Review Peer J

Instrumental validity and intra/inter-rater reliability of a novel low-cost digital pressure algometer

<u>Abstract</u>

Line 22- Missing verb...would allow pressure pain assessment to a variety....

Line 24- Exchange ',' for the word AND

Line 26- It should say 60 random compressions (number before the word)

Line 28- Not sure if use of numerals is correct if value is less than 10

Line 36- Sentence starting with The results....

The description of the conclusion, second sentence in line 36 is unclear, as the findings do not ensure anything. If the conclusion is that the results could potentially help make the use of this method more widespread among clinicians, that is what should be emphasized.

Conclusion should be organized that the findings are grouped together first and that the potential usefulness of this information is stated last.

Line 38- Remove first ','

<u>Introduction</u>

Line 42- It should say Visual 'analogue' scale (not analogical)

Line 45- It is not clearly written. Please rewrite for clarity

Line 47- Add the word 'by' between the word diagnosis of pain and providing

Line 57- The word weighting does not appear to be used correctly here

Line 61- Describing the force platform is out of place in this paragraph. As it is written, it is unclear if the force platform is used as a separate comparison or if it is a component of the design with adapted hanging potable scale.

The focus of introduction should be to present relevant background information and to introduce specific method being tested. If a force platform is used for comparison purpose only, this should be discussed in the later section and not discussed here.

Line 63- Incorrect use of the word 'Property'.

Line 64-66- This is redundant as this was already mentioned briefly in Line 54. Consider removing the sentence in Line 54

Line 67-69- This is also a bit redundant and should be combined with previous statements regarding potential use in low-income and developing countries.

Line 74- Word 'Enough' before the words validity and reliability

M&M

Line 102- It should be stated that the pressure was applied using pressure algometer.

Line 117- 122- Unclear and confusedly written. Are all the details regarding non-consecutive days/hours relevant to the paper?

Line 130-132- Explain the relevance of this statement and also the statement is poorly written.

Results

Line 155 and 162 should say 'No significant differences'

Line 158, 164, 171, 173, 177, 179- 'Very good' is a subjective assessment and should not be used in the Results section, Use 'statistically significant' instead if appropriate

Discussion

Line 186 and 187- No significant difference

Line 188- This is not hypothesis as stated

Isometric peak compression force was never stated in the hypothesis in Introduction part.

Line 189- Authors need to be more specific about which equipment they are referring to. In this line PA is referred to as an alternative to an expensive equipment. In line 54 it is stated that PA is often expensive.

Line 190- This should be a new paragraph

Line 195-Line 196- 'Diagnostic tool' should be used instead of 'diagnostics'.

Line 215-Reference needed

Line 217- Authors mention several studies, but there is only one reference

Line 215-Authors should specify whether PPT was high or low in the specific correlation

Line 223- Same as line 215

Line 227- States that the excessive alcohol consumption people were excluded, however in M&M it simply states the length of time that alcohol was not consumed during with no mention of amount

Line 228- 235- It is unclear what this paragraph adds to the discussion. Consider rewriting to emphasize the contribution that the modified PA adds.

Line 238-Line 241- I don't think it is possible to draw a conclusion that various muscle bellies will be equally valid based upon testing using the force platform and LLC.

Line 244- Uses authors name when citing. In other places it is used in the format 'Studies written....'

The format used in line 244 is written in a more professional manner compared to the rest of the paper when other authors were cited. Consider revising.

Line 244 -Which 3 measures? Be specific

Line 254- PA is mentioned here in comparison to force platform but not load cell. Does that matter?

Line 255- The issues of portability and user system have not previously been mentioned regarding the standard pressure algometers. Based on my experience, standard pressure algometers are portable and easy to use.

Conclusion

Line 261- Here the tool is described as adapted PA, however it has been referred to just as PA throughout the paper and the specific adaptations made and differences between this equipment and standard algometer MUST be described in detail.

Line 262- Incorrect use of 'Is warranted'- Are you trying to comment on the validation?