

Exploring Insight : A Systematic Literature Review

Assoc. Prof. Dr. Norizah Mohd Mustamil
En. Faizal Zulkifli (Doctoral Candidate)

28 November 2023

Serving the Nation. Impacting the World.



UNIVERSITI
MALAYA

Let's get to know each other

Go to:

www.mentimeter.com

Enter code: 2410 4936



What is SLR?

A review of evidences with respect to a clearly formulated question, based on a systematic and explicit method to identify, select, and critically appraise relevant primary research.

Due to their particular methodology, systematic reviews provide the best means to synthesize all available evidence regarding specific questions in an unbiased way

Inorganized



Organized





Systematic Literature Review



To collate all the empirical evidences that fit pre-specified eligibility criteria to answer a specific research question.



Minimizing bias, thus more reliable findings.



Evidence from all available research studies, (vs largest or most recent study)



Highest level of evidence for decision-making



Cited more often than other types of papers

Non-systematic reviews (Literature Review)



a review that adopts a more informal or selective approach



Typically, at higher risk of bias because decisions about how studies are searched for, selected, and integrated are not pre-specified or transparently described.



For example, such a review may suffer from confirmation bias if the authors only search for, select, or cover studies that support a particular argument or theory.



As a result, such non-systematic reviews generally provide limited knowledge about the overall evidence provided by a collection of studies regarding a specific research topic or question (i.e., the collective body of knowledge).

Advantages of SR



SUMMARISE EVIDENCE, KEEP PEOPLE UP TO DATE WITHOUT READING ALL PUBLISHED RESEARCH LITERATURE



ALLOW LARGE AMOUNTS OF DATA TO BE ASSIMILATED



A CLEARER PICTURE BY COLLATING RESULTS OF RESEARCH



REDUCE BIAS – REMOVES REVIEWERS' PERSONAL OPINIONS, PREFERENCES AND SPECIALIST KNOWLEDGE



EXPLICIT METHODS – ALLOW THE READER TO ASSESS HOW REVIEW HAS BEEN COMPILED



MORE RELIABLE CONCLUSIONS BECAUSE OF METHOD USED

Systematic reviews
presents stronger
evidence compared
to individual studies

IJPPM
71,5

1728

Received 3 January 2020
Revised 11 October 2020
Accepted 22 December 2020

Sustainability balanced scorecard architecture and environmental performance outcomes: a systematic review

Suaad Jassem

*Managerial and Financial Sciences, Al Zahra College for Women, Muscat, Oman, and
Zarina Zakaria and Anna Che Azmi
University of Malaya, Kuala Lumpur, Malaysia*

Abstract

Purpose – This study aims to assess the current state of research on the use of sustainability balanced scorecards (SBSCs), as they relate to environmental performance-related outcomes. It also seeks to present a conceptual framework proposing relationships between SBSC and environmental performance.

Design/methodology/approach – This paper conducts a systematic literature review of articles published in double-blind peer-reviewed journals that are listed on Scopus and/or Web of Science databases.

Findings – The first part of the paper reveals that two architectures of SBSC appear to be dominant in the literature (SBSC-4 where sustainability parameters are integrated with the four perspectives of the balanced scorecard and SBSC-5 where sustainability is shown as an additional standalone fifth perspective). The next part of the paper presents a conceptual model relating SBSC as decision-making tools to environmental performance outcomes. The paper also indicates that SBSC knowledge mediates the above relationships. Furthermore, based on the theory of expert competence, the presence of experts possibly moderates the relationship between SBSC architecture and environmental performance outcomes.

Research limitations/implications – The literature indicates a lack of consensus on establishing a clear linkage on the relationship between SBSC architecture and environmental performance outcomes. As a result, a holistic conceptual framework where SBSC knowledge acts as a mediator and presence of experts as a moderator may be able to provide a more consistent relationship between SBSC architecture and environmental performance outcomes.

Practical implications – The conceptual framework proposed provides factors to be considered by decision makers, for effective outcomes when aiming to achieve environmental stewardship objectives.

