

LEADING CHANGE TOOLKIT™

TO HELP CHANGE AGENTS AND
CHANGE TEAMS MAKE LASTING
IMPROVEMENTS IN HEALTH CARE

Evidence-Based Practice Questionnaire: Attitudes to Evidence-Based Practice (EBPQ)

Pragmatic Testing and Content Validity Data

Summary of Pragmatic properties

The EBPQ had an overall **objective pragmatic score** of **15** out of **20**. According to this objective pragmatic assessment, the EBPQ strengths include being available in the public domain, having acceptable language, not requiring training for administration, and being composed of less than 50 items. The EBPQ lost scores because interpretation of the total score is not clearly outlined.

Based on two RNAO stakeholders, the EBPQ was rated **4** out of **4** for **likelihood to use**. The EBPQ has an overall **stakeholder facing assessments** score of **23.5** out of **24**.

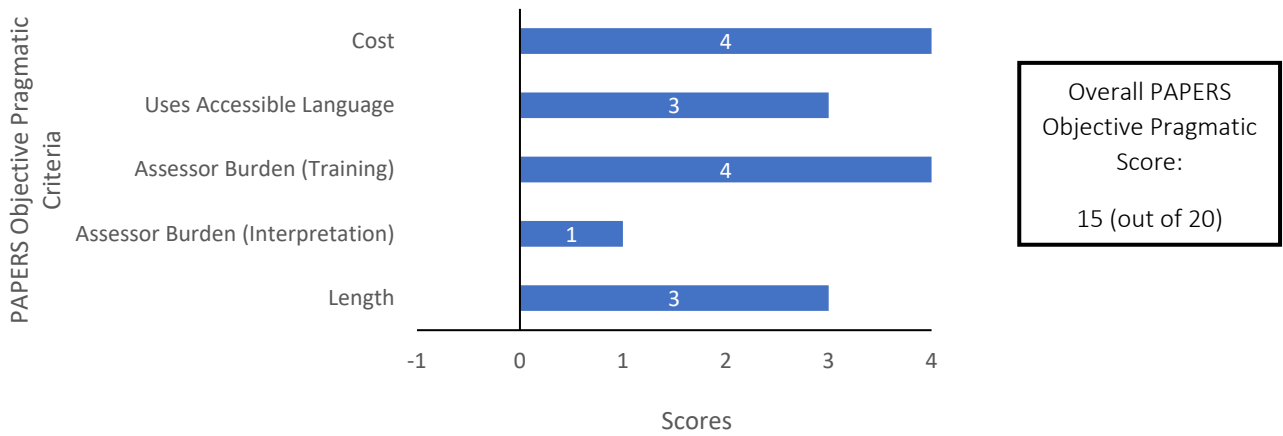
Tool Pragmatic Properties

Tools were assessed for pragmatic properties with the PAPERS tool (Stanick et al. 2019); a validated tool for measuring a tool's acceptability, ease of use, appropriateness, and usefulness. Objective pragmatic properties were assessed by two research assistants independently and with consensus for each tool. Stakeholder facing pragmatic properties were assessed independently by at least two stakeholders (e.g., champions) for each tool. A mean score was calculated from participants' responses for each of the stakeholder facing PAPERS survey questions.

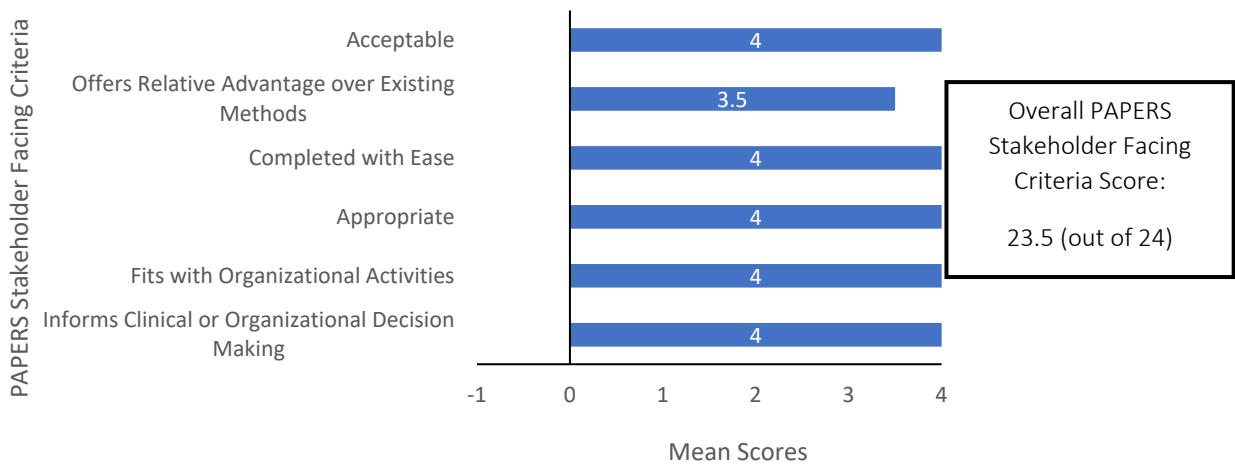
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PAPERS Objective Pragmatic Criteria - Scoring details below



