Cross-cultural Adaptation and Validation of the Singing Voice Handicap Index (S-VHI) Into Spanish

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RESULTS

Objectives

The self-evaluation of the voice, although subjective by definition, is of growing importance in daily clinical practice since it is the patient who perceives voice disorders. Specifically, on their physical, social and economic aspects, this self-evaluation is relevant when considering voice quality. This evaluation needs careful quantification as it is paramount, and needs to be compared and correlated with the data of the objective assessment.

Prior reports have demonstrated that voice disorders adversely impact patients’ lives, specifically on their physical, social, emotional and economic aspects. This is why a Voice Handicap Index (VHI) can be computed on the base of the patient’s answers to a carefully selected list of questions.

The Spanish version of the Singing Voice Handicap Index (S-VHI) was translated into Spanish from a validated English version. The questionnaire was completed by 29 dysphonic singers and 81 healthy singers between January and December 2009. Test-retest reliability, internal consistency and construct validity were performed.

Test-retest reliability:
Forty-two of 110 singers (38.1%) completed the S-VHI twice over a period of 2 to 8 weeks. Strong test-retest reliability for the total scores of the questionnaire was found (r=0.63; p=0.000).

For S-VHI scores correlate with the data of the objective assessment.

Internal Consistency and Item-Total correlation:
Overall reliability was analyzed using Cronbach’s alpha of 0.56, and the correlation between the total scores of the S-VHI and the self-rated overall severity of the voice handicap was 0.52 (p=0.000). Dysphonic singers had lower S-VHI scores than normal singers (ANCVA: F=10.9, P=.002).

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Construct validity:
Significant correlations were demonstrated between the self-rated overall severity of the voice handicap and the total scores of the S-VHI (r=0.52; p=.000). The total scores for the control group were significantly lower than those of the patients group (ANCVA: F=10.9, p=.002).

The Spanish version of the S-VHI shows high test-retest reliability and high item-total correlation. The average score of the S-VHI in healthy singers is 20% of the maximum possible score of the questionnaire, well above the average score in a healthy population for the spoken voice with VHI=30 (3.5%).

CONCLUSIONS

This study developed a Spanish version of S-VHI and tested its reliability and validity. High test-retest reliability and high item-total correlation were found. The Spanish S-VHI was also able to distinguish between the dysphonic group and the control group of singers.

The scores of the healthy singers do not tend to zero but have a mean of 26.4 18.3 points, 17.5% of the maximum possible score, well above the average score in a healthy population for the spoken voice with VHI=30 (8.7%).

REFERENCES