Reviewer’s report

Title: Effectiveness of a theory-based multicomponent intervention (Movement Coaching) on the promotion of total and domain-specific physical activity: a randomised controlled trial in low back pain patients

Version: 0 Date: 30 Jul 2017

Reviewer: Mary Barbe

Reviewer’s report:

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This is a very interesting study with profound implications, that different approaches are needed to enhance physical activity in subjects with chronic low back pain. The results surprised me, that the multicomponent intervention was not more effective than the low intensity intervention at improving physical activity overall or in the three subdomains. The study was well designed and managed, despite the high drop out rate. The statistics are appropriate and well described. The handling of missing data was appropriately conservative. The authors were very forth coming with all data and findings. Both strengths and limitations in the interpretation were provided. I particularly agree with the interpretation that the overall findings may be due to overestimation of a subject’s own physical activity at baseline. The conclusions clearly match the data and is strong.

There are a few grammatical errors that need correcting:

Page 5, line 83: Add an "at" to "interventions are more effective AT promoting physical activity..."

Page 12, lines 247-250ish: Use of semicolons to separate groups and their definitions would be less confusing than the current "/" , which I first interpreted as "divide".

Page 13, line 287. Add a "to" so that it reads: "a higher chance of not replying TO the two postal follow-up..."

Two minor issues:

Page 12, line 267 should refer to Figure 2 rather than Figure 1.
Page 33, Table 7. Significant results should be bolded, as in the other tables.

One major issue:

Why are variables/findings duplicated in Table 5? I am unsure what the two replications of total, workplace, etc, is meant to indicate as each replicate has different results. Perhaps a subheading is missing in the table.

Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

Yes

Does the work include the necessary controls?
If not, please specify which controls are required in your comments to the authors.

Yes

Are the conclusions drawn adequately supported by the data shown?
If not, please explain in your comments to the authors.

Yes

Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?
If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.

I am able to assess the statistics

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