Reviewer's report

Title: Test-retest reliability of temporal and spatial gait parameters measured with an instrumented walkway system

Version: 1 Date: 9 March 2004

Reviewer: Meg Morris

Reviewer's report:

General
This article addresses an important topic for allied health clinicians: whether the spatial and temporal parameters of gait can be measured reliably over a 1 week period using a computerised gait mat system. Although several other authors have already documented the reliability of instrumented walkway systems, this is the first publication on retest reliability over a 1 week interval.

Major Compulsory Revisions (that the author must respond to before a decision on publication can be reached)
N/A

Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)
(1) Table 1 has 2 columns for means for each of preferred and fast walking speeds - are these 2 columns for the right and left legs? or are they data of week 1 and week 2 (table needs to be re-labelled to make this clear).
(2) The justification for the method of statistical analysis is exceptionally brief and needs to be expanded by 60-80 words to explain why that particular statistical approach was used.
(3) As well as providing reliability coefficients, the authors need to add data on the error of measurement, the change scores from week 1 - week 2 and the standard error of measurement / 95% confidence intervals around the change scores.
(4) The manuscript needs to be edited to enhance English expression throughout. In some places the tense is inconsistent.

Discretionary Revisions (which the author can choose to ignore)

A brief section needs to be added on:
(1) the limitations of this experiment
(2) further implications for clinical practice

What next?: Accept after minor essential revisions

Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Needs some language corrections before being published

Statistical review: No

Declaration of competing interests: