

CORRESPONDENCE



Correspondence to “Test-retest reliability and validity of the Sitting Balance Measure-Korean in individuals with incomplete spinal cord injury”

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TO THE EDITOR:

It was with great interest that I read the recently published article by Lee et al. [1] on the adaptation and validation of the Korean version of Sitting Balance Measure (SBM-K) for persons with incomplete spinal cord injury (SCI). The effort of the authors is to be congratulated as the validation of this outcome measure will be important to local clinicians to improve the care of Koreans with SCI in need to improve their ability to maintain seated posture. In addition, the measurement properties investigated by the authors including the test-retest reliability, validity, and marginal measurements errors will help monitor the progress of interventions designed for persons with SCI with trunk impairments.

One important point of the author’s study that deserves comment is their justification for the need for the validation of the SBM-K. In their introduction, the authors affirmed that the validity and reliability of the available sitting balance measurements have not been established in persons with SCI. Lee et al. [1] stated that “Standardized scales developed for sitting balance assessment include the Sitting Balance Scale, Function in Sitting Test, Sitting Balance Assessment Tool, and Modified Functional Reach Test. However, these sitting balance assessments are subjective, and their validity and reliability have not been established”. This statement does not seem to be aligned with the current literature on the state of the measurement properties (i.e., validity and reliability) of clinical sitting balance measures among persons with SCI. In the recent years, clinicians and researchers have been working to improve the clinical assessments of sitting balance in persons with SCI. A quick search in the PubMed database using the keywords “sitting balance” AND “spinal cord injury” leads to a variety of sitting balance outcome measures specific for persons with SCI with established validity and reliability [2–4]. Examples of sitting balance measures with established validity and reliability include the Trunk Control Test—TCT (test-retest reliability, $K_w = 0.99$; internal consistency—Cronbach’s coefficient $\alpha = 0.98$; interrater reliability = 0.99; exploration of content, construct, and criterion validity) [4] or the Function in Sitting Test- FIST (test-retest reliability, ICC = 0.95; MDC = 4; internal consistency Cronbach’s coefficient $\alpha = 0.81$; with exploration of concurrent validity) [2]. In addition, systematic reviews [5, 6] describing in detail the measurement properties of these outcome measures according to the COSensus-based Standards for the selection of health Measurement Instruments-COSMIN are also available to guide the evidence-based practice of clinicians working with persons with SCI.

Taking into consideration the importance of sitting balance in the performance of activities of daily living among wheelchair users with SCI, it is evident that this field of study needs more attention. However, the body of the literature has been recently growing in the field to improve the evidence-based practice of physical and occupational therapists aiming at assessing and enhancing the sitting balance of persons with SCI [2–6]. The outcome measures highlighted above such as the TCT and the FIST-SCI present with appropriate measurement properties (i.e., validity and reliability) and can be used by clinicians and researchers to effectively assess persons with SCI with sitting balance deficits.

Libak Abou ¹✉

¹Department of Kinesiology and Community Health, College of Applied Health Sciences, University of Illinois at Urbana-Champaign, Urbana, IL, USA. ✉email: labou2@illinois.edu

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COMPETING INTERESTS

The author declares no competing interests.

ADDITIONAL INFORMATION

Correspondence and requests for materials should be addressed to Libak Abou.

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