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Detecting Markers of Radicalisation in Social Media Posts:

Insights From Modified Delphi Technique and Literature Review

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ABSTRACT

This study involved the creation of factors and indicators that can detect radicalization in social media posts. A concurrent approach of an expert knowledge acquisition process (modified Delphi technique) and literature review was utilized. Seven Singapore subject-matter experts in the field of terrorism evaluated factors that were collated from six terrorism risk assessment tools (ERG 22+, IVP, TRAP-18, MLG, VERA-2, and Cyber-VERA). They identify those that are of most considerable relevance for detecting radicalization in social media posts. A parallel literature review on online radicalization was conducted to complement the findings from the expert panel. In doing so, 12 factors and their 42 observable indicators were derived. These factors and indicators have the potential to guide the development of cyber-focused screening tools to detect radicalization in social media posts.

KEYWORDS

Internet, Online Radicalization, Protective Factors, Psychology, Risk Factors, Social Media

1. INTRODUCTION

The internet has become one of the most important arenas for terrorists to spread their messages and to radicalize recruits in different parts of the world, including Singapore. The growth in numbers of self-radicalized individuals—facilitated by the internet—and the rising urgency to detect and takedown radical content on social media make the identification of factors and indicators to detect online radicalization a timely pursuit. Despite the growing demand, there is a paucity of research on risk assessment instruments that are designed specifically for detecting online radicalization (Khader, 2016).

Existing terrorism risk assessment tools could provide insights on the difficult task of ascertaining the relevant factors and indicators for an instrument to detect online radicalization. In recent times, many terrorism risk assessment tools were created, of which Lloyd (2019) reviewed six commonly used tools: Extremism Risk Guide (ERG 22+), Islamic Radicalisation (IR-46), Identifying Vulnerable People (IVP), Multi-Level Guidelines (MLG), Terrorist Radicalisation Assessment Protocol (TRAP-18), and Violent Extremism Risk Assessment-2 (VERA-2). Given that the factors within these tools were developed based on the creators' empirical research and interviews with terrorist offenders, they have some form of validity, thereby making them an ideal starting point to identify factors and indicators for online radicalization. The alternative would be to conduct an in-depth literature review to appraise various studies on risk factors for online radicalization.

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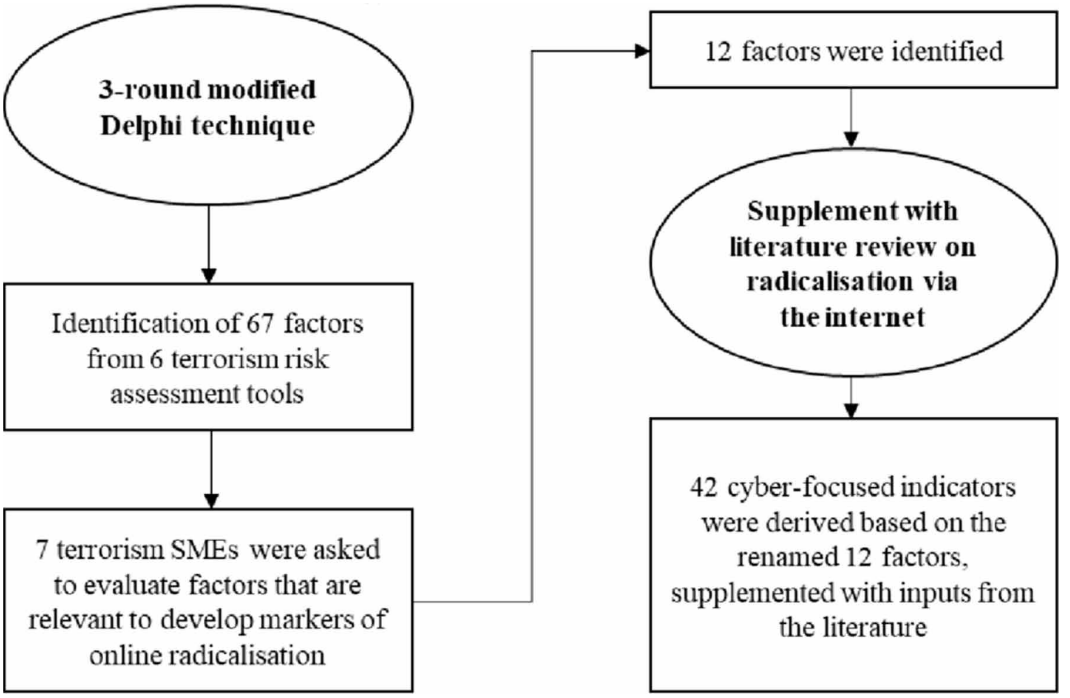
Figure 1. The research process to identify the factors and their associated indicators



Thus, this paper used a modified Delphi technique (with seven Singapore subject-matter experts [SMEs] in the field of terrorism) combined with a literature review on risk factors for online radicalization to construct a list of factors and indicators. A similar approach was also used by Post et al. (2002), in their attempt to measure the risk that a terrorist group would pose. Figure 1 outlines the research process for this study.

In terms of factor and indicator development, Schuurman and Eijkman (2015) suggest that it is useful to tap on and incorporate the knowledge and experience of terrorism practitioners. Hence, the SMEs' opinions on the relevance of the factors from existing terrorism risk assessment tools for identifying factors for online radicalization was sought. These existing tools provide relevant data points for this study—i.e., to develop a cyber-focused risk assessment—as they were created based on in-depth literature review and the creators' professional experience. Additionally, the parallel literature review of the relevant research publications served to complement the results from the expert panel by contextualizing the identified factors to extant research, and in the process, identify essential factors and indicators of interest.

2. MODIFIED DELPHI TECHNIQUE

In the 1950s, Olaf Helmer and Norman Dalkey developed the Delphi technique at the RAND Corporation. This research methodology seeks to gather knowledge from SMEs on a specific topic of interest (Dalkey & Helmer, 1963). It is an iterative process designed to collect—usually via surveys that are interspersed with feedback—and achieve a convergence of opinions from SMEs. The process stops when consensus is reached, suggesting that the SMEs had agreed upon a collective solution to the research question. This methodology is particularly useful for research areas where there is a paucity of information about a problem or phenomenon. For example, this research method has been