Abstract

There is increasing interest in understanding terrorist organizations and, specifically, predicting and ultimately preventing - terrorist attacks. We conducted a systematic review of the contemporary peer-reviewed literature on membership and radicalization in terrorist organizations focused around two key questions: 1. What factors increase the likelihood individuals will identify with and join terrorist organizations? 2. Within terrorist organizations, what is the process through which members become (more) radicalized?

Introduction

With terrorist attacks an almost constant topic of media coverage worldwide, many steps being taken in the fight against terrorism. One strategy has been to try to identify individuals and/or groups at risk of becoming (more) radicalized. To be successful, this strategy requires an understanding - and most importantly, empirical evidence - of the factors associated with radicalization. Though much has been written about terrorism over the years, there has been limited synthesis of the theories, models, and empirical findings across articles. To that end, we sought to summarize the contemporary literature on membership in terrorist organizations: (1) to identify consensus in the literature, if it exists; (2) to drive future research directions; and (3) to inform evidence-based strategies to prevent terrorist attacks.

Methods

Literature Search

Records were identified through searches of six databases: (¹) PsycINFO, (²) PsycArticles, (³) Web of Science, (⁴) National Criminal Justice Reference Service (NCJRS) Abstracts, (⁵) ProQuest Dissertation & Theses electronic databases, and (⁶) Google Scholar.

Keyword Searches

In each database, the following search terms with Boolean operators and search conventions were used: (a) terror*, (b) terror and affiliate*, (c) terror and radical*, and (d) predict* terror. Inclusion Criteria

Articles were retained for analysis if they met the following criteria: (a) Related to the prediction of terrorism; (b) addressed variables related to the process of radicalization or characteristics of terrorists; (c) reported in peer-reviewed journals, dissertations, theses, conference presentations, government reports, or book chapters; (d) written in English or reliable translation available; and (e) produced between January 1, 1990, and December 31, 2015 (see Figure 1). For each included record, cited references were screened against inclusion criteria to ensure identification of all relevant records.

Coding

A comprehensive coding scheme was created and utilized to record all relevant data from each article. Articles were coded by two research assistants, and a small subset (k = 36, 18.1%) were coded by both to assess inter-rater reliability. Inter-rater reliability ranged from adequate (58.3%) to excellent (100%). Disagreements were resolved through consensus between both raters.

Figure 1. Systematic Search

Figure 2. Methodology over Time

Figure 3. Data Source over Time

Figure 4. Ideological Focus

Figure 5. Type of Terrorist

Figure 6. Type of Terrorist Attack

Results

In total, 199 articles met our inclusion criteria (Figure 1). These articles were primarily written by authors from the United States (59.3%). There has been a considerable increase in the number of peer-reviewed over publication time, with articles between 2006 and 2015 representing 74.9% of the literature. Only 6.0% of the literature was published between 1990-2000 and 19.1% between 2001-2005.

Methodology

Despite the increase in the number of publications, there has been relatively limited empirical analysis of data. In fact, with only 26.6% reporting on findings of empirical research (Figure 2), Of the empirical articles, nearly half (45.3%) were published between 2011-2015. A mere 12.5% of the 199 articles reported of analyses of primary data, while 16.6% reported of analyses of secondary data (Figure 3).

Content

The articles were largely focused on a few models, such as those proposed by Borum (2003), Moghaddam (2005), and Precht (2007), none of which were empirically validated. We examined three aspects of terrorism address in each article: 1) ideological focus, 2) type of terrorist, and 3) type of attack. To demonstrate, in almost half of the articles (43.2%), ideology of interest was not specified. When specified, religious fundamentalism was most frequent (38.2%) (Figure 4). More than half of the articles (54.3%) did not specify the type of terrorist. When specified, the articles typically discussed a group member (20.1%) (see Figure 5). Finally, 54.8% of the articles did not describe a type of terrorist attack. Suicide bombing (40.2%) represented the most prominent type of attack when discussed, while school and workplace shootings only represented 2.0% and 1.5% each (Figure 6).

Conclusions

This review summarized the contemporary peer-reviewed literature on membership and radicalization in terrorist groups. We found 199 articles that met our inclusion criteria.

Summary of Findings

Findings showed that most of the literature is theoretical rather than empirical in nature, based largely on findings or models reported in other published articles. On the whole, these articles provide limited description of specific ideologies or types of terrorists, as well as limited operationalization of the type of terrorist attack of interest. These findings are surprising given the recent media, public, and political attention on topics including religious fundamentalism and lone wolf terrorists. Findings also suggest that current threat assessment strategies need the empirical evidence to support their effectiveness.

Future Research

Take together, findings of our systematic review indicate several critical avenues for future research:

1. Use of (diverse) primary and secondary data sources to better understand radicalization and terrorist groups.
2. Validation of theoretical models using empirical data.
3. Application of models, findings, and research strategies from established and related fields, such as gang membership and violence.
4. Specification of the research focus, including ideological foundations, the type of terrorist, and type of terrorist attack.
5. Clear operationalization of constructs of interest.

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