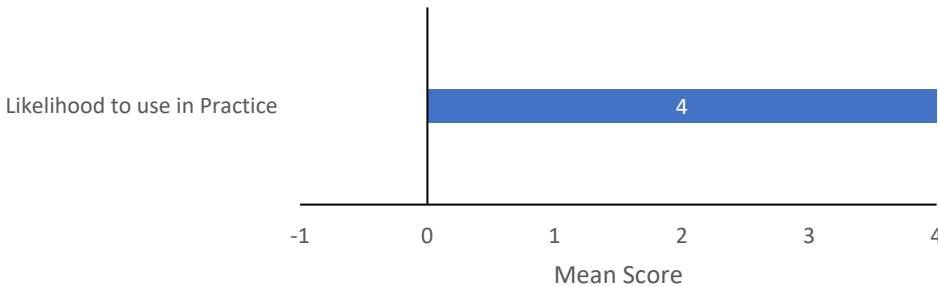
PAPERS Stakeholder Facing Criteria (n = 2 stakeholders) - Scoring details below



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Likelihood to Use the Tool in Practice (n = 2 stakeholders) - Scoring details below



Content Validity

Summary of Content Validity

According to our assessment using an adapted version of a checklist by Mokkink et al. (2010), the EB PQ has evidence of content validity.

Content validity refers to degree to which the content of the tool is an adequate reflection of the construct being measured. In the case of the Evidence-Based Practice Questionnaire: Attitudes to Evidence-Based Practice (EB PQ), this refers to the extent that individuals can use the EB PQ to assess barriers/facilitators to knowledge use and monitor knowledge use according to the following subscales:

- Practice of evidence-based practice
- Attitude towards evidence-based practice
- Knowledge/skills associated with evidence-based practice

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General Requirements	Yes	No
1. Was there an assessment of whether all items refer aspects of the construct to be measured?	X	
2. Was there an assessment of whether all items are relevant for the study population? (e.g., age, gender, disease characteristics, country, setting)	X	
3. Was there an assessment of whether all items are relevant for the purpose of the measurement instrument? (discriminative, evaluative, and/or predictive)	X	
4. Was there an assessment of whether all items together comprehensively reflect the construct to be measured?	X	

Adapted from: Mokkink, L.B., Terwee, C.B., Knol, D.L., Stratford, P.W., Alonso, J., Patrick, D.L., Bouter, L.M. and De Vet, H.C. (2010). The COSMIN checklist for evaluating the methodological quality of studies on measurement properties: a clarification of its content. *BMC medical research methodology*, 10(1), 1-8.

According to our assessment using an adapted version of a checklist by Mokkink et al. (2010), the EBPQ tool has evidence of content validity.

Content Validity Requirement 1:

- The tool developers of the EBPQ initially collected a preliminary item pool from the literature and through discussions with health care providers. The initial item pool was piloted with 33 tenured health care professionals. The number of items were reduced through item analysis and scaling methods to create a draft of the EBPQ (Upton & Upton, 2006).
- The drafted questionnaire was sent to 500 nurses to establish the structure of questionnaire. Then the questionnaire was sent again to 500 different nurses for survey refinement and validation (Upton & Upton, 2006).

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Content Validity Requirement 2:

- The EBPQ was piloted with 33 tenured health care professionals and a total of 751 nurses during the two pilot studies of the drafted questionnaire (75.1% overall response rate). The nurses in the two pilot studies were from a range of specialties (e.g., surgery, mental health, and elder care) (Upton & Upton, 2006).

Content Validity Requirement 3:

- The tool developers reported that the respondents from the two pilot studies had minimal comments regarding changes required to the structure or content of the survey. The tool developers stated that most of the comments from the pilot studies were positive (Upton & Upton, 2006).

Content Validity Requirement 4:

- The tool developers reported that the respondents from the two pilot studies had minimal comments regarding changes required to the structure or content of the survey. The tool developers stated that most of the comments from the pilot studies were positive (Upton & Upton, 2006).
- The EBPQ was based on the literature and through discussions with health care professionals and piloted three times (Upton & Upton, 2006).

Limitations:

- There were no identified limitations regarding conducting content validity testing pertaining to the EBPQ.

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References

- Mokkink, L.B., Terwee, C.B., Knol, D.L., Stratford, P.W., Alonso, J., Patrick, D.L., Bouter, L.M. and De Vet, H.C. (2010). The COSMIN checklist for evaluating the methodological quality of studies on measurement properties: a clarification of its content. *BMC medical research methodology*, 10(1), 1-8.
- Stanick, C. F., Halko, H. M., Nolen, E. A., Powell, B. J., Dorsey, C. N., Mettert, K. D., Weiner, B.J., Barwick, M., Wolfenden, L., Damschroder, L.J. and Lewis, C.C (2021). Pragmatic measures for implementation research: Development of the Psychometric and Pragmatic Evidence Rating Scale. *Translational behavioral medicine*, 11(1), 11-20. <https://doi.org/10.1093/tbm/ibz164>
- Upton, D., & Upton, P. (2006). Development of an evidence-based practice questionnaire for nurses. *Journal of advanced nursing*, 53(4), 454-458.