SPICE framework for defining research questions

A summary of
Booth, A. (2006). Clear and present questions: formulating questions for evidence based practice. Library Hi Tech. 24:3, 355-368.

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Tool		

Relevance For Public Health

The first stage of evidence-based practice is to ask focused, structured questions, which is what SPICE helps public health professionals to do. It is highly relevant for those engaged in evidence-informed public health as they structure their research questions in a way that is most relevant to their public health practices.

Description

The acronym SPICE stands for Setting, Perspective, Intervention, Comparison and Evaluation, and provides a way to formulate practice questions for finding evidence in existing research. It builds upon the PICO acronym (Population, Intervention, Comparison and Outcomes) in two ways. First, the population component is split into two parts: setting and perspective. Second, "outcomes" is replaced with "evaluation" in order to encourage a broader evaluation framework and incorporate concepts such as "outputs" and "impact" together.

The benefits of such a structured approach to question formulation include a more efficient search, use of scarce time on only relevant evidence, and improvement in articulation and communication of problems with colleagues. This leads to asking more questions, undertaking more searches and using more detailed search methods to find more precise answers.

Implementing the Tool

Who is Involved?

SPICE is useful for anyone looking to generate focused, clear and structured research questions. This is especially useful for public health professionals engaging in evidence-informed public health practice.

Steps for Using Tool

The SPICE framework consists of five distinct features:

1. Setting – where?
2. Perspective – for whom?
3. Intervention – what?
4. Comparison – compared with what?
5. Evaluation – with what result?

When users are beginning a new search for evidence, SPICE helps to structure a clear search question. Users consider each of the five features of SPICE and ask the accompanying questions in order to develop a thoughtful question and search for relevant literature to yield a precise and useful answer.

Evaluation and Measurement Characteristics

Evaluation

Information not available

Validity

Not applicable

Reliability

Not applicable

Methodological Rating

☐ Not applicable

Tool Development

Developers

Andrew Booth

Method of Development

The SPICE framework was developed after considering the recommendation that librarians use a modified version of PICO to improve the process of question formulation. SPICE builds upon PICO to address the needs of librarians engaged in evidence-based information practice. SPICE was developed in a conceptual paper that extrapolates findings from health care research to general librarianship.

Release Date

2006

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Resources

Title of Primary Resource	Clear and present questions: formulating questions for evidence based practice.
File Attachment	None
Web-link	https://www.emeraldinsight.com/doi/full/10.1108/07378830610692127
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