Social implications – Environmental performance by business organisations have come under close scrutiny of stakeholders. As a result, the holistic model proposed in the current study may pave the path for decision-makers to achieve superior environmental outcomes, leading to greater satisfaction of stakeholders such as the communities that are impacted by the business operations of an organisation.

Originality/value – This is the first paper to propose a model for future research regarding the link between SBSC and environmental performance outcomes – with expert managers acting as moderators and SBSC knowledge acting as a mediator.

Keywords SBSC, Sustainability balanced scorecard architecture, Environmental performance outcomes,

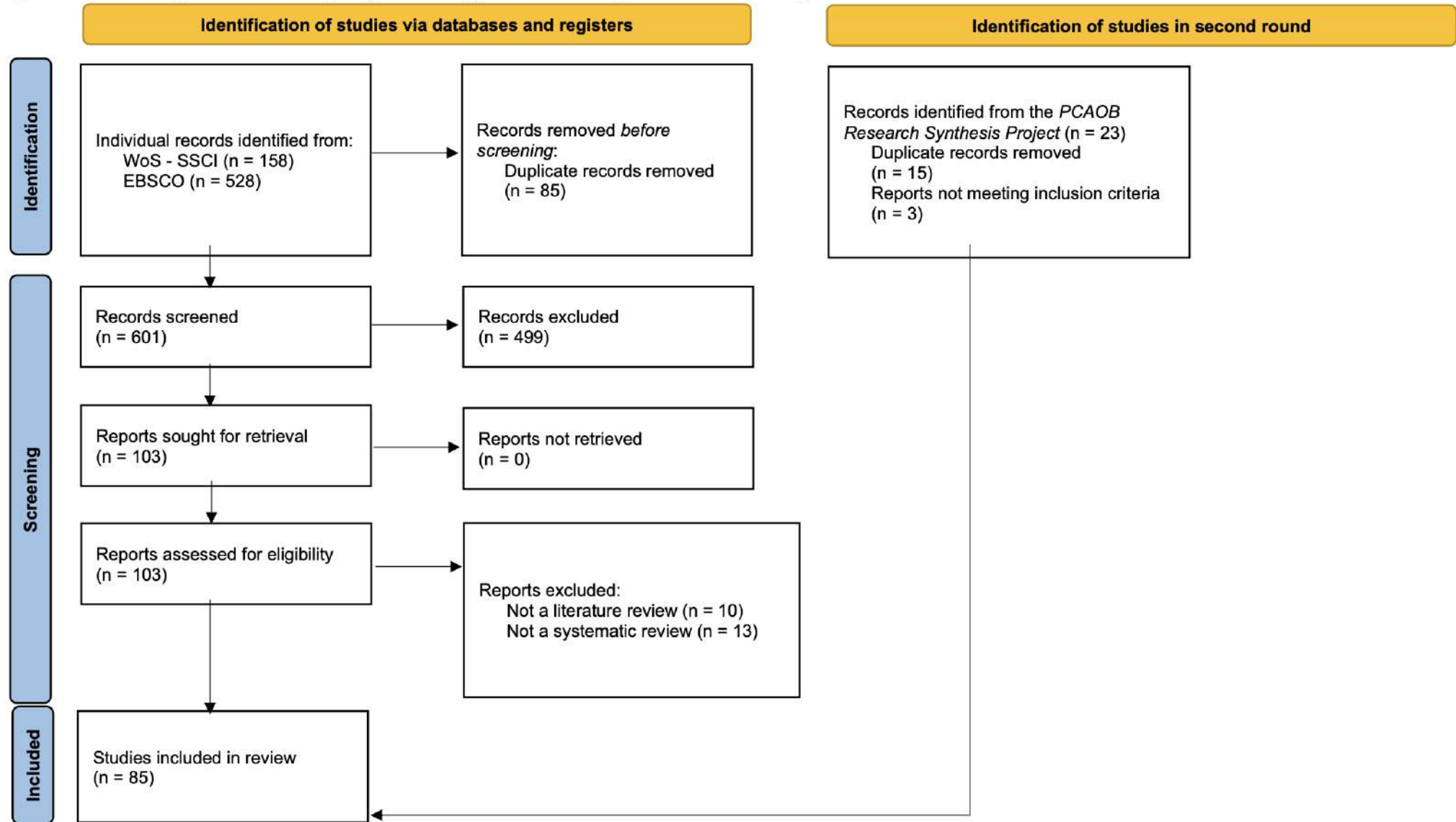
A ROADMAP FOR SYSTEMATIC LITERATURE REVIEWS



