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DOMAIN MAPPING OF CONTEMPORARY TERRORISM RESEARCH

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CHAPTER OVERVIEW

Mapping a domain involves mining, analyzing, charting, and visualizing a research area according to experts, institutions, topics, publications, and social networks. This chapter presents an overview of contemporary terrorism research by applying domain visualization techniques to the literature and author citation data from the years 1965 to 2003. The data were gathered from ten databases such as the ISI Web of Science then analyzed using an integrated knowledge mapping framework that includes selected techniques such as self-organizing map (SOM), content map analysis, and co-citation analysis. The analysis revealed (1) 42 key terrorism researchers and their institutional affiliations; (2) their influential publications; (3) a shift from focusing on terrorism as a low-intensity conflict to an emphasis on it as a strategic threat to world powers with increased focus on Osama Bin Laden; and (4) clusters of terrorism researchers who work in similar research areas as identified by co-citation and block-modeling maps.
1. INTRODUCTION

Contemporary terrorism is a form of political violence that evolved in the 1960s and characterized by an increase in terrorist attacks across international boundaries [36]. The recent escalation of contemporary terrorism has attracted many new and non-traditional research communities such as information science and human factors, whose scholars have a desire to do research in this area. This raises questions for new terrorism researchers as they try to adapt to the challenges in this domain “Who are the leading researchers in terrorism?” “What are their relevant publications?” “What are the dominant topics because I want to know if my ideas have already been explored?” “What types of data are used?” “Who should I work with?”

The task of responding to these questions is difficult because of the explosive growth in the volume of terrorism publications, the interdisciplinary and international nature of the field, and the lack of a professional association to nurture the terrorism research area and provide a platform for organizing and providing systematic access to terrorism studies [15;27]. For example, terrorism information is spread across many electronic databases, government and research center’s websites, and a large number of journals that deal with various specialized aspects of the phenomenon [16].

This work extends a prior effort using a manually-driven bibliometric approach to examine terrorism research and offers another view of the intellectual field of terrorism [26]. Bibliometrics is the quantitative study of the literature and scholarly communication processes in a field [3]. With the interest in terrorism increasing, the findings of this study will be immensely useful in understanding the contributions of key terrorism authors in guiding terrorism-related research.

This paper presents a brief review of analytical techniques and framework for knowledge mapping. Subsequent sections will describe the research design and results of our contemporary terrorism literature mapping with three types of analysis: basic analysis, content map analysis, and co-citation network analysis. The final section will provide conclusion.

2. RELATED WORK

There is extensive literature on knowledge mapping of scholarly literature and patents to analyze the structure, the dynamics, social networks, and development of a field such as medical informatics and information science [5;14;17;33]. Mapping refers to an evolving interdisciplinary area