Author’s response to reviews

Title: 'Walk This Way': Results from a pilot randomised controlled trial of a health coaching intervention to reduce sedentary behaviour and increase physical activity in people with serious mental illness

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Author’s response to reviews:

Thank you to the reviewers for their helpful and constructive comments. Please find our responses below.

Justin Chapman (Reviewer 3): A nice write-up. The authors have gone through multiple reviews and the article is well-written. A couple minor suggestions:

1. First sentence in the second paragraph of the intro could be made clearer with a comma or two, or breaking it up into two sentences.

We have changed this by breaking it up into two sentences
2. I know the protocol is published elsewhere, but just stating "biometric tests" (2.4 Procedure, first paragraph) seems a bit too vague for the Methods section.

We have now stated that the baseline measures collected can be found in section 2.6.2 (rather than duplicate what we have written there)

3. Similarly, the amount participants are reimbursed at each assessment point could be stated here (2nd paragraph)

We have added this information at the end of section 2.4

4. Clarification needed between 2.4 and 2.5: 2.4 states randomisation occurred after completion of baseline assessments (which would ensure concealed allocation), but in 2.5 it states researchers were blind to allocation at the time of assessments implying allocation may have been done prior. This doesn't necessarily break concealed allocation, but it raises additional questions about the randomisation method that have been left unclear in this article (e.g. if block randomisation was used researchers can potentially predict allocation, which has been shown to affect results in previous research).

We have clarified that we used simple randomisation and given more details of the procedure - ie, that researcher took an unopened envelope with allocation status and opened this with the participant after the baseline assessment completed.

5. 2.8 Data management: is pseudoanonymised a term commonly used in your experience? I'm accustomed to "re-identifiable", but it could just be a difference in terms used locally (I'm located far from the motherland)

We have changed this to ‘anonymised’ as we appreciate the term ‘pseudoanonymised’ may not be widely used.

6. 2.9 Analysis - some information about how the accelerometer data was analysed is needed here. What thresholds did the authors use? How did you define a valid day?

The thresholds used for the accelerometer data are given in Section 2.6.2. we defined a valid day as one where the accelerometer had been worn and data recorded for a complete 24 cycle.
7. In results section, it's a little strange to state the intervention group had a 'relative excess of men'… Suggest just stating that the proportion of men was significantly greater than in the control group if a statistical test was performed and stating the test statistic. If e.g. chi-square wasn't performed than this probably isn't worth mentioning.

We have taken this statement out.

8. Table 1: It'd be beneficial to state sample sizes in the table. Also, the smoking status numbers don't add to 20 in either the intervention or control group…

We have added sample size and corrected the smoking status numbers.

Robert Stanton, BHMSc (Hons) PhD (Reviewer 4):

9. P6, L45. Although the intervention is described elsewhere, not all readers may have access to the protocol. At least identify this was a mixed methods study, and identify if the interviews were also undertaken at the same location and by whom within the research team.

We have added more details on p6 to explain that this was an RCT with a process evaluation which included interviews with participants.

10. P7, 34. Under Procedure (2.4). Please provide examples of biometric tests conducted.

We have now stated that the baseline measures collected can be found in section 2.6.2 (rather than duplicate what we have written there)

11. P7, L58. Please describe the randomisation procedure. I assume simple randomisation where integers from 1-40 were randomised into 2 sequences of 20 numbers, but please advise if block or other forms were used. Were participants provided with their allocation in an opaque envelope, or was that given directly to the researcher?

We have confirmed that this was simple randomisation and clarified that the researcher took an unopened envelope with allocation status to the baseline assessment which was opened with the participants after the baseline assessment was done.
12. P9, L18. The abbreviation for metabolic syndrome should be used from the first mention in P5, L7.

This has now been done—all mentions of metabolic syndrome after first mention use the abbreviation.

13. P10, L39. What were the checks and valid values. I assume this is well described in the protocol, but perhaps adding small details including what was checked (PA values well above expected or PA values were truncated where a pre-set threshold was exceeded). Who undertook double data entry and who was this then checked by?

We set valid values for the outcome measures used. The accelerometer data and other physical health data were visually inspected by JW and BS when entering data. Unfortunately due to resource restrictions we were unable to do double data entry. We have removed this statement from the paper.

14. P10, L55. Since this is a mixed methods study, there should be a description of how qualitative data were obtained and analysed including the framework for analysis.

We have added that the qualitative data was obtained from interviews with intervention participants and analysed using thematic analysis.

15. P13, L12. Please see previous comment regarding qualitative analysis. Were these semi-structured one on one interviews or focus groups. In table 2 it is usual to reference the quote. I assume these all came from the intervention group? References would be in the form (F/32y) to indicate the comment came from a 32yo female. If qualitative data were obtained during focus groups, the FG number should be included. Also were all completing participants interviewed or only selected participants.

We have clarified in Section 2.9 page 11 that the interviews were all from intervention participants and added the details of the participants in the format suggested. We now also state that five participants agreed to be interviewed.

Please note that we have also made changes to the manuscript as agreed with the Editorial Office. these changes are highlighted in Section 4.2 p17, Section 4.3 p18 and Section 4.5 p19-20