Step 1: Documentation

- SLR is a complex process
- Detailed documentation should occur both before the review starts and after completion of the review
- Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA)
- A good protocol contains details about everything that can be planned before conducting the review - the **rationale** and intended **purpose** of the review, and the planned **methodological** and **analytical** approach

Figure 2: Flow diagram of identifying, screening, and including financial auditing reviews



Step 2: Defining The Questions

Research question must be clearly defined, important, and answerable

Broad research question:

What do we know about audit quality?

Narrow research question:

How did the introduction of Audit Oversight Board affect audit quality in Malaysian capital market?

Review scope determination

a) Type of studies that are reviewed

(*e.g., behavioural experiments*)

b) Outcomes

(*e.g., financial reporting quality, market reactions*)

c) Populations

(*e.g., professional auditors, listed firms*)

PICO Framework

- POPULATION
 - The group that is the area of interest for the research question
- INTERVENTION
 - The specific exposure of test for the population of interest
- COMPARISON
 - The alternative that is being compared with the intervention
- OUTCOME
 - The outcome or result of interest that is being measured
- STUDY DESIGN

PICO – Example 1

Research Questions



What is the role of HEI in the technological change process



What is the contribution of Education 5.0 to the challenges in the accounting profession



How can the accounting professional adapt to change and transformation?

PICO Application

- P – Accounting profession
- I – Teaching, education & training
- C – New learning, competencies, methodological and tools
- O - Employment in training (high-level)

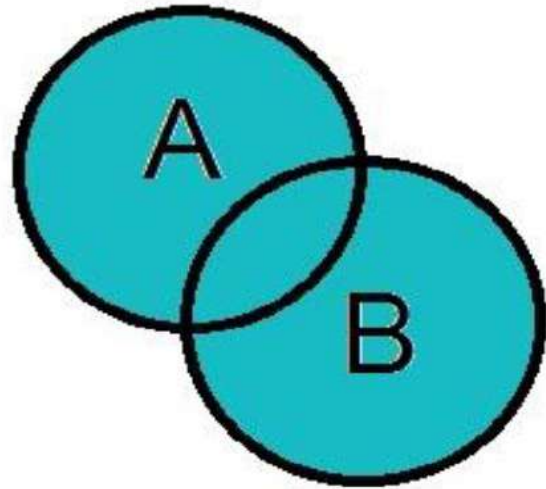
Step 3: Eligibility Criteria



Step 4: Literature Search

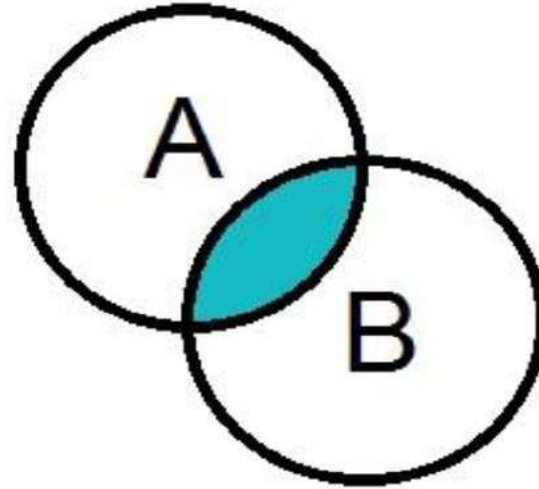
Database	<ul style="list-style-type: none">• Determining the databases• (Web of Science, EBSCO, or SCOPUS)• Unpublished studies - SSRN and Research Gate and conference proceedings of relevant conferences.
Keywords and concepts	<ul style="list-style-type: none">• Alternative terms and concepts
Sensitivity vs specificity	<ul style="list-style-type: none">• Sensitivity (finding as many potentially relevant papers as possible) vs specificity (ensuring that these papers are relevant)
Search date	<ul style="list-style-type: none">• First search and rerun search
Collecting data	<ul style="list-style-type: none">• Search the databases - merged, and duplicates are removed

