

11

On being ‘systematic’ in literature reviews

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General guidelines for conducting literature reviews often do not address the question of literature searches and dealing with a potentially large number of identified sources. These issues are specifically addressed by so-called systematic literature reviews (SLR) that propose a strict protocol for the search and appraisal of literature. Moreover, SLR are claimed to be a ‘standardized method’ for literature reviews, that is, replicable, transparent, objective, unbiased, and rigorous, and thus superior to other approaches for conducting literature reviews. These are significant and consequential claims that – despite increasing adoption of SLR – remained largely unnoticed in the information systems (IS) literature. The objective of this debate is to draw attention of the IS community to SLR’s claims, to question their justification and reveal potential risks of their adoption. This is achieved by first examining the origins of SLR and the prescribed systematic literature review process and then by critically assessing their claims and implications. In this debate, we show that SLR are applicable and useful for a very specific kind of literature review, a meta study that identifies and summarizes evidence from earlier research. We also demonstrate that the claims that SLR provide superior quality are not justified. More importantly, we argue that SLR as a general approach to conducting literature reviews is highly questionable, concealing significant perils. The paper cautions that SLR could undermine critical engagement with literature and what it means to be scholarly in academic work.

Keywords: Systematic Literature Reviews; SLR; Conducting Literature Reviews; Literature Review; Narrative Literature Review; Database Searches

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Introduction

Literature reviews are an important ingredient of every research. Literature reviews typically provide an overview, synthesis and a critical assessment of previous research, challenge or problematize existing knowledge and identify or construct novel research problems and promising research questions (Alvesson and Sandberg, 2011; LePine and Wilcox-King, 2010). The process of conducting a literature review can be daunting especially for novice researchers when faced with a potentially large, unbounded and continuously growing body of literature. There are several approaches and guidelines for conducting literature reviews in information systems (IS) (Bandara et al., 2011; Levy and Ellis, 2006; Schwarz et al., 2007; Webster and Watson, 2002; Wolfswinkel et al., 2013). Importantly, they provide a conceptual foundation for developing and constructing literature reviews. For instance, Webster and Watson (2002) suggest the use of a topic-centric approach for presenting, classifying and assessing relevant literature; Bandera et al. (2011) propose the use of thematic analysis and qualitative research software for analyzing a body of literature; Wolfswinkel et al. (2013) recommend the use of grounded theory for conducting and presenting literature reviews; and Schwarz et al. (2007) provide criteria for distinguishing review and framework articles. While providing insightful approaches and guidelines, these papers do not pay due attention to the role of literature search processes and their importance in conducting literature reviews.

The importance of literature searches, when conducting literature reviews, is discussed by an approach known as systematic literature review (SLR) or just systematic review. The SLR approach is part of the evidence-based movement – originating in medicine and spreading to social sciences – that aims to advance policy and practice by providing the best evidence available from research (Campbell Collaboration, 2007; Morrell, 2008). The distinct feature of SLR is a protocol that prescribes how to identify, select, assess and synthesize evidence from the literature. By adhering to such a protocol, SLR, it is claimed, provide a 'standardized method' for literature reviews that is *replicable, transparent, objective, unbiased, and rigorous* (Atkins and Louw, 2000; Okoli and Schabram, 2009, 2010; Oates, 2011; Oates et al., 2012). SLR are thus proposed as a superior alternative to so-called narrative or traditional literature reviews (Baumeister and Leary, 1997; Hjørland, 2011). The latter are by implication assumed to be unsystematic, biased, non-replicable, unscientific and non-rigorous (MacLure, 2005; Morrell, 2008).