The Programme Sustainability Assessment Tool (PSAT)

Pragmatic Testing and Content Validity Data

Summary of Pragmatic properties

The PSAT had an overall **objective pragmatic score** of **17** out of **20**. According to this objective pragmatic assessment, the PSAT's strengths include being available in the public domain, having acceptable language, not requiring training for administration, having some instructions for interpreting scores and having less than 50 items.

Based on two RNAO stakeholders, the PSAT was rated **2** out of **4** for **likelihood to use**. The PSAT has an overall **stakeholder facing assessments** score of **18.5** out of **24**.
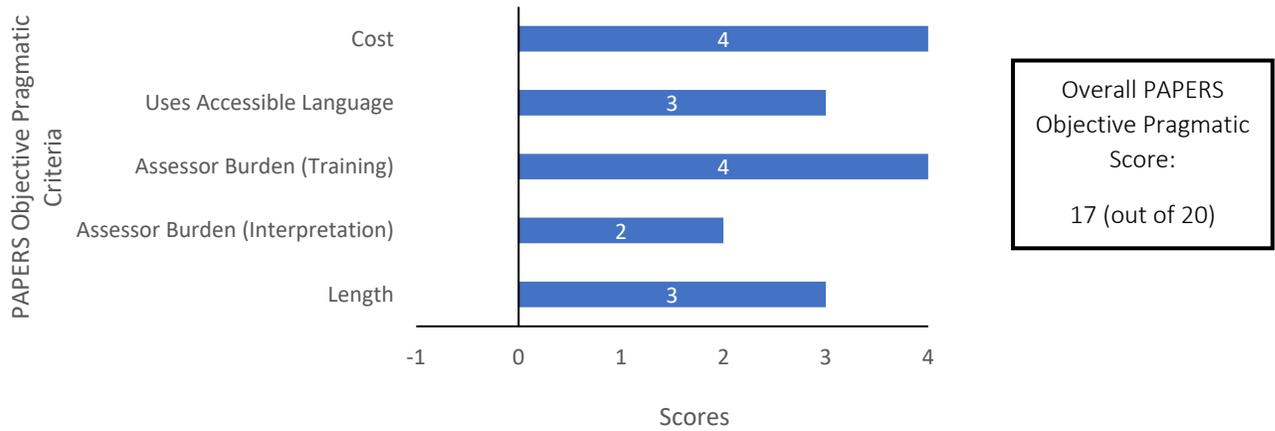
Tool Pragmatic Properties

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.
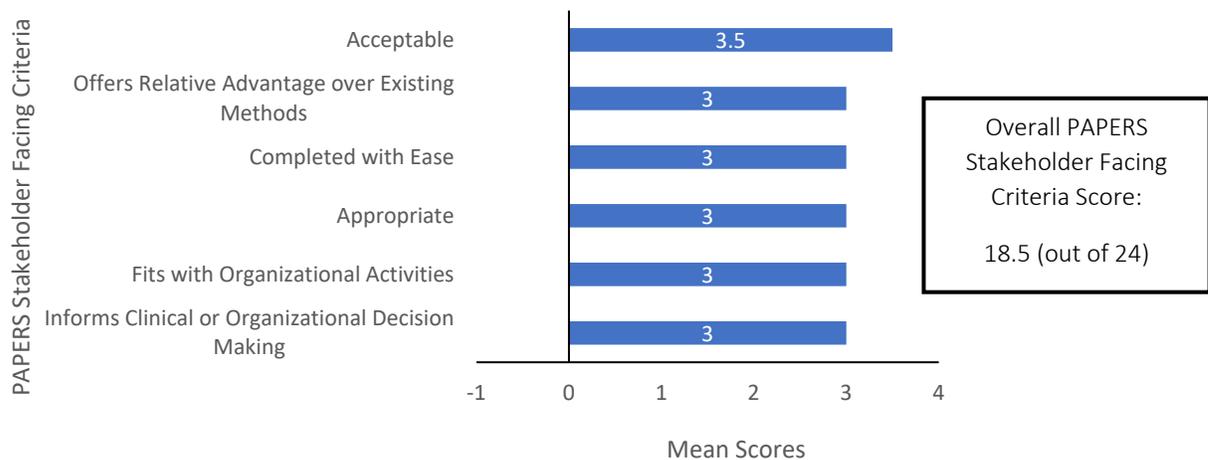
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*PAPERS Objective Pragmatic Criteria - Scoring details below*