Boolean operator



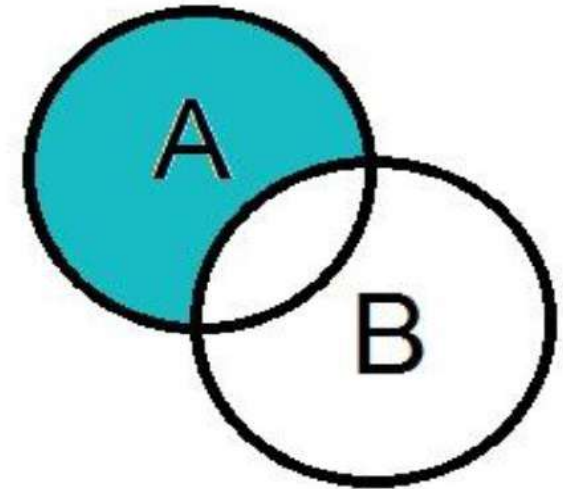
A OR B

(Boys OR Girls)



A AND B

(Boys AND Girls)



A NOT B

(Boys NOT Girls)

Keyword Search

Search Phrase	Truncation (*)	Wildcard (?)
"small medium industries"	Diabet* Diabetic Diabetes Teen* Teen, teens, teenager, teenagers	Wom?n Woman Women Organi?ation Organization Organisation

Step 5: Screening and Selecting Studies

Eligibility criteria
(inclusion and exclusion criteria)

- Population characteristics
- Intervention
- Comparator - active or passive
- Outcomes of interest
- Study types and designs
- Date range
- Language restrictions: difficult to obtain articles in other languages
- Geographic considerations
- Time restrictions: If limiting the research to specific dates, indicate reason

Important

Two separate review authors execute this screening and selection process independently

If both authors agree, and the process for resolving disagreements between authors should be discussed in the review

Screen titles and abstracts

Exclusion criteria are removed

Download full-text

Final decision - excel, database, reference manager, Covidence, Rayyan, Zotero

Step 6: Data Collection and Quality Assessment

Eligibility criteria (inclusion and exclusion criteria)

- Population characteristics
- Intervention
- Comparator - active or passive
- Outcomes of interest
- Study types and designs
- Date range
- Language restrictions: difficult to obtain articles in other languages
- Geographic considerations
- Time restrictions: If limiting the research to specific dates, indicate reason

Data Collection

Publication information	Population	Theory	Independent Variables	Moderator/Mediator	Outcomes

Data Collection

Publication information	Study design	Population	Setting / Context	Outcome

Data Quality

- 1) Study has not been retracted - *Retraction Watch Database* (RWdb, www.retractionwatch.com)
- 2) Internal validity (e.g., selection bias)
- 3) External validity (e.g., small non-random samples)
- 4) Measurement issues (e.g., the use of proxies rather than direct measurement, uncertainty about the validity of used measures)
- 5) Uncertainty and imprecision of effect estimates (e.g., wide confidence intervals, small samples)
- 6) Potential selective reporting
- 7) Two authors of the review independently assess each study using a set of pre-specified criteria (the intra-class correlation coefficient or Cohen's kappa can then be computed to capture inter-rater agreement).

Step 7: Reporting



Mention type of review in title and abstract



Discuss eligibility criteria



Define the search strategy and databases



Provide information on SLR procedure



Integrate results of all identified studies and comprehensively report all necessary information

THANK YOU!