



## ARCHIVED - Archiving Content

### Archived Content

Information identified as archived is provided for reference, research or recordkeeping purposes. It is not subject to the Government of Canada Web Standards and has not been altered or updated since it was archived. Please contact us to request a format other than those available.

## ARCHIVÉE - Contenu archivé

### Contenu archivé

L'information dont il est indiqué qu'elle est archivée est fournie à des fins de référence, de recherche ou de tenue de documents. Elle n'est pas assujettie aux normes Web du gouvernement du Canada et elle n'a pas été modifiée ou mise à jour depuis son archivage. Pour obtenir cette information dans un autre format, veuillez communiquer avec nous.

This document is archival in nature and is intended for those who wish to consult archival documents made available from the collection of Public Safety Canada.

Some of these documents are available in only one official language. Translation, to be provided by Public Safety Canada, is available upon request.

Le présent document a une valeur archivistique et fait partie des documents d'archives rendus disponibles par Sécurité publique Canada à ceux qui souhaitent consulter ces documents issus de sa collection.

Certains de ces documents ne sont disponibles que dans une langue officielle. Sécurité publique Canada fournira une traduction sur demande.

June 2013  
>issue 23

This Briefing Paper reviews the sequence of events leading up to terrorist attacks, in particular, the tasks that must be undertaken, being target selection, weapons acquisition, surveillance and implementation. Through an online survey of participants involved in counter terrorism operations, the authors identified preferences for a particular order in these tasks, and specific target locations. It is also noted that specific attributes in target locations are deemed to be important. The authors highlight how this study's findings could enhance current counter terrorism strategies.



Dr Ruth Delaforce  
Editor  
CEPS Adjunct Fellow

## Red-Teaming Terrorist Attacks: A Simulation Approach.

Mr David Romyn & Professor Mark Kebbell

### Introduction

The September 11 attacks and subsequent rise in the global number of terrorist attacks led Western governments to spend billions of dollars in efforts to protect their citizens from terrorist attacks (Brew, 2010; Hobijn & Sager, 2007; Home Affairs Committee, 2010). Despite this continued increase in spending to prevent terrorism, the rate of terrorist attacks and numbers of people killed in these attacks has actually increased since 2001. Given the amount of money spent on protection against these terrorist attacks, it stands to reason that the methods used should be evidence-based. In the present study we sought to generate data on two areas of terrorist attack prevention: the detection of terrorists before they are able to carry out an attack; and predicting likely targets of a terrorist attack.

One challenge with counter-terrorist (CT) policing is balancing the need to gather sufficient evidence to make a conviction against the risk to the public if an attack is carried out. In the past, CT police have been criticized both for making arrests too early and too late (Intelligence and Security Committee, 2009). Developing an understanding of the order of tasks in the preparing for a terrorist attack, and the perceived importance of each task, may provide CT police with a more detailed understanding of the preparation process. This information could better inform CT police about when is best to make an arrest.

Understanding the order of tasks that are carried out could also provide insight into attack planning generally. For example, are terrorists more likely to select targets and then acquire weapons to suit that target? Or do terrorists base their target selection on the weapons they can acquire? Is on-line reconnaissance considered more or less important than in-person reconnaissance? As well as investigating the sequence of events in preparing for a terrorist attack, the current research also looked at predicting which locations would be targeted.

Previous methods aimed at predicting likely locations for a terrorist attack have relied on rating possible targets based on a list of pre-determined attributes. One example of this looks at how *Exposed*, *Vital*, *Iconic*, *Legitimate*, *Destructible*, *Occupied*, *Near*, and *Easy* a possible target is; this is referred to by the acronym 'EVIL DONE' (Clarke & Newman, 2006). To apply EVIL DONE, each possible terrorist target in a given area is given a rating between 1 and 5 for each of the eight attributes. The attribute

ratings for each target are summed to create a vulnerability score for each possible target. The location with the highest overall score is considered the most vulnerable to come under terrorist attack. However, this method may not provide an accurate appraisal of target vulnerability.

