

Letter to the editor

Using the Spinal Cord Independence Measure (SCIM III) by self-use.

Our paper entitled "Translation into Greek and initial validity and reliability testing of a modified version of the SCIM III, in both English and Greek, for self-use"¹ was published online in *Disability and Rehabilitation* recently. In our paper we failed to cite the work of Fekete et al (2013)² entitled "Development and validation of a self-report version of the Spinal Cord Independence Measure (SCIM III)". It is with our regret that this work came into our knowledge recently and only after the publication of our work.

Reading their work with great interest it became obvious that the two projects took place at similar times. Though both projects present the use of SCIM III by self-report there are some differences in the methods followed. To begin with, Fekete et al², adapted SCIM III for self-report (SCIM-SR) by omitting or decomposing categories, to facilitate self-reporting. We did not omit or decompose any of the original SCIM III response categories and only made grammatical adjustments. Furthermore, Fekete et al's² SCIM-SR was translated from English into German and it was the German version which has been validated. We tested for initial validity and reliability of both the English and the Greek versions. Fekete et al² acknowledge the fact that conclusions for the English version cannot be drawn from their study. Another difference lies within the samples used; where our participants were people with an incomplete SCI living in the community, Fekete et al's² participants were inpatients with either complete or incomplete injury.

Fekete et al² used the German versions of SCIM III and SCIM-SR to collect data. The authors claim to support criterion validity of their German version of SCIM-SR by having compared it with SCIM III. However, it is not reported whether a validation study for the German version of SCIM III had been conducted. We compared criterion validity by comparing SCIM III self-use and GR-SCIM III self-use with EQ-5D which had been previously validated. However, as not all subscales between the two scales matched only partial validation could be conducted, as explained in our paper¹ and future work has been proposed.

Fekete et al² greatly adapted the bladder management subscale because, as they say, it is impossible to measure residual urine volume by self-report. We did not adapt this subscale and there were only four missing responses, in this particular subscale, of the total of 219 participants. However, the reliability of the bladder management item was very low keeping the reliability of the whole “respiration and sphincter management” subscale at poor or unacceptable levels¹. As we comment in our paper¹, other studies had similar problems with this subscale^{3, 4} or had low but acceptable levels of Cronbach’s α ^{5, 6} pointing to possible problems with this subscale. As such, the adaptation of this subscale by Fekete et al² may be the solution to this problem. This now needs to be further tested in the English version and translated into Greek and tested for its psychometric properties.

Had we been aware of Fekete et al’s² study prior to our publication, we would not have altered our study since data had been collected and analysed prior to their publication. However, we would not have claimed that our study was the first one to have used SCIM III for self-use. Until today, to our knowledge, Fekete et al’s² study is the only one to test the validity of the German version of SCIM III-SR and recently the study by Aguilar-Rodríguez et

al (2015)⁷ to test the validity of the Spanish version for self-use. Our study remains the only one to have conducted initial testing on the psychometric properties of the English (and Greek) SCIM III for self-use.

We are looking forward to see the results of the testing for the psychometric properties of an English version of SCIM III-SR by Fekete's team or a different team if such a study is due. An interesting future study, using matched or similar samples, may be to compare the two versions of SCIM III for self-use aiming to identify if using a version which omits items or decomposes categories (compared to the original SCIM III) versus one that does not give different results.

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The authors of this letter declare that no conflicts of interest exist.

References

1. Michailidou C, Marston L, De Souza LH. Translation into Greek and initial validity and reliability testing of a modified version of the SCIM III, in both English and Greek, for self-use. *Disabil Rehabil*, 2015; Early Online 1-9 DOI: 10.3109/09638288.2015.1035454

2. Fekete C, Eriks-Hoogland I, Baumberger M et al. Development and validation of a self-report version of the Spinal Cord Independence Measure (SCIM III). *Spinal Cord* 2013;51:40-47.
3. Invernizzi M, Carda S, Milani P, et al. Development and validation of the Italian version of the spinal cord independence measure III. *Disabil Rehabil* 2010;32:1194–203.
4. Glass CA, Tesio L, Itzkovich M, et al. Spinal Cord Independence Measure, version III: applicability to the UK spinal cord injured population. *J Rehabil Med* 2009;41:723–8.
5. Itzkovich M, Gelernter I, Biering-Sorensen F, et al. The Spinal Cord Independence Measure (SCIM) version III: reliability and validity in a multi-center international study. *Disabil Rehabil* 2007;29:1926–33.
6. Kesiktas N, Paker N, Bugdayci D, et al. Turkish adaptation of Spinal Cord Independence Measure — version III. *Int J Rehabil Res* 2012;35:88–91.
7. Aguilar-Rodríguez M, Peña-Pachés L, Grao-Castellote C et al. Adaptation and validation of the Spanish self-report version of the Spinal Cord Independence Measure (SCIM III). *Spinal Cord* 2015;53:451-454 doi:10.1038/sc.2014.225.