A Guidance to Systematic Literature Review to Young Researchers by Telkom University and the University of Turin

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Abstrak

Tujuan dari tinjauan literatur sistematis adalah untuk memberikan ringkasan yang jelas dan objektif tentang keadaan pengetahuan saat ini tentang topik tertentu, mengidentifikasi kesenjangan dalam literatur, dan menyarankan area untuk penelitian di masa depan. Jenis tinjauan ini banyak digunakan di banyak bidang, termasuk kesehatan, pendidikan, psikologi, dan ilmu sosial, untuk menginformasikan pengambilan keputusan berbasis bukti, pengembangan kebijakan, dan panduan praktik. Proses melakukan tinjauan literatur sistematis membutuhkan perencanaan yang cermat, perhatian terhadap detail, dan pendekatan sistematis untuk pengumpulan dan analisis data. Tinjauan yang dihasilkan adalah sumber yang berharga bagi para peneliti, praktisi, dan pembuat kebijakan yang ingin memahami keadaan pengetahuan saat ini di bidang tertentu. Untuk memperkenalkan metode ini kepada para peneliti muda di Indonesia, MBA Telkom University bekerja sama dengan departemen manajemen di University of Turin (Italia) mengadakan sesi 2 jam tentang tinjauan literatur sistematis. Artikel ini adalah ringkasan dari acara tersebut. Hasil kegiatan ini adalah penambahan materi systematic literature review ke dalam kurikulum metode penelitian di lingkungan magister Administrasi Bisnis, Universitas Telkom.

Kata kunci: tinjauan literatur sistematis, bibliometrik, metodologi penelitian, lokakarya.

Abstract

The purpose of a systematic literature review is to provide a clear and objective summary of the current state of knowledge on a particular topic, identify gaps in the literature, and suggest areas for future research. This type of review is widely used in many fields, including healthcare, education, psychology, and social sciences, to inform evidence-based decision-making, policy development, and practice guidelines. The process of conducting a systematic literature review requires careful planning, attention to detail, and a systematic approach to data collection and analysis. The resulting review is a valuable resource for researchers, practitioners, and policymakers seeking to understand the current state of knowledge in a given field. To introduce this method to young researchers in Indonesia, MBA Telkom University worked together with the department of management at the University of Turin (Italy) to have a 2-hours session about systematic literature review. The result of this activity is the addition of systematic literature review material

into the research methods curriculum at the Master of Business Administration, Telkom University.

Keywords: systematic literature review, bibliometric, research methodology, workshop.

1. Introduction

A systematic literature review is a comprehensive, methodical approach to identifying, evaluating, and synthesizing all available research on a specific research question or topic (Devos et al., 2011). It involves a thorough and systematic search of published and unpublished literature using predefined inclusion and exclusion criteria, and a rigorous evaluation of the quality and relevance of the identified studies (Nafisa et al., 2022). The purpose of a systematic literature review is to provide a summary of the existing evidence on a particular topic, to identify any gaps in knowledge, and to identify areas where further research is needed (Rahayu & Tupan, 2020). It is typically used in academic research, healthcare, and other fields where evidence-based decision-making is critical (Amier & Pradana, 2022).

A well-conducted systematic literature review involves a detailed and transparent methodology, which includes defining the research question, developing inclusion and exclusion criteria, performing a comprehensive search of the literature, screening and selecting studies, extracting data from selected studies, and synthesizing the results (Porter, 2002).

Overall, a systematic literature review is an essential tool for ensuring that decisions and recommendations are based on the best available evidence. There are several advantages of conducting a systematic literature review, including:

- Comprehensive coverage: Systematic literature reviews are designed to provide a comprehensive overview of all available literature on a particular topic, which can help researchers and practitioners to make evidence-based decisions.
- Reducing bias: By following a rigorous and transparent methodology, systematic literature reviews can help to reduce bias in the selection and analysis of studies, which can increase the credibility of the findings.
- Identifying gaps: Systematic literature reviews can help to identify gaps in the literature, highlighting areas where further research is needed and providing direction for future studies.
- Synthesizing evidence: By synthesizing the findings of multiple studies, systematic literature reviews can provide a more robust and reliable overview of the evidence on a particular topic than individual studies can (Secinaro et al., 2022).
- Enhancing reproducibility: Systematic literature reviews are designed to be transparent and reproducible, which can enhance the credibility of the research and enable others to replicate the study or build on its findings (Pradana et al., 2023).

Overall, the advantages of systematic literature reviews make them a valuable tool for researchers, practitioners, and policymakers looking to make evidence-based decisions (Bai et al., 2019). In order to introduce this methodology to wider audience, the department of Master of Business Administration, Telkom University, cooperated with department of Management at the University of Turin, Italy. By inviting three researchers to a hybrid session, we organized a workshop with the title: "How to Do A Systematic Literature Review? A Useful Method for Research and Thesis". This event was attended by young researchers in Bandung, Indonesia. As we experienced in our research methodology classes and webinars, a lot of students still have little understanding of this methodology. Hence, we organized this event to deepen the knowledge related to it.

2. Methodology

The workshop with the title: "How to Do A Systematic Literature Review? A Useful Method for Research and Thesis" was held on April 11, 2023, and took place in a classroom at the Pascasarjana Building of Telkom University, Bandung, Indonesia. Although set up as a joint lecture between Telkom University and the University of Turin, the hybrid session was not limited to young researchers at Telkom University only. The initial objective of this session was indeed to introduce this method to wider audience and public (Novanto & Pradana, 2021). In both online and onsite room, this session was attended by 90 audience from the beginning to the end.