A possible flaw with this method is that it assumes all attributes are equally important. For example, how *exposed* or *near* a target is, is considered just as important as how *occupied* it is, or how *easy* an attack would be to carry out. Another drawback of EVIL DONE is that some of the attributes, such as *legitimate* or *near*, rely on having information regarding the motives or location of someone likely to carry out an attack. Because this information may not always be known, or may vary, it is arguable that these are not useful attributes in assessing attack vulnerability. The current research aims to identify which attributes of EVIL DONE make a target appear more or less favourable to those planning a terrorist attack.

While investigating terrorist attack planning it is also useful to identify what differences there are, if any, between people with or without prior military training when planning a terrorist attack. To address this question, participants with a military background were compared with those from a non-military background. To discover if there are any differences between police and trained or untrained terrorists in how an attack would be planned or a target selected, police participant responses were compared with responses from both other groups.

## Research Questions

By asking participants how they would plan a terrorist attack and which target from a list of targets they would select for an attack, we hoped to answer the

following questions;

1. Is there a consistent pattern in which tasks are carried out and which of these tasks are considered the most important?
2. Which targets are most likely to be attacked, and what is it about those targets that make them appear better targets than others?
3. Are particular attributes of EVIL DONE more relevant to risk assessment than others?
4. Are there differences between military-trained, police-trained and civilian participants as to the choices they make throughout?

## Method

An electronic survey asking participants to assume the role of a notional terrorist was distributed to 105 participants ( $N=43$  with military training,  $N=15$  with police training, and  $N=47$  civilians). The survey presented participants with a list of tasks common to the preparation of a terrorist attack, such as acquiring weapons, selecting targets, and finding a location to plan and prepare for the attack. Participants were asked in what order they would carry out each task and how important they believed each task was in the preparation of an attack.

Participants were then presented with a list of locations, such as an airport, an underground train station, an electrical substation and an ANZAC Day march. Participants were asked to rank them in order from most preferred to least preferred targets for a terrorist attack. They were also asked to write a brief explanation as to why they selected their most and least preferred targets. These explanations were coded against the EVIL DONE attributes to determine which were considered when selecting targets. Finally, participants were presented with all eight of the attributes from Clarke

and Newman's (2006) EVIL DONE risk assessment and asked how important they believed each attribute would be in the selection of a target for a terrorist attack.

The same survey was provided to both military and civilian participants. The survey provided to police participants differed only in how questions were phrased. For the police survey, rather than asking what they would do, questions within the survey asked what they believed a terrorist would do.

## Results and Discussion

### Attack planning

It was found that participants followed a consistent order of tasks in the planning of a terrorist attack -  $W(104)=.58$ ,  $p<.001$ . Participants consistently stated that they would carry out tasks related to target selection and reconnaissance before the acquisition of equipment and weapons. The final task to be carried out in planning a terrorist attack was found to be the testing of weapons. These findings suggest that participants are more inclined to select a type of weapon based on the target they select, rather than selecting a target based on available weapons.

Regarding the importance of tasks, acquiring and testing of weapons, as well as the identification and reconnaissance of targets were considered important, while the acquisition of other equipment and gathering information online were considered less important. There were very few differences between the three participant groups as to what order they would carry out tasks, and the importance placed on each of the tasks. The testing of weapons was consistently the last task to be carried out, and rated as one of the more important tasks in preparation. This may indicate that preparation for an attack is nearing completion.

### Target selection

A clear rank-order of targets for a terrorist attack was also discovered,  $W(104)=.13$ ,  $p<.001$ . Specifically, in order from most preferred to least preferred, the targets selected were:

1. Underground train station
2. Football grand final
3. ANZAC day march
4. Airport
5. Religious gathering
6. Electrical substation
7. Military base

The underground train station was significantly more preferred than all other targets, with the exception of the football grand final. At the other end of the scale, both the military base and electrical substation were considered significantly less preferred than all other targets except for the religious gathering. The most common reasons given by participants for selecting their most preferred targets were that they were *easy*, *occupied*, *destructible*, *legitimate*, and *vital*. Least-preferred targets were selected because they were seen as being *not easy*, *not occupied*, *not legitimate*, and *not destructible*. There were very few differences between groups in target selection preferences.

