

# Content validity indexes assigned to the Brazilian version of the ImpRes-tool: a tool to improve the quality of implementation projects and research

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**Background:** Implementation Science is still very much a novel field in Brazil. No resources to guide the design of implementation research and real-world implementation projects exist that have been developed or adapted for use in Brazil. In addressing this gap, we translate and cross-culturally adapt and validate the Implementation Science Research development (ImpRes) tool and its complementary guide, previously developed in the United Kingdom. ImpRes contains ten domains that, according to the current literature and expert consensus, cover the core elements of implementation research that should be considered in the preparation of implementation research and projects [1]. The aim of this work was to appraise the content validity of the ImpRes-BR tool.

**Methods:** After the stages of translation, back-translation, and pilot testing, the ImpRes-BR tool and guide were reviewed by an expert panel, consisting of specialists in the field of applied health research composed of 10 members. Based on the experts' responses, who rated the items on a four-point Likert scale, the content validity index at the item level (CVI-I) and at the scale level (CVI-E) was calculated using the mean calculation method (CVI-E/Med) [2]. A CVI-I of 0.78 and a CVI-E of 0.90 were defined as minimum acceptable indices [3,4].

**Results:** In addition to conceptual validity indices greater than 90%, a CVI-I of at least 0.90 was observed in all domains of the tool and its guide and an IVC-E of 0.98, thus exceeding the limits of CVI-I: 0.78 and CVI-E: 0.90 necessities for its validity (see table 1).

**Table 1:** Results related to the evaluation of the conceptual and content equivalence of each domain with the panel of experts in the pilot test of the pre-final version of the instruments.

	Conceptual Equivalence		Content Equivalence				IVC-I
	Clear	Not clear	Not relevant	Impossible to assess relevance	Relevant, but needs minor change	Very relevant and succinct	
	n (%)	n (%)	n (%)	n (%)	n (%)	n (%)	
Implementation Research Characteristics	9 (90%)	1 (10%)	0 (0%)	1 (10%)	4 (40%)	5 (50%)	0,90
Implementation Theories, Frameworks and Models	9 (90%)	1 (10%)	0 (0%)	0 (0%)	5 (50%)	5 (50%)	1,00
Determinants of Implementation: Contextual Factors	10 (100%)	0 (0%)	0 (0%)	0 (0%)	3 (30%)	7 (70%)	1,00
Implementation Strategies	10 (100%)	0 (0%)	0 (0%)	0 (0%)	3 (30%)	7 (70%)	1,00
Service and Patient Outcomes	9 (90%)	1 (10%)	0 (0%)	0 (0%)	3 (30%)	7 (70%)	1,00
Implementation Outcomes	10 (100%)	0 (0%)	0 (0%)	0 (0%)	4 (40%)	6 (60%)	1,00
Unintended Consequences	9 (90%)	1 (10%)	0 (0%)	0 (0%)	2 (20%)	8 (80%)	1,00
Economic Evaluation	10 (100%)	0 (0%)	0 (0%)	0 (0%)	1 (10%)	9 (90%)	1,00
Stakeholder Involvement and Engagement	9 (90%)	1 (10%)	0 (0%)	0 (0%)	4 (40%)	6 (60%)	1,00
Patient and Public Involvement and Engagement	9 (90%)	1 (10%)	0 (0%)	0 (0%)	4 (40%)	6 (60%)	1,00
IVC-E/Med							0,98

IVC-I: Content Validity Index at item level; IVC-E/Med: Average Content Validity Index at scale level.

**Conclusion:** The Brazilian version of the ImpRes-tool and guide showed good content validity indices, both at the item level and at the scale level, thus demonstrating its usability to guide project design and implementation research in the Brazilian context.

## References:

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