

Cultural Adaptation and Validation of Speech Handicap Index (SHI): A Scoping Review

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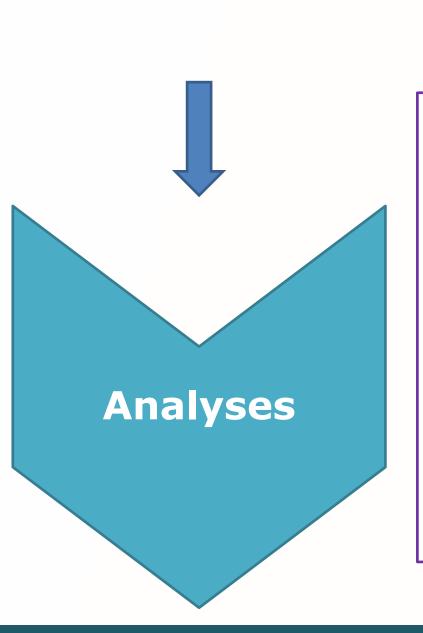
INTRODUCTION

- The Speech Handicap Index (SHI) is a self-reported speech-related quality of life assessment originally developed for measuring the psychosocial speech impact in patients with oral or pharyngeal cancer.
- The present study provides a scoping review of the literature on the validated SHI, with the purpose of identifying and documenting available studies and procedures for the cultural adaption and validation of SHI.

METHOD



• Prime databases including PubMed, EMBASE, and Google Scholar were searched for journal publications reporting validation of the SHI.



 Review and reference cross-checking was performed using a priori selection criteria. A body of literature related to SHI were scoped and publication quality categorized independently by two investigators. After applying all the screening criteria, articles that met the eligibility criteria, such as peer-reviewed and primary source articles written in English, were included in the review.

RESULTS

The scoping review yielded ten articles that met the inclusion criteria presenting the SHI in eight different languages, including Dutch, UK English, French, Korean, Simplified Chinese (Mandarin), Lithuanian, Italian, and European Portuguese. All studies reported validity and reliability, as shown in Table 1.

High reliability and validity between various language versions of the SHI were identified. The current scoping review provides a useful summary and could be a helpful precursor to a future systematic review.

Table 1: Summary of selected studies' samples and validity

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			Patients		Control						
	SHI Versions	n	Mean age	n	Mean age	Construct	Clinical	Group	Content	Convergent	Criterion
			(years)		(years)	Validity	Validity	Validity	Validity	Validity	Validity
	Dutch,	120	62.3 ± 9.7	111	56	+	+	+	_		_
	Rinkel et.al. 2008					•	•	•			
	English, Dwivedi et.al, 2010	55	59 ± 10	-	_	+	-	+	-	_	-
	French, Degroote et.al, 2012	118	57.9 ±16.38	112	49 ± 14	+	+	_	-	_	_
	Mandarin Chinese,	42	56.2 ± 10.6	-	_	+	-	+	-	_	-
	Li et.al, 2015										
	Korean,	56	56.8 ± 13.7	50	51.9 ± 9.3	+	-	_	+	_	_
	Park et.al, 2015										
	Lithuanian, Pribuisiene et.al,	46	61.7 ± 10.1	60	59.2 ± 13.1	_	+	_	+	_	_
	2017										
	Italian,	52	63.30 ± 13.63	100	57.71 ± 6.31	+	+	+	-	_	_
	Riva et.al, 2019										
	Italian, Mozzanica et.al, 2019	50	60.8 ± 13.6	75	46.2 ± 18.7	+	+	+	_	_	_
	French, Balaguer et. al, 2019	87	65.8 ± 9.6	21	62	+	+	_	-	+	+
	European Portuguese,	95	59.1 ± 10.7	83	55.5 ± 11.3	-	_	+	_	+	_
	Guimarães et.al, 2020										

DISCUSSION & CONCLUSION

- The present findings can guide future prospective SHI validation studies by defining the psychometric parameters of the existing versions of the SHI and demonstrate how to apply rigorous translation methods to appropriately adapt the PROM to the desired language and culture.
- We can have different cultures and tongues, but we should all speak the same language when it comes to developing, adapting and validating diagnostic instruments.

SELECTED KEY REFERENCES

- 1. Rinkel, Rico N., et al. "Speech Handicap Index in patients with oral and pharyngeal cancer: better understanding of patients' complaints." Head & Neck: Journal for the Sciences and Specialties of the Head and Neck 30.7 (2008): 868-874.
- 2. Dwivedi, Raghav C., et al. "First report on the reliability and validity of speech handicap index in native English-speaking patients with head and neck cancer." Head & neck 33.3 (2011): 341-348.

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