When asked directly about attributes of EVIL DONE, participants believed that how *occupied*, *easy*, *iconic*, *vital*, *legitimate* and *destructible* a target is are all significantly more important than how *near* or *exposed* a target is. It was also found that *destructible* was considered significantly less important than how *easy* or *occupied* a target is, implying that participants in all groups were more inclined to cause casualties than destroying property. There were very few significant differences found between groups regarding the importance of the EVIL DONE aspects.

While participants consistently rated *legitimate* as an important attribute,

qualitative data from the target selection preferences highlights a flaw with this attribute. Specifically, while the ANZAC day march was ranked fourth of seven targets, those who selected it as their most preferred target did so because they considered it *legitimate* while those who ranked it least preferred did so because they considered it to be *not legitimate*. These findings suggest that while the *legitimacy* of a target is important to an individual planning an attack, it is also extremely subjective. For this reason, it may not be useful in gauging which targets are most vulnerable to a terrorist attack.

### Conclusion

Because the current research aimed to answer questions related to the very broad topic of terrorism, the results themselves are very general and give little insight into specifics of particular types of attacks, or attacks on targets in particular geographic locations. However, the current method could easily be adapted to investigate the vulnerability of specific landmarks in any given city. As there were very few differences between police participants and other groups, a survey distributed to a large number of police would be expected to provide similar results to a survey of military or civilian participants.

The current research has highlighted that those planning a terrorist attack concern themselves with target selection before the acquisition of weapons. Also, attributes such as *occupied*, *easy*, *vital*, *iconic*, and to a lesser degree *destructible*, are considered to be more important than how *exposed* or *near* a target is when deciding which to attack. These findings suggest that some attributes of EVIL DONE may not be useful in discovering which locations are most likely to be targets of a terrorist attack. By surveying those familiar to a particular area, a great deal of insight could be gained as to which targets are most likely to be attacked

and, more specifically, what makes these targets more attractive than others.

### References

- Brew, N. (2010). *Budget 2010-11: Security. ASIO and related intelligence issues*. Canberra: Parliamentary Library. Available from <http://www.aph.gov.au/library/pubs/rp/BudgetReview2010-11/SecurityASIO.htm>.
- Clarke, R. V., & Newman, G. R. (2006). *Outsmarting the Terrorists*. Westport: Greenwood Publishing Group.
- Counter-terrorism White Paper. (2010). *Securing Australia: Protecting our community*. Canberra: Department of the Prime Minister and Cabinet.
- Hobijn, B. & Sager, E. (2007). What has homeland security cost? An assessment: 2001-2005. *Current Issues in Economics and Finance*, 13(2), 1-7.
- Home Affairs Committee. (2010). *The home office's response to terrorist attacks* (Sixth report, 2009-10). House of Commons, Home Affairs Committee. Available from <http://www.publications.parliament.uk/pa/cm200910/cmselect/cmhaff/117/11702.htm>
- Silke, A. (2008). Research on Terrorism. In H. Chen, E. Reid, J. Sinai, A. Silke & B. Ganor (Eds.), *Terrorism Informatics* (Vol. 18, pp. 27-50): Springer US.

## About the Authors

*David Romyn* worked in the Australian Army, Royal Australian Engineers for 11 years before completing his Bachelor of Psychology with Honours. His current research areas of interest include terrorist attack planning and IED construction.

*Professor Mark Kebbell* is a Professor of Forensic Psychology at Griffith University. He is interested in applying psychological principles to offenders' decision-making.

All papers in this series are subject to peer review.

General Editor of this series: Dr Ruth Delaforce, ARC Centre of Excellence in Policing and Security.

For a complete list and the full text of the papers in this series, please visit [www.ceps.edu.au](http://www.ceps.edu.au).

## ARC Centre of Excellence in Policing and Security

M10\_3.01  
Mt Gravatt Campus  
170 Kessels Road  
NATHAN QLD 4122  
Ph: 07 3735 6903  
Fax: 07 3735 1033

[www.ceps.edu.au](http://www.ceps.edu.au)

ISSN 2200-4130 (Print)  
2200-4149 (Online)



Australian Government  
Australian Research Council



Australian  
National  
University



THE UNIVERSITY  
OF QUEENSLAND  
AUSTRALIA



Charles Sturt  
University

Views expressed are personal to the author, and should not be attributed to CEPS or its industry partners.