PAPERS Objective Pragmatic Criteria

Criteria	Score
Cost	4
Uses Accessible Language	3
Assessor Burden (Training)	4
Assessor Burden (Interpretation)	2
Length	3

Scores: -1, 0, 1, 2, 3, 4

Overall PAPERS Objective Pragmatic Score:

17 (out of 20)

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

PAPERS Stakeholder Facing Criteria

Criteria	Mean Score
Acceptable	3.5
Offers Relative Advantage over Existing Methods	3
Completed with Ease	3
Appropriate	3
Fits with Organizational Activities	3
Informs Clinical or Organizational Decision Making	3

Mean Scores: -1, 0, 1, 2, 3, 4

Overall PAPERS Stakeholder Facing Criteria Score:

18.5 (out of 24)

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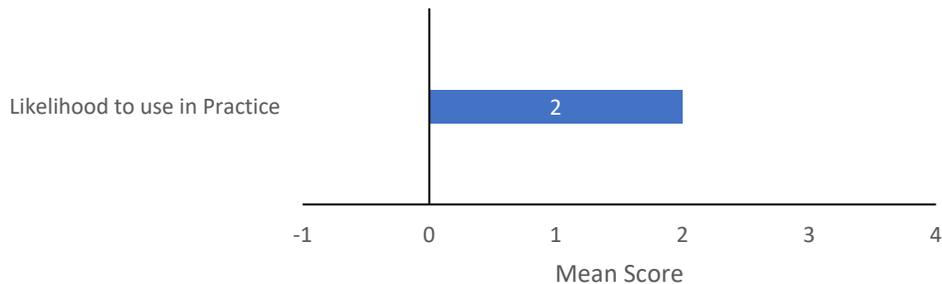
Content Validity

Summary of Content Validity

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

Content validity refers to the degree to which the content of the tool is an adequate reflection of the construct being measured. In the case of the Program Sustainability Assessment Tool (PSAT), this refers to the extent that individuals can use the PSAT to assess barriers/facilitators to knowledge use, monitor knowledge use, and the sustainability of knowledge use by assessing the following eight domains:

- Political support
- Funding stability
- Partnerships
- Organizational capacity
- Program evaluation
- Program adaptation
- Communication
- Strategic planning

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 PSAT tool has evidence of content validity.

Content Validity Requirement 1:

- The initial PSAT (63 items organized into nine domains) was developed according to a literature review on program sustainability, concept mapping, and informed by Schell et al. (2013) conceptual framework on program sustainability (Luke et al., 2014).
- Psychometric testing and changes to the initial PSAT was based on a large sample from many public health programs at both the community and state level (Luke et al., 2014).

Content Validity Requirement 2:

- Psychometric testing of the PSAT was conducted on a sample of 592 public health program employees across 25 programs representing four different chronic disease areas and differed in program size (community or state level) (Luke et al., 2014).

Content Validity Requirement 3:

- The PSAT domains was found to be positively correlated with individual's perceived sustainability of their program (single 7- point Likert item) (n = 205) (Luke et al., 2014).

Content Validity Requirement 4:
- The PSAT was developed and validated according to both the literature and by individuals who are working across 25 public health programs. The authors conducted multiple group confirmatory factor analysis to assess whether the PSAT domains would change according to program type and level and did not find a difference. Hence, we can argue that the PSAT is comprehensive as it was found to be valid across multiple different programs (Luke et al., 2014).

Limitations:
- The validation studies across different program types are hindered by small sample sizes. Also, the tool developers stated that PSAT needs to be validated for its ability to predict long term sustainability outcomes (Luke et al., 2014).

References

Luke, D. A., Calhoun, A., Robichaux, C. B., Elliott, M. B., & Moreland-Russell, S. (2014). The Program Sustainability Assessment Tool: a new instrument for public health programs. *Preventing chronic disease*, *11*, 130184. https://doi.org/10.5888/pcd11.130184

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Schell, S. F., Luke, D. A., Schooley, M. W., Elliott, M. B., Herbers, S. H., Mueller, N. B., & Bunger, A. C. (2013). Public health program capacity for sustainability: a new framework. *Implementation Science*, *8*(1), 1-9.

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