not have sufficient evidence for their predictive validity. The tool most used in Australia is the Violent Extremist Risk Assessment (VERA-2), which is a modified version of the Extremism Risk Guidance 22+ used in England and Wales (Silke, 2014: 14). The VERA-2 consists of five categories of risk factors, which are attitude (psychological factors), context (environmental factors), history (individual's historical experiences), protection (protective factors), demographics (individual characteristics) (Beardsley & Beech, 2013: 6). Beardsley and Beech (2013) undertook a risk assessment of five convicted terrorists using the VERA-22 to determine the assessments accuracy. They found the assessment to have high predictive validity (notwithstanding the small sample size).

Table 2. Predictors of terrorist recidivism

Predictors	Example measures	Citations
Criminal history factors		
Prior terrorism conviction	The number of prior criminal convictions for terrorism offences	Hasisi et al (2020), Carmel et al (2020), Fahey 2013)
Sentence length	Length of prison sentence handed down by judge	Carmel et al (2020)
Violent crime in criminal history	Number of violent offence convictions in criminal history	Carmel et al (2020)
Time at risk within the community	Number of years at risk in the community (ie not detained)	Fahey (2013)
Group membership		
Affiliation with terrorist organisation	Organisational affiliation provided by police / intelligence data	Hasisi et al (2020), Carmel et al (2020), Hakim & Mujahidah (2020)
Strong personal motivation for joining organisation	Preferences for a violent lifestyle with personal motives as variable to measure motivation for joining organisation (power, status, respect, adventure/fun, affinity for firearms, rejection from army) and greed motives as a variable (income or promises of money)	Kaplan & Nussio (2018)
Lifestyle factors		
Unmarried	Marital status (single/never married, married, divorced, widowed, or unknown)	Carmel et al (2020)
Social isolation	Self-reported feelings of acceptance by family	Kaplan & Nussio (2018), Hakim & Mujahidah (2020)
Social stigma	Familial/self-reported experiences of social stigma (i.e., social exclusion)	Hakim & Mujahidah (2020)
Withdrawal	Self-reported social withdrawal	Hakim & Mujahidah (2020)
Unemployment	Period of unemployment or whether currently unemployed	Hakim & Mujahidah (2020)
Education	Highest level of education achieved	Kaplan & Nussio (2018)
Personality factors		
Sense of powerlessness	Self-reported feelings of loss of power	Kaplan & Nussio (2018)
Low social status	Self-reported feelings of loss of social status	Kaplan & Nussio (2018)

7. <u>Conclusions</u>

This report has presented an overview of the current understandings of terrorist recidivism at an international level. The primary purpose of this analysis was to review the definitions and current measurements of terrorist recidivism. The review also intended to compare general and terrorist recidivism as well as assess the current state of knowledge about terrorist recidivism, including differences in terrorist recidivism rates based on the characteristics of the index offence. It is clear from this review that future empirical research is needed to assess many of these questions. Further research must be mindful of the differences in the way recidivism is measured and the variations of definition and measurements across countries, as well as recidivism measures that involve terrorism and / or other crime types. With this in mind, and based on the review, we make several recommendations regarding the definition and measurement of terrorist recidivism.

The most common approach to measuring terrorist recidivism was to measure the re-offending of terrorist offences based on re-convictions over a five-year period. As the main interest of criminal justice agencies is the level of risk posed by those convicted of terrorist offences, we suggest that the re-offending of terrorist offenders should be disaggregated into 'general' offending, violent (non-terrorist related) offending (e.g., domestic violence), and terrorist related offending. By terrorist related offending, we include all relevant offences related to terrorism but particularly those most closely associated with the index offence. It is worth further consideration, however, as to whether terrorist related offending could itself be broken down into meaningful subcategories (e.g., violent and non-violent terrorism). Re-engagement in terrorism that does not involve offending should be dealt with and measured separately, rather than being considered as recidivism. Therefore, when measuring terrorist recidivism, recidivism should be measured as detected terrorist activity following an official sanction (e.g., arrest, imprisonment).

