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Query: What is Systematic Literature Review?

Systematic Literature Review (SLR) is a method of synthesizing scientific evidence to answer a specific research question in a transparent and reproducible manner. The objective of a SLR is to include all published research relevant to the research question. It is performed like a scientific process and employs concepts of empirical research. [1].

A SLR is performed by following a clearly defined protocol or plan, where the criteria for inclusion is established before the review is conducted. The SLR process identifies, selects, and critically evaluates research to answer a well-formulated question. [2].

A systematic review is defined as a review of evidence on a specific research question that employs systematic and explicit methods to identify, select, and critically assess relevant primary research and to extract and analyze data from the studies that are included in the review. The methods used in a systematic review must be transparent and reproducible. [3].

References:

1. https://www.cambridge.org/core/services/aop-cambridge-core/content/view/40D4CEA7A7CC3FB6ED6233E79A0A2A1F/S2220434219001690a.pdf/systematic_literature_reviews_an_introduction.pdf
2. https://libguides.csu.edu.au/review/Systematic
3. https://guides.temple.edu/c.php?g=78618&p=4178713

Outline of Systematic Literature Review

A systematic literature review is a methodical approach to reviewing a body of literature on a particular topic or research question. It involves identifying, evaluating, and synthesizing relevant studies to provide a comprehensive understanding of the existing evidence. The following is an outline of the key steps involved in conducting a systematic literature review:

- Define the research question: The first step is to clearly define the research question and the scope of the review. This includes specifying the key concepts, defining the inclusion and exclusion criteria, and identifying the types of studies to be included.

- Search strategy: The next step is to develop a search strategy to identify relevant studies. This includes identifying the databases to be searched, the search terms and keywords to be used, and the date range to be covered.

- Study selection: Once the search is complete, the next step is to screen the studies for relevance. This involves screening the titles and abstracts of studies to determine whether they meet the inclusion criteria. Full-text articles are then reviewed to assess whether they meet the inclusion criteria.

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- Quality assessment: The quality of the included studies is then assessed. This involves evaluating the methodological rigor of each study using established criteria, such as the Cochrane Risk of Bias tool.

- Data extraction: The relevant data from each study is then extracted, including study design, sample size, population characteristics, intervention or exposure, outcome measures, and key findings.

- Data synthesis: The data from the included studies is then synthesized using a variety of methods, such as meta-analysis, narrative synthesis, or thematic analysis. This involves summarizing the key findings, identifying patterns or themes, and assessing the strength of the evidence.

Reporting: The results of the systematic literature review are then reported, usually in the form of a written report or manuscript. The report should include a clear description of the methodology, a summary of the key findings, and a discussion of the implications of the results for practice or future research. It should also include a transparent description of any limitations or biases in the review.

Point to include in a systematic literature review

A systematic literature review is a rigorous and structured approach to reviewing a body of literature on a particular topic or research question. Some key points to include in a systematic literature review are:

- Background and context: Provide a clear and concise overview of the background and context of the research question, including the rationale for the review, its aims and objectives, and any relevant theoretical or conceptual frameworks.

- Search strategy: Detail the search strategy used to identify relevant studies, including the databases searched, search terms and keywords used, and any additional search methods, such as hand-searching, reference chaining or grey literature searching.

- Inclusion and exclusion criteria: Specify the inclusion and exclusion criteria used to select studies, including the type of studies included (e.g., randomized controlled trials, observational studies), population characteristics, intervention/exposure, outcome measures, and date range.

- Study selection: Describe the process used to screen and select studies, including the number of studies identified, the number of studies screened, and the number of studies

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included in the final review. Provide a flowchart to illustrate the study selection process.

- Quality assessment: Evaluate the quality of the included studies using established criteria, such as the Cochrane Risk of Bias tool. Describe the methods used to assess quality, including any inter-rater reliability checks.

- Data extraction: Detail the data extraction process, including the data items extracted from each study (e.g., study design, sample size, population characteristics, intervention/exposure, outcome measures, and key findings).

- Data synthesis: Synthesize the data from the included studies, including a summary of the key findings, any patterns or themes identified, and an assessment of the strength of the evidence. Use appropriate methods for data synthesis, such as meta-analysis, narrative synthesis, or thematic analysis.

- Limitations and biases: Discuss any limitations or biases in the review, including any limitations in the search strategy or study selection process, and any sources of potential bias in the included studies.

- Implications for practice and research: Discuss the implications of the findings for practice and future research, including any recommendations for practice or policy, and any gaps or limitations in the existing evidence.

Conclusion: Provide a clear and concise conclusion summarizing the key findings of the review and their implications, as well as any future research directions.