

# LEADING CHANGE TOOLKIT™

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

## Evidence-Based practice Attitude and Utilization Survey (EBASE)

### Pragmatic Testing and Content Validity Data

#### *Summary of Pragmatic properties*

The EBASE tool had an overall **objective pragmatic score** of **14** out of **20**. According to this objective pragmatic assessment, the EBASE strengths include being available in the public domain, having acceptable language, and not requiring training for administration. The EBASE tool lost scores because interpretation of the total score is not clearly outlined and the length of the tool is over 50 items but less than 100.

Based on two RNAO stakeholders, the EBASE tool was rated **3** out of **4** for **likelihood to use**. The EBASE tool has an overall **stakeholder facing assessments** score of **18.5** out of **24**.

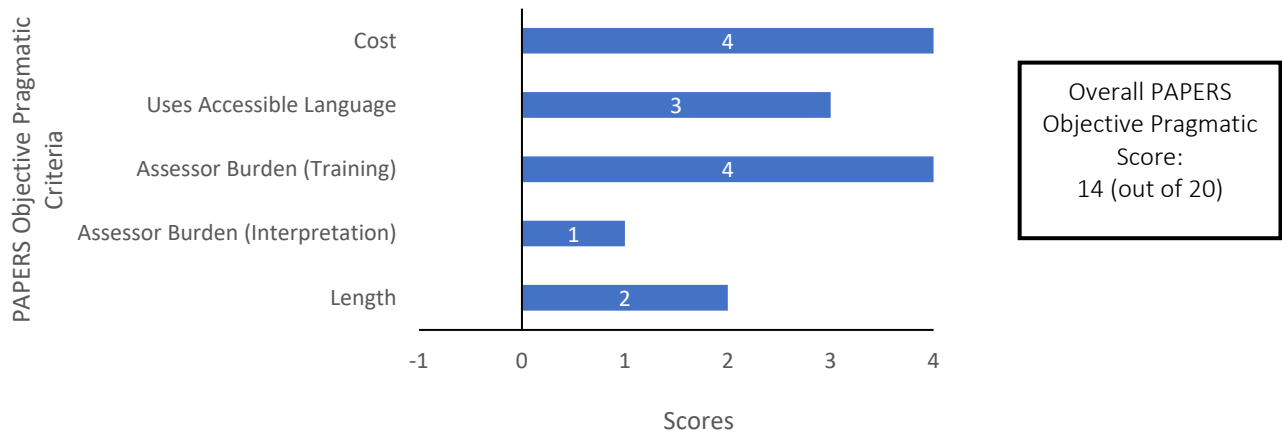
#### **Tool Pragmatic Properties**

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.

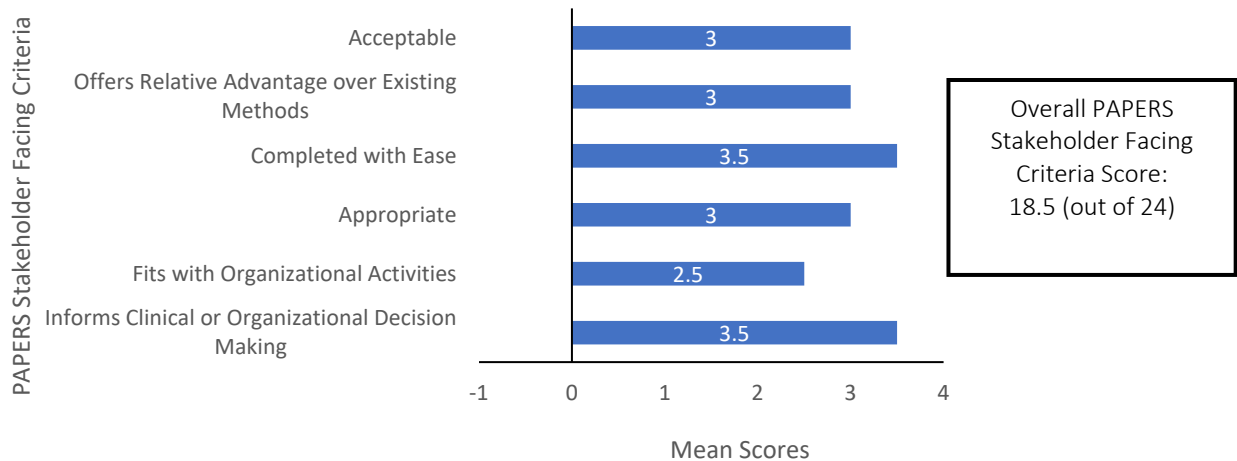
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*PAPERS Objective Pragmatic Criteria - Scoring details below*



