



LEADING CHANGE TOOLKIT™

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

Evidence-Based Practice Attitude Scale-36 (EBPAS-36)

Pragmatic Testing and Content Validity

Summary of Pragmatic properties

The EBPAS-36 tool had an overall **objective pragmatic score** of **16** out of **20**. According to this objective pragmatic assessment, the EBPAS-36's strengths include being available in the public domain, having acceptable language, not requiring training for administration, and having less than 50 items. The EBPAS-36 tool lost scores because interpretation of the total score is not clearly outlined.

Based on two RNAO stakeholders, the EBPAS-36 tool was rated **2** out of **4** for **likelihood to use**. The EBPAS-36 tool has an overall **stakeholder facing assessments** score of **15** out of **24**.

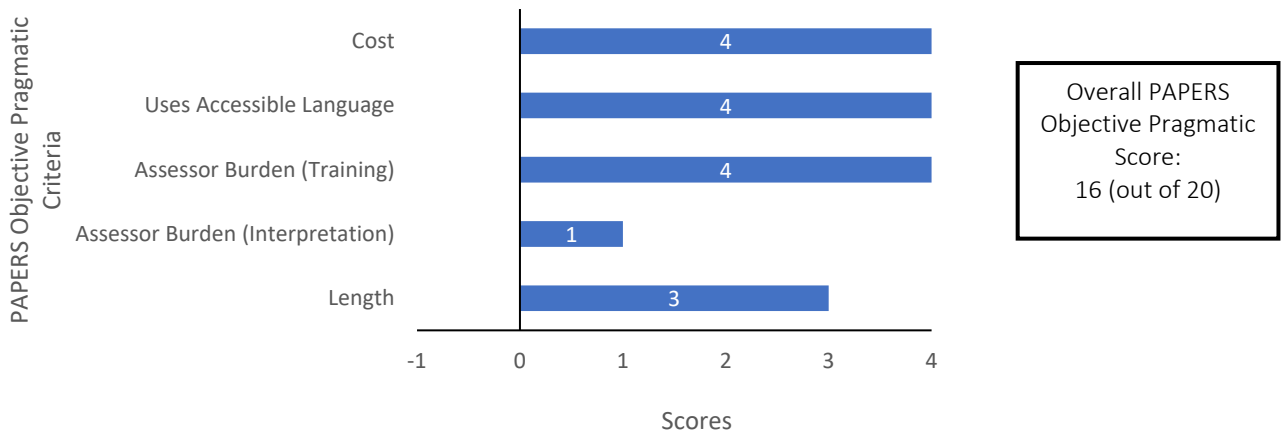
Tool Pragmatic Properties

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.

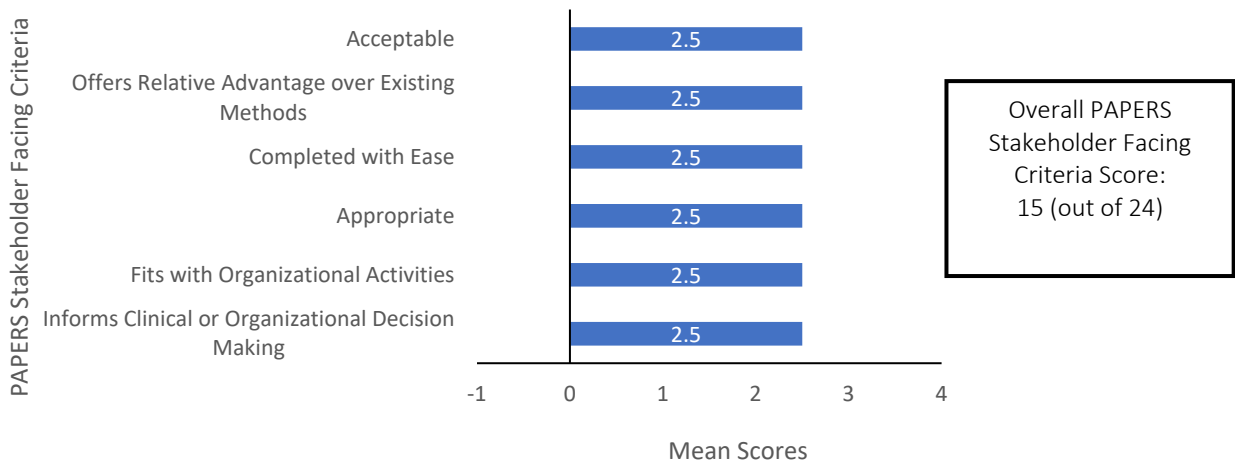
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PAPERS Objective Pragmatic Criteria - Scoring details below



