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Translations of the International Outcome Inventory for Hearing Aids (IOI-HA)

Traducciones del Inventario Internacional de Resultados para Auxiliares Auditivos (IOI-HA)

The International Outcome Inventory for Hearing Aids (IOI-HA) was developed as a product of an international workshop on Self-Report Outcome Measures in Audiological Rehabilitation (Cox et al, 2000). The workshop participants recognized a need to be able to combine and compare data from different investigations and clinical service models. Thus, the inventory was developed to facilitate cooperation among researchers and program evaluators in diverse hearing healthcare settings, including across national boundaries. By design, it is brief and general enough to be appropriate in many different studies. The goal is to append the IOI-HA items to other self-report outcome measures that might be planned for a specific application. The IOI-HA items will then provide directly comparable data that will allow combination or comparison across otherwise incompatible projects.

For this plan to be successful, it is essential to generate psychometrically equivalent translations in the languages in which hearing aid research and treatment assessments are performed. Elsewhere in this issue, there are two reports that reflect psychometric assessments of the original English version of IOI-HA in the USA and in Wales. A further report gives an assessment of the characteristics of a Dutch translation of the IOI-HA, used in The Netherlands. It is encouraging that all three investigations produced data reflecting similar inter-item correlations and two non-overlapping separate factors that were essentially identical across the studies.

These papers were presented at the meeting of the International Collegium of Rehabilitative Audiology (ICRA) held in Cardiff in May 2001. A number of the contributors to the original self-report workshop were present, and it was decided to organize members and their associates to generate translations of the questionnaire into a number of different languages. It was also decided to explore other applications of the questionnaire, of which a preliminary approach is presented in this issue by Noble.

The present article reports a set of 21 careful translations of the IOI-HA into other languages. All translations were performed by individuals who are well versed in the academic discipline and have the target language as their first language. Each translation was checked by at least one additional qualified individual to ensure that each item captures the nuances of the original English wording. Each translator carefully followed the design principles of the original version. There are seven items in the inventory, each accessing a different self-report outcome dimension. The items were written to be unambiguous, with few cognitive requirements and at a low reading level. Negative statements and reversed meanings were avoided. An attempt was made to eschew any cultural bias. All items were designed with five possible responses. The response categories for six of

the items were chosen so that their semantic distinctions (in English) were roughly equal (Levine, 1981). The seventh item requires an estimate of hours of daily use. To maximize the comprehensibility of the inventory, each item has a separate response continuum, and the responses are presented so that the most favorable item appears on the right. It is intended to present the translations in the appendices in copy-ready format so that they can be used immediately. These translations and any others that might have been generated are also available as downloadable files from the website www.ausp.memphis.edu/harl.

With the exception of the Dutch translation, none of the non-English translations presented here has been studied to determine its psychometric properties. The next appropriate step would be for each of the translations to be used with a group of native speakers of the target language. The psychometric properties of the translated inventory should then be determined and compared to those of the English version. The original English version should be used as a criterion, and changes should be made to the wording of translated items that do not appear to replicate the characteristics of the criterion.

This article presents translations of the IOI-HA only. However, this inventory represents the first in what was envisioned by workshop participants as a series of inventories. Other IOI versions could be used to assess and compare the outcomes of audiological rehabilitation using devices other than hearing aids. In addition, a version that addresses the rehabilitation result from the point of view of other individuals (i.e. significant others of the hearing-impaired person) could be very useful. Progress has been made in devising suggested wording for the English language items for these IOI offshoots (Noble, this issue).

Acknowledgements

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References

- Cox RM, Hyde M, Gatehouse S, et al. (2000) Optimal outcome measures, research priorities and international cooperation. *Ear Hear* 21:106S–15S.
- Levine N. (1981) The development of an annoyance scale for community noise assessment. *J Sound Vibration* 74:265–79.

助听器效果国际性调查

1. 在最近的两周时间里，您每天平均有几个小时使用助听器？

没用过 每天少于一小时 每天一至四小时 每天四至八小时 每天多于八小时

2. 想一想在使用现有的助听器之前，您在什么情况下最希望能够听得清楚。在最近的两周时间里，在以上情况下您的助听器对您有多少帮助？

根本没有帮助 仅有一点帮助 有中等程度的帮助 有很大程度的帮助 非常有帮助

3. 想一想您在什么情况下最希望能够听得清楚。在最近的两周时间里，即使在使用现有的助听器之后，对于以上情况您仍然感到有多少听力困难？

非常有困难 有很大程度的困难 有中等程度的困难 仅有一点困难 根本没有困难

4. 综合考虑优点和缺点，您是否认为值得佩戴现有的助听器？

根本没有价值 仅有一点价值 有中等程度的价值 有很大程度的价值 非常有价值

5. 在最近的两周时间里，使用现有的助听器之后，您的听力障碍对您的工作和日常生活有多少影响？

非常有影响 有很大程度的影响 有中等程度的影响 仅有一点影响 根本没有影响

6. 在最近的两周时间里，使用现有的助听器之后，您的听力障碍对您周围的其他人有多少干扰？

非常有干扰 有很大程度的干扰 有中等程度的干扰 仅有一点干扰 根本没有干扰

7. 综合考虑各个方面，佩戴现有的助听器使您对生活的满意程度有多少改变？

变得更糟 根本没有改变 仅有一点提高 有很大程度的提高 非常有提高

Chinese Version