However, if agencies are attempting to identify those individuals who are at risk of recidivism, specific predictors of recidivism should be measured. This includes the re-engagement with known terrorist organisations and / or contact with known terrorists. To ensure consistency, re-engagement should not be measured as recidivism until a criminal offence has been detected and a formal sanction has been instituted (including arrest, conviction, sentence). Predictors that have the greatest predictive validity should be selected, and used on their own or in combination. A combination of factors is likely to provide increased predictive validity compared to using factors in isolation only. Factors considered should, where possible, include static and dynamic risk factors. Static factors are unchangeable (e.g., criminal history) whereas dynamic factors are changeable and can respond to interventions (e.g., social isolation). Established risk assessment measures should be reviewed in detail to determine overall predictive utility of such measures and their potential applicability to the Australian context. Some risk assessment measures (e.g., for sexual offending) have been applied successfully in Australian contexts even though they were established based on samples in other countries.

This analysis has identified that there is a pressing need for more research in Australian context. Although we expect results found in similar contexts such as the United Kingdom, Canada and the United States to also apply to Australia, we can have more confidence in the generalisability of these results where we have data on terrorist recidivism based on Australian samples. Examining terrorist recidivism within an Australian context will provide a more accurate understanding of the risk level posed in Australia. This is because context is key when examining terrorist recidivism, particularly across the studies which have been reviewed. The political environment, criminal legislation and sentencing practices, policing practice, rehabilitation and deradicalisation programs available, as well as level of support upon release from incarceration are all important contextual factors that need to be considered when reviewing terrorist recidivism rates. Moreover, undertaking research in the Australian context will allow for the comparison between general, violent, and terrorist recidivism rates to further understand the level of risk posed by terrorist recidivism. It will also allow us to begin to answer deeper questions – such as whether the type of terrorism related offences significantly influence the risk of recidivism – which are unable to be assessed based on the current state of the empirical literature.

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9. Appendix: Methodology

The research questions guiding the literature review are as follows:
- What is 'terrorist recidivism' and how does this differ from more general definitions of recidivism, if at all?
- What does international research tell us about general recidivism and terrorist recidivism rates? Are there any commonalities and/or disparities between the two?
- Are there differences in terrorist recidivism rates dependent on the role the person was in, e.g., leaver vs. terrorism financing vs. potential bomber?
- Are there any themes, gaps and opportunities identified in research which should be considered in an Australian context to answer the questions above?

These research questions were used to form the search strings used to gather relevant research on terrorist recidivism across 13 databases. The following search strings were used in all 13 databases to locate literature on terrorist recidivism and re-egagement: re-egagement AND violent extremis* OR terror* OR radicalis*; recidivism AND violent extremis* OR terror* OR radicalis*; re-egagement AND "violent extremis*" AND terror* AND radicali*; recidivism AND "violent extremis*" AND terror* AND radicali*. The 13 databases used to access literature included Hein Online, Wiley Online Library, SpringerLink, Taylor & Francis Online, SAGE Journals, JSTOR, Proquest, Oxford University Press, Informit, Google Scholar, Science Direct, Web of Science, and EBSCOHost. The EBSCOHost database was limited to Academic Search complete, Criminal Justice Abstracts, Humanities Source. The search was limited to abstracts and the period of 2010-2021. Relevant results were collected from 11 databases, which include Hein Online, Wiley Online Library, SpringerLink, Taylor & Francis Online, SAGE Journals, JSTOR, Proquest, Oxford University Press, Informit, Google Scholar, and EBSCOHost.

The relevant data that was produced from the search terms were then further examined for relevancy against the inclusion criteria. This inclusion criteria were any literature that included one or more of the following terms: recidivism, re-egage, re-egagement, and/or post-release offending. Literature was also included if contained any discussion of prior convictions of individuals, which could suggest recidivism. The inclusion criteria also required the literature is published in English, after 2010, and is available in full text. Additionally, backward and forward citations were used to collect relevant literature. In doing so, any research that was outside of the time frame of the search was only included if the work was seminal. Based on this inclusion criteria, only 32 pieces of literature were deemed relevant for the purpose of this review. This relevant literature includes peer-reviewed journal articles, book chapters, and reports.

Literature that met the inclusion criteria were then coded according to a predefined set of coding protocol. Studies were coded on original data collected, methodology (including the quality of such methods), terrorist recidivism definition, outcome measured used, and findings.

To gather research on general recidivism rates, the following search string was used across seven databases: recidivism AND rates AND reviews. The seven databases used to access literature included Wiley Online Library, SpringerLink, Taylor & Francis Online, SAGE Journals, Oxford University Press, Informit, Google Scholar, and Science Direct. The search was limited to abstracts and the period of 2010-2021. 101 relevant results were produced and of that 11 met the inclusion criteria. The inclusion criteria were articles examining recidivism rates or literature reviews reviewing recidivism rates across violent and non-violent crime.