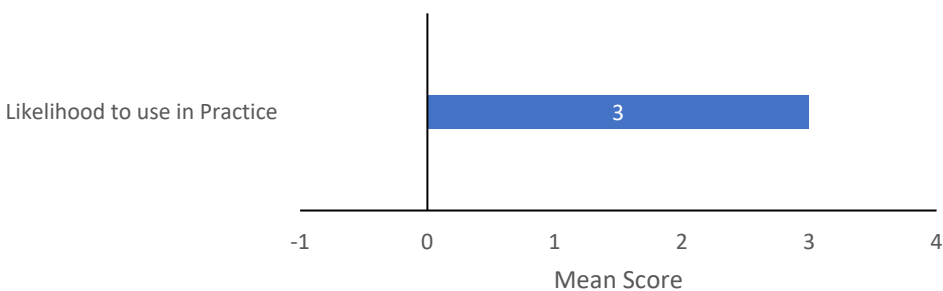
*PAPERS Stakeholder Facing Criteria (n = 2 stakeholders) - Scoring details below*



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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 EBASE tool 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 Attitude and Utilization Survey (EBASE), this refers to the extent that individuals can use the EBASE to assess barriers/facilitators to knowledge use and monitor knowledge according to seven survey parts:

- Part A (clinicians’ opinion of evidence-based practice (EBP))
- Part B (self-reported practitioner skills in EBP)
- Part C (clinicians’ level of training in five EBP-related areas)
- Part D (percentage of practice based on clinical research and sources of information that influence clinical decision-making)
- Part E (barriers to EBP)
- Part F (facilitators to EBP)
- Part G (respondents demographics)

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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.

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### Content Validity Requirement 1:

- Face validity was determined by the authors with consultation from a statistical consultant (Leach & Gillham, 2008).
- Executive members of professional complementary and alternative medicine (CAM) associations, directors/senior lecturers in CAM education, researchers in CAM, experts in questionnaire design, and experts in evidence-based practice (EBP) were invited to evaluate the EBASE. These individuals evaluated the relevance of each item on a 4-point Likert scale. The mean percentage of items with a score of 3 and 4 was calculated to determine a content validity index of 0.899 (range = 0.471–1.000), indicating good content validity (Leach & Gillham, 2008).

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## Content Validity Requirement 2:

- Nine individuals (two academic experts in survey design and EBP and seven CAM practitioners, academics, or researchers) evaluated the relevance of each of EBASE items (Leach & Gillham, 2008).
- The EBASE was also validated in a sample of 126 CAM practitioners (Leach & Gillham, 2008).

## Content Validity Requirement 3:

- The content validity index of 0.899 (range = 0.471–1.000), indicates that nine experts (mixed of EBP and CAM experts) found that the items were relevant in evaluating CAM clinicians' use, skills, and opinion of EBP (Leach & Gillham, 2008).

## Content Validity Requirement 4:

- The same experts as above were asked if they have any comments regarding the phrasing of items, or whether any additions related to EBP, or from any pertinent clinical research and professional literature are required. Only minor phrasing recommendations were advised by the experts (Leach & Gillham, 2008).

## Limitations:

- The validation study had low response rate of 36%. The authors also stated that it is possible that CAM practitioners who were interested in EBP were more likely to participate in the validation study (Leach & Gillham, 2008).

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## References

- Leach, M. J., & Gillham, D. (2008). Evaluation of the Evidence-Based practice Attitude and utilization Survey for complementary and alternative medicine practitioners. *Journal of evaluation in clinical practice*, 14(5), 792-798. <https://doi.org/10.1111/j.1365-2753.2008.01046.x>
- 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., & Lewis, C. C. (2019, Nov 20). Pragmatic measures for implementation research: development of the Psychometric and Pragmatic Evidence Rating Scale (PAPERS). *Translational Behavioral Medicine*. <https://doi.org/10.1093/tbm/ibz164>