The use of systematic literature review was deemed interesting by the participants who asked questions and would like to practice more about it. The session was moderated by Mahir Pradana, a researcher at the department of Master of Business Administration, Telkom University. The speakers from the University of Turin are:

Davide Calandra

Researcher in Business Administration at the Department of Management, University of Turin (Italy). He is the author of numerous publications on accounting, Islamic economy and finance, public administrations, entrepreneurship, circular economy, and technology adoption in businesses. Now, he is particularly interested in blockchain and artificial intelligence, and he is currently studying the impact of these "disruptive" technology in the accounting, auditing, and accountability field.

Figure 1: Davide Calandra

Federico Lanzalonga

PhD Candidate in Business and Management at the Department of Management, University of Turin (Italy). He is the author of multiple publications on smart cities management, business model applications, entrepreneurship, and circular economy. His doctoral course focuses on new business models related to electric mobility. Finally, he collaborates to study the impact of blockchain and artificial intelligence within the accounting and auditing field.

Figure 2: Federico Lanzalonga

Michele Oppioli

PhD Candidate in Business and Management at the Department of Management, University of Turin (Italy). He is the author of multiple publications on collaborative governance, technologies, smart cities, accounting and sustainability. His doctoral course focuses on accounting, public administration and technology adoption in businesses. Finally, he is interested in adopting artificial intelligence and blockchain in accounting, auditing, fintech and accountability.

Figure 3: Michele Oppioli

From this event, a systematic literature review is explained as a method that involves a structured and comprehensive approach to identifying, analyzing, and synthesizing all relevant research studies on a particular topic. The following are the typical steps involved in conducting a systematic literature review:

- Define the research question: Identify the research question or topic of interest and determine the scope of the review (Uluyol et al., 2021).
- Develop inclusion and exclusion criteria: Define the criteria for selecting and excluding studies based on their relevance and quality.
- Conduct a search: Conduct a systematic search of relevant databases, such as PubMed, Scopus, Web of Science, etc., to identify all relevant studies.
- Screen studies: Screen the identified studies based on the inclusion and exclusion criteria and eliminate irrelevant studies.
- Assess study quality: Assess the quality of the studies using predefined criteria, such as the Cochrane Risk of Bias tool or the GRADE approach.
- Extract data: Extract data from the selected studies using a predefined data extraction form.
- Analyze data: Analyze the data and synthesize the results of the selected studies.
- Interpret the findings: Interpret the findings of the systematic review and draw conclusions based on the available evidence.
- Report the results: Prepare a report of the systematic review following the PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) guidelines.
- Update the review: Regularly update the systematic review to ensure that the findings remain relevant and up-to-date.

3. Results and Day of the Event

This session was attended by 90 audience from the beginning to the end. Besides having a 2-hours lecture and discussion, the output of this activity is to arrange a module about systematic literature review.

Table 1. Description of the Event

No.	Participants	Numbers
1	Online participants	75 participants
2	Onsite participants	15 participants
	TOTAL	90 participants

Figure 1. Event Poster

Throughout the discussion, we could take a quick conclusion that this methodology is still not that popular among the Indonesian researchers. Research in Indonesia is mostly focused on empirical methodology. However, having a

structured literature review can provide better build-up to the theoretical part of a research paper (Zaman et al., 2021).
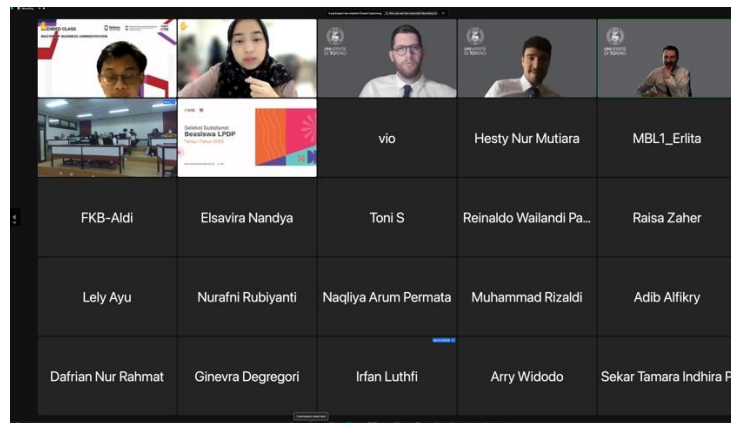

Figure 2. Onsite Participants

Figure 3. Online Participants

Figure 4. Situation inside the Hall

4. Conclusion

Systematic literature reviews are an important method for synthesizing evidence from multiple studies and are widely used in various fields of research. However, like any research method, there are limitations that should be considered. First, the time and resource-intensive. Systematic literature reviews require a significant amount of time and resources to conduct. The process of identifying relevant studies, screening them, extracting data, and synthesizing findings can be laborious and time-consuming. Moreover, the quality and quantity of studies available on a particular topic can affect the findings of a systematic literature review. If there are very few studies available or if the studies are of low quality, the results of the review may be limited.

Systematic reviews are also vulnerable to publication bias, where studies with positive or statistically significant results are more likely to be published than studies with negative or non-significant results. This can lead to overestimation of the effect size or impact of an intervention. The studies included in a systematic literature review may be heterogeneous in terms of study design, participant characteristics, interventions, and outcomes. This heterogeneity can make it challenging to compare and combine the results of studies.

Other limitation is systematic reviews may be limited by language bias, where studies published in languages other than English may be missed, resulting in incomplete data. There is also interpretation bias: Systematic reviews may be subject to interpretation bias, where reviewers may interpret the results of the studies in a biased or subjective manner. Last, systematic reviews may become outdated quickly as new studies are published, particularly in rapidly evolving fields (Willayat et al., 2022).

It is important to note that these limitations can be minimized through careful planning and execution of the systematic review process. By having this activity, we would like to make young researchers aware about the advantages and disadvantages of systematic literature review methodology.

5. Acknowledgements

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