Reviewer’s report

Title: The Effect of Exercise as Adjunctive Treatment on Quality of Life for Individuals with Alcohol Use Disorders: a randomized controlled trial

Version: 1 Date: 24 Apr 2019

Reviewer: William Haydock

Reviewer's report:

This paper reports on an interesting and potentially valuable piece of analysis. However, the paper would benefit from clarifying some points of analysis and argument prior to publication. I list these instances below.

p.2: When setting the context for the study, with the phrase 'Alcohol-dependent individuals may experience a better quality of life when supplanting their treatment with exercise', it would help if this was explained to be either a hypothesis the study is trying to test (i.e. it is possible that people may benefit from exercise), or a statement of fact (i.e. some individuals *do* receive this benefit) based on previous research. If it is the latter, presumably the aim of this study was to determine in more detail who benefits from exercise?

p.3 The following phrase (lines 5-7 of the Background section) would benefit from unpacking to explain more clearly what is meant: "treatment of AUD is associated with a range of compliance factors, which means that even when an individual enters the treatment facility, his/her risk of treatment interruption and relapse remains high". The general reader would probably be helped by explaining 'compliance factors' and what exactly the 'association' is understood to be.

p.10: The key findings could perhaps be more clearly emphasised in this section. At the moment the methodological discussion of the difference between 'completers' and 'non-completers' is given equal (or even greater) prominence compared to the key finding which is, if I've understood correctly, that there did not seem to be a significant effect on quality of life produced by the two exercise regimes being tested in this study. This could be spelled out more clearly for the reader.

p.12:

(i) The phrase 'may therefore no longer be existing on long term' does not make sense. Perhaps what is meant is a phrase like 'may therefore not be maintained in the long term'?

(ii) The second paragraph, with sentences beginning 'Nevertheless' and 'However' does not make sense as an argument. The authors should spell out their reasoning more clearly. I am not sure
what point is being made about drop out rates and the impact these might have on modelling the effects of the interventions. Perhaps the first sentence (beginning 'Nevertheless') fits better, if edited, with the previous paragraph discussing follow up and drop out rates?

p.13: The point "baseline values of quality of life were used to determine follow-up values for one third of the study sample" is important and could be highlighted more clearly earlier in the paper, perhaps in the methodology section.

I have not discussed the statistical methodology here as this is not an area where I have sufficient knowledge or expertise, and therefore I have recommended that another reviewer take on the task of commenting on this. However, this appears to have been covered sufficiently by the reviewers of the first submission.

The abstract for this paper, in particular, is clear and outlines the substance of the article well. If this clarity of writing and explanation can be brought into the main body of the paper, I would welcome publication of this article as an interesting and valuable contribution to the literature regarding alcohol use disorders.

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 recommend additional statistical review

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