CONDUCTING SYSTEMATIC LITERATURE REVIEWS & BIBLIOMETRIC ANALYSES

A systematic review is a structured and rigorous plan for collecting literature evidence (books, articles and other publications) and evaluating the information based on a predetermined criteria.

Researchers can combine a systematic review with bibliographic approaches to visualise results.

Did you know? The rationale for systematic literature reviews has been well established in some fields such as medicine for decades.

How to conduct a Systematic Literature Review

1 IDENTIFY LITERATURE FOR INCLUSION

- Consider forming a research team or enlist the help of colleagues/advisors to guide the scope of the literature review, the review process and the triangulation of key decisions
- Perform an initial scoping exercise
- Decide on inclusion and exclusion criteria – a common approach is to identify literature through boolean searches in relevant databases

2 DATA CLEANING

Remove duplicates and "false positives" or irrelevant data

"False positives" are search results that get picked up as they contain a keyword or phrase used in the literature search, but upon further inspection belong to a different or unrelated topic.

3 ANALYSIS AND SYNTHESIS

The analysis will partially depend upon the type of evidence (e.g. qualitative or quantitative) that the systematic review has uncovered. Options for analysis rage from qualitative techniques to categories studies, to quantitative and statistical techniques.

4 PRESENTATION OF RESULTS

Results can be presented in the form of:

- Descriptive statistics (e.g. frequency tables) to summarise basic information, such as the number of publications on a topic over time;
- Using meta-analytical approaches; or
- Using bibliographic mapping approaches.

5 BIBLIOGRAPHIC MAPPING TOOLS

There are numerous bibliographic mapping tools. Examples include:

- **Histcite:** Histcite is a program that allows the researcher to map influential publications within a field of research and their interrelations and allows for an assessment of the development of thought on a topic
- **R:** R is a highly capable statistical programming language that provides a flexible and extensible free environment to conduct research and analysis. The package also facilitates various network analyses, including co-citation analysis, coupling analysis, collaboration analysis or co-occurrence analysis
- **Resgap:** Resgap is a topic extraction tool that allows the researcher to extract topics within a body of research and can be used to identify 'emerging trends' conceptual developments in the literature over time.
  Possible analyses include:
  - **Burstiness:** the detection of 'bursty'/ popular topics in a field of research (i.e. topics that become suddenly prominent for a short period of time)
  - **Maximum spanning tree:** aims to connect all topics together to determine different 'community' structures and topic clusters within a dataset (can help the researcher to understand the different topics of research and how they connect).

Read more about literature reviews: Linnenluecke, M.K., Marrone, M. and Singh, A.K., 2020. Conducting systematic literature reviews and bibliometric analyses. Australian Journal of Management, 45(2), pp.175-194.