

Designing a feasible exercise intervention in first-episode psychosis

Fisher, Emily; Wood, Stephen; Upthegrove, Rachel; Aldred, Sarah

DOI:

[10.1016/j.psychres.2020.112840](https://doi.org/10.1016/j.psychres.2020.112840)

License:

Creative Commons: Attribution-NonCommercial-NoDerivs (CC BY-NC-ND)

Document Version

Peer reviewed version

Citation for published version (Harvard):

Fisher, E, Wood, S, Upthegrove, R & Aldred, S 2020, 'Designing a feasible exercise intervention in first-episode psychosis: exercise quality, engagement and effect', *Psychiatry Research*, vol. 286, 112840.
<https://doi.org/10.1016/j.psychres.2020.112840>

[Link to publication on Research at Birmingham portal](#)

General rights

Unless a licence is specified above, all rights (including copyright and moral rights) in this document are retained by the authors and/or the copyright holders. The express permission of the copyright holder must be obtained for any use of this material other than for purposes permitted by law.

- Users may freely distribute the URL that is used to identify this publication.
- Users may download and/or print one copy of the publication from the University of Birmingham research portal for the purpose of private study or non-commercial research.
- User may use extracts from the document in line with the concept of 'fair dealing' under the Copyright, Designs and Patents Act 1988 (?)
- Users may not further distribute the material nor use it for the purposes of commercial gain.

Where a licence is displayed above, please note the terms and conditions of the licence govern your use of this document.

When citing, please reference the published version.

Take down policy

While the University of Birmingham exercises care and attention in making items available there are rare occasions when an item has been uploaded in error or has been deemed to be commercially or otherwise sensitive.

If you believe that this is the case for this document, please contact UBIRA@lists.bham.ac.uk providing details and we will remove access to the work immediately and investigate.

