IJSPT

ORIGINAL RESEARCH

CORRELATION OF SELF-REPORTED OUTCOME MEASURES AND THE SELECTIVE FUNCTIONAL MOVEMENT ASSESSMENT (SFMA): AN EXPLORATION OF VALIDITY

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ABSTRACT

Background/Purpose: The Selective Functional Movement Assessment (SFMA) is a clinical model used to assist diagnosis and treatment of musculoskeletal disorders by identifying dysfunctions in movement patterns. Based on the premise that addressing movement dysfunction is associated with an improvement in patient outcomes, the validity of the SFMA would be strengthened by observed improvement in self-reported function being associated with change in movement patterns. The purpose of this study was to explore the validity of the SFMA by determining if a correlation exists between a change in self-reported outcome measures and attributes of the assessment.

Methods: Eighty-five clinical subjects (20.3 $\pm$ 1.6 years) were administered the Patient-Specific Functional Scale and one of four region-specific outcome measures followed by the SFMA top-tier movements. When deemed appropriate for discharge or following six weeks of therapy by an independent physical therapist, each subject repeated the outcome measures and was re-evaluated on the top-tier tests by the same initial assessor who was blinded to the subject's self-reported outcomes. Correlations between changes in outcome measures, number of painful movements and measures of movement quality (number of dysfunctional movements and criterion scores) were calculated with Spearman rank correlation coefficients. Subjects were analyzed as a consolidated group and by each region based on primary complaint.

Results: Fair to good positive correlations between improvements in self-reported outcomes and decreases in the number of painful patterns were noted for the complete dataset and for those with shoulder girdle and lumbopelvic complaints (r_s = 0.28, 0.52, and 0.41, respectively). Subjects with lumbopelvic complaints demonstrated fair positive correlations with improvements in self-reported outcomes and decreases in the number of dysfunctional patterns (r_s = 0.41 and 0.46). No correlations between changes in outcome measures and criterion score were observed.

Conclusion: Improvements in self-reported outcome measures were associated with fewer painful movement patterns of the SFMA. Improvements in self-reported function were not related to changes in movement quality, except for subjects presenting with lumbopelvic complaints.

Level of Evidence: 2b

Key Words: Functional movement, outcome measures, Selective Functional Movement Assessment (SFMA), validity.

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DOI: 10.16603/ijspt20170931