Reviewer’s report

Title: Reliability of the Multidimensional Pain Inventory and stability of the MPI Classification System in chronic back pain

Version: 1 Date: 25 June 2012

Reviewer: Roger Hilfiker

Reviewer’s report:

The reviewed study evaluated the reliability of the German version of the Multidimensional Pain Inventory (MPI) and the stability of the classification system based on the MPI in a new setting and a different country (than previous similar studies were performed) and in a group of patients with chronic musculoskeletal pain to reassessment of the transferability of the instrument. One reason to assess the reliability and stability in a Swiss (German speaking) context was that the reliability of the German language was only assessed once with a small sample and that other studies to assess stability mainly used patients with fibromyalgia. This present study involves a large sample size of 204 patients with mainly chronic non-specific back pain. The authors evaluated the stability of the subgroup classification. In addition they evaluated the internal consistency of the items within the scales as well as the reliability on scale level.

The study question is relevant as the authors did an important step in the validation process (transferability/generalizability). The data are sound, there are no missing values, which is plausible given the setting of an inpatients rehabilitation. The interpretation is well balanced, however there might be more about the fact that the authors of the current study state that the MPI is stable in spite of the other studies stating that it is not that stable (see specific comments). However, the conclusions are supported by the data of the current study. The methods used are appropriate and well described (or referenced) to allow others to replicate the work.

The present manuscripts reports on a topic relevant for researchers and practitioners in the field of chronic musculoskeletal pain.

General Comments from the Reviewer:

The manuscript is well written and an important step in validation of an instrument. However, I have some minor comments (Minor Essential Revisions):

Specific comments from the Reviewer:

Methods, page 7, 1st para: The authors use 1), 2), 3) for the exclusion criteria. Would it make sense to do the same for the inclusion criteria (i.e. use numbers)?

Methods, page 7, para “outcome measures”: Is the MPI really a Likert scale? In my understanding Likert type items have anchors such as strongly agree and strongly disagree, etc (and a neutral midle point, which is not the case in the
items from the MPI).

Methods, page 9, para 3: Which formula for the ICC was used? (e.g. was the systematic error considered (in SPSS: consistency versus agreement)?) If the systematic error was not considered, please consider to replace the terms agreement (and no agreement) with consistency or a synonym. I guess (by comparing the ICCs to the pearsons r) that systematic error was not considered i.e that the method “consistency” was chosen in spss (?). See Weir 2005 “Quantifying Test-Retest Reliability Using the Intraclass Correlation Coefficient….”. Journal of Strength and Conditioning Research 2005 19(1) 231-240.

Methods, page 10, para 2: The correct standards for kappa, as reported in reference 24, should be: <0 (not < 0); 0.00 – 0.20 (not 0.01 …).

Discussion, page 14, first para: typo ? (improvement of locus? of control…

Discussion, page 14, para 2: The authors state that the MPI is stable. Why do they believe their results more than they believe the results of references 10 to12? Couldn’t it be that the MPI is not stable in patients with fibromyalgia but stable in patients with chronic non-specific back pain? Please consider to argument more your statement and to discuss a little bit more the difference between this study and the studies of references 10 to12. Could you please discuss more the differences in percentages of unstable patients at retest in table 5 between the studies?

Table 1: what is the difference between College and University graduate?

Figure 1 is excellent.

Level of interest: An article of importance in its field

Quality of written English: Acceptable

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:

I declare that I have no competing interests