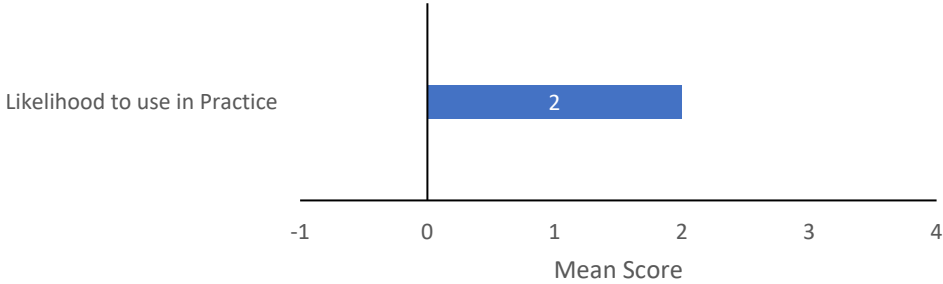
PAPERs Stakeholder Facing Criteria (n = 2 stakeholders) - Scoring details below



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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 checklist by Mokkink et al. (2010), the EBPAS-36 tool has evidence of content validity.



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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 Scale-36 (EBPAS-36), this refers to the extent that individuals can use the EBPAS-36 to assess barriers/facilitators to knowledge use and monitor knowledge use according to the following subscales:

- Requirements
- Appeal
- Openness
- Divergence
- Limitations
- Fit
- Monitoring
- Balance
- Burden
- Job security
- Organizational support
- Feedback

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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 checklist by Mokkink et al. (2010), the EBPAS-36 tool has evidence of content validity.

Content validity requirement 1:

- The EBPAS-36 is a shortened version of the EBPAS-50, of which was developed from theories about the relationships between attitudes and behaviours and implementation frameworks (Rye et al., 2017). The EBPAS-50's items were also created through the consultations of mental health service providers and researchers (Aarons et al., 2004).
- Despite the reduced number of items, the EBPAS-36 retained the 12 subscales present in the EBPAS-50. This means that the items in the EBPAS-36 still reflects the subscales that theories, frameworks, and experts report collectively measures attitudes towards evidence-based practice (Rye et al., 2017).

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- The EBPAS-36 was shortened to ameliorate the large number of items within the EBPAS-50, and to eliminate redundant items that are reported by stakeholders to be asking the same question as another item (Rye et al., 2017).

Content Validity Requirement 2:

- The authors reduced the number of items present in the EBPAS-50 and validated the EBPAS-36 with a sample of 418 mental health care providers from the United States of the America and 838 psychologists and psychologist students from Norway (Rye et al., 2017).
- The authors stated that having both participants from the US and Norway allowed them to also confirm cross-cultural validity of the EBPAS-36 (Rye et al., 2017). The EBPAS-50 was previously translated into Norwegian by a professional translator and appropriate translation of the items were confirmed through an iterative process between the tool developers (Aarons et al., 2004)

Content Validity Requirement 3:

- The same participants described above evaluated the relevance, specificity, or redundancy of each item in measuring each subscale (Rye et al., 2017).

Content Validity Requirement 4:

- The tool developers assured that the EBPAS-36 maintained the 12 factors present in the EBPAS-50 (Rye et al., 2017). These factors were deemed to comprehensively measure individual's attitudes and organization factors affecting evidence-based practice (Aarons et al., 2004). Item reduction was based on the feedback provided by both the Norway and US samples, and the individual items' factor loading (Rye et al., 2017).

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Limitations:

- One limitation of the development paper of the EBPAS-36 was the low response rate in the Norwegian sample. Further, the authors stated that the slight inconsistency between the definitions for evidence-based practice in the US survey and the Norway survey is a limitation of their study. In the US version of the EBPAS-36, evidence-based practice referred to any form of intervention or behaviour supported by empirical research while, in the Norway version, evidence-based practice was limited to therapies, interventions and treatments that are supported by empirical research (Rye et al., 2017).

References

- Aarons, G. A. (2004). Mental health provider attitudes toward adoption of evidence-based practice: The Evidence-Based Practice Attitude Scale. *Mental Health Services Research, 6*(2): 61–74. <https://doi.org/10.1023/B:MHSR.0000024351.12294.65>
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