



LEADING CHANGE CHANGE AGENTS AND TO HELP CHANGE AGENTS AND CHANGE TEAMS MAKE LASTING

IMPROVEMENTS IN HEALTH CARE

Implementation Leadership Scales (ILS)

Pragmatic Testing and Content Validity Data

Summary of Pragmatic properties

The ILS had an overall **objective pragmatic score** of **16** out of **20**. According to this objective pragmatic assessment, the ILS' strengths include being available in the public domain, having acceptable language, not requiring training for administration, the availability of a scoring guide, and being short in length.

Based on two RNAO stakeholders, the ILS was rated **3** out of **4** for **likelihood to use**. The ILS has an overall **stakeholder facing assessments** score of **18** 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.

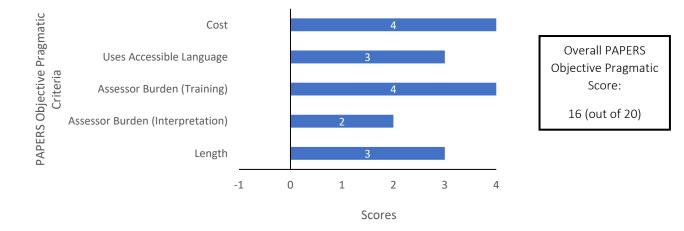




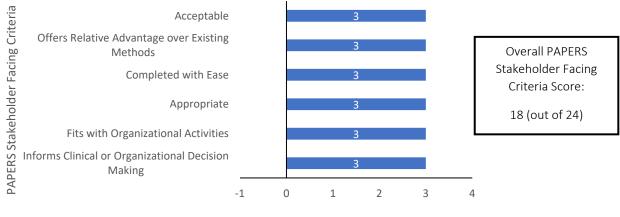
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PAPERS Objective Pragmatic Criteria - Scoring details below



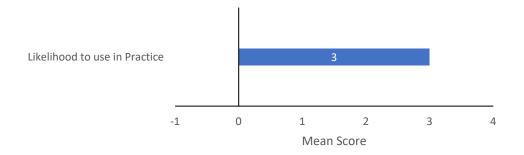
PAPERS Stakeholder Facing Criteria (n = 2 stakeholders) - Scoring details below





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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 ILS 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 Implementation Leadership Scales (ILS), this refers to the extent that knowledge users can use ILS to assess barriers/facilitators to knowledge use and monitor knowledge use by evaluating the following components of leadership:

- Proactive leadership
- Knowledgeable leadership
- Supportive leadership
- Perseverant leadership





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

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 ILS has evidence of content validity.

Content Validity Requirement 1:

- Tool development was based on multiple sources (Aarons et al., 2014): •
 - o Extant literature on leader behaviours pertaining to implementation and organizational climate and culture change.
 - Individual items were reviewed by tool developers and subject matter experts (a mental health program leader, an EMP trainer, and four mental health program managers).
 - Potential items were reviewed by tool developers and by four mental health 0 program managers.





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Content Validity Requirement 2:

• Tool was tested for validity and reliability in a sample of 459 mental health clinicians in 93 different outpatient mental health programs in Southern California, USA. These mental health clinicians varied regarding professional role (e.g., marriage and family therapy and social work) (Aarons et al., 2014).

Content Validity Requirement 3:

• The ILS tool is discriminative of measuring leadership as tool developers reported that responses from individuals belonging to the same team, who evaluated the same leader, were correlated (Aarons et al., 2014).

Content Validity Requirement 4:

• The tool developers also demonstrated that the ILS is moderately to highly correlated with subscales (transformation and transactional leadership) of the Multifactor leadership questionnaire (Bass & Avolio, 1995), a generic leadership tool, and low correlations with Organizational Climate Measure (Patterson et al., 2005) subscales which measures organizational climate. These correlations, as stated by the tool developers, demonstrate that the ILS items measures leadership specifically but captures something more specific than generic leadership scales. The authors stated that the ILS captures leadership pertaining to implementation (Aarons et al., 2014).

Limitations:

• The authors did not report any significant limitations in design nor methods.







References

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