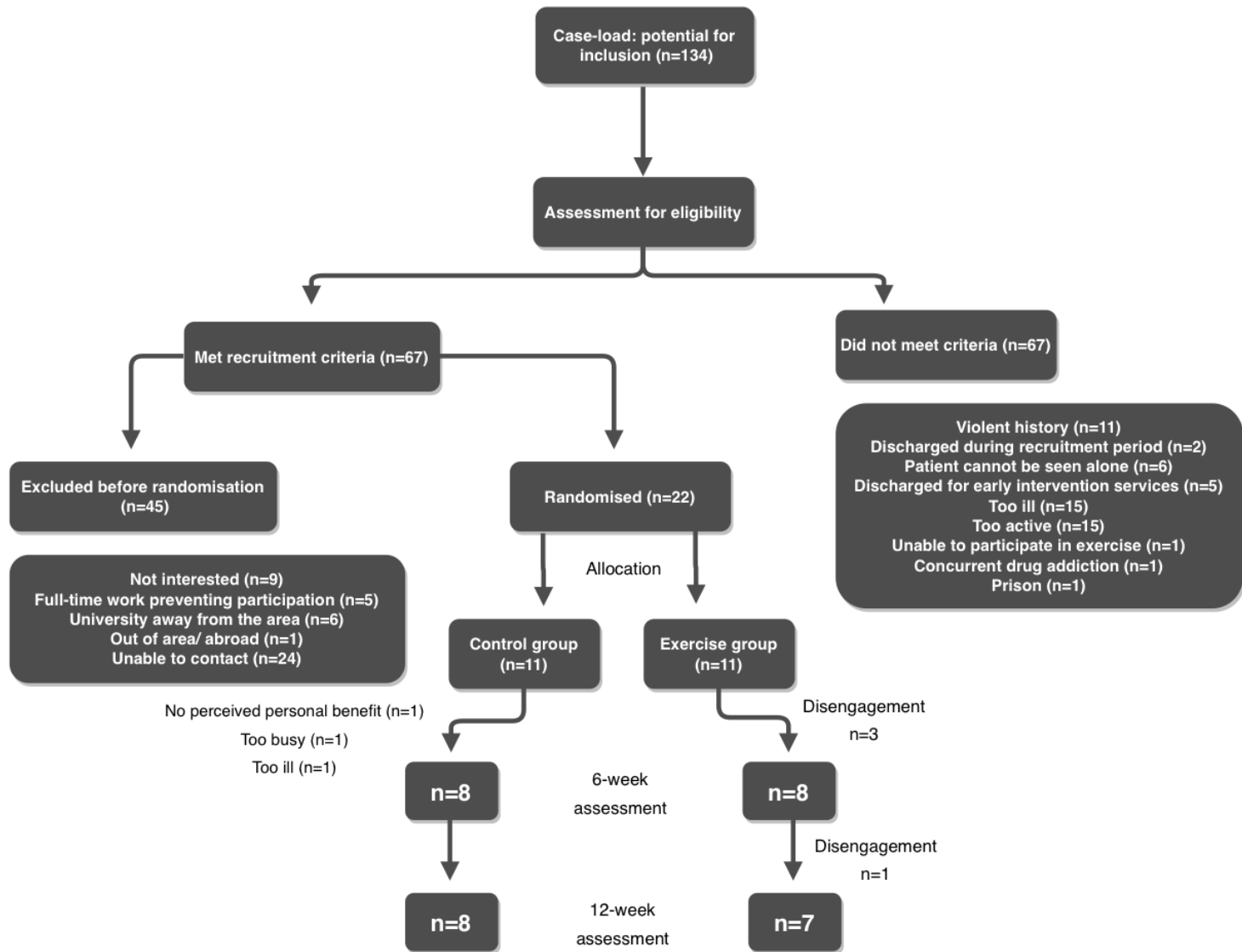


Figure 1. Consort diagram detailing the recruitment and retention process of the study. Of the potential 134 participants identified from the Early Intervention caseload, only 67 met recruitment criteria, and of those, 22 participants were randomised to enter either the control group or the exercise group. 8 participants completed the control arm of the study, and 7 the exercise arm.

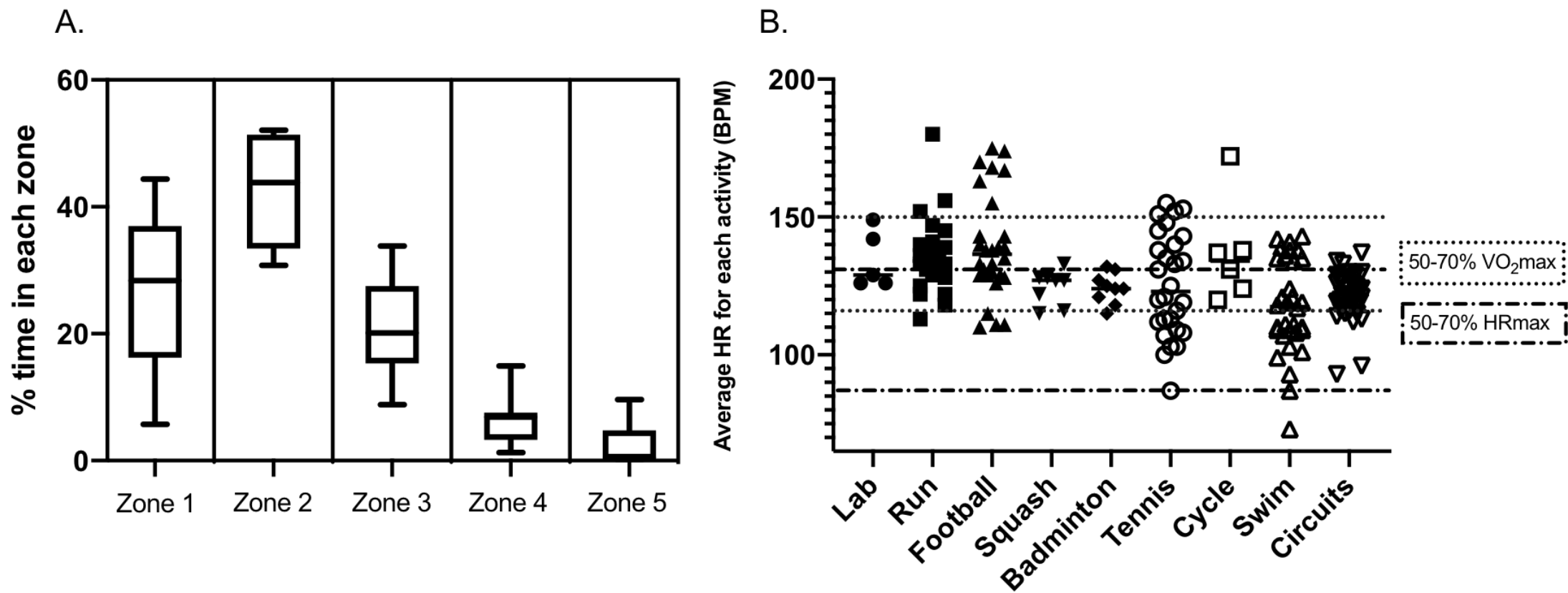


Figure 2. (A) The heart rate zone distribution for each exercise session during the intervention. Median values are expressed, along with median and upper and lower quartiles in the box and whisker plots. (B) The heart rate during each activity type, including bands representing 50-70% HRmax- the most commonly defined 'moderate intensity' and this studies' own target for the intervention of 50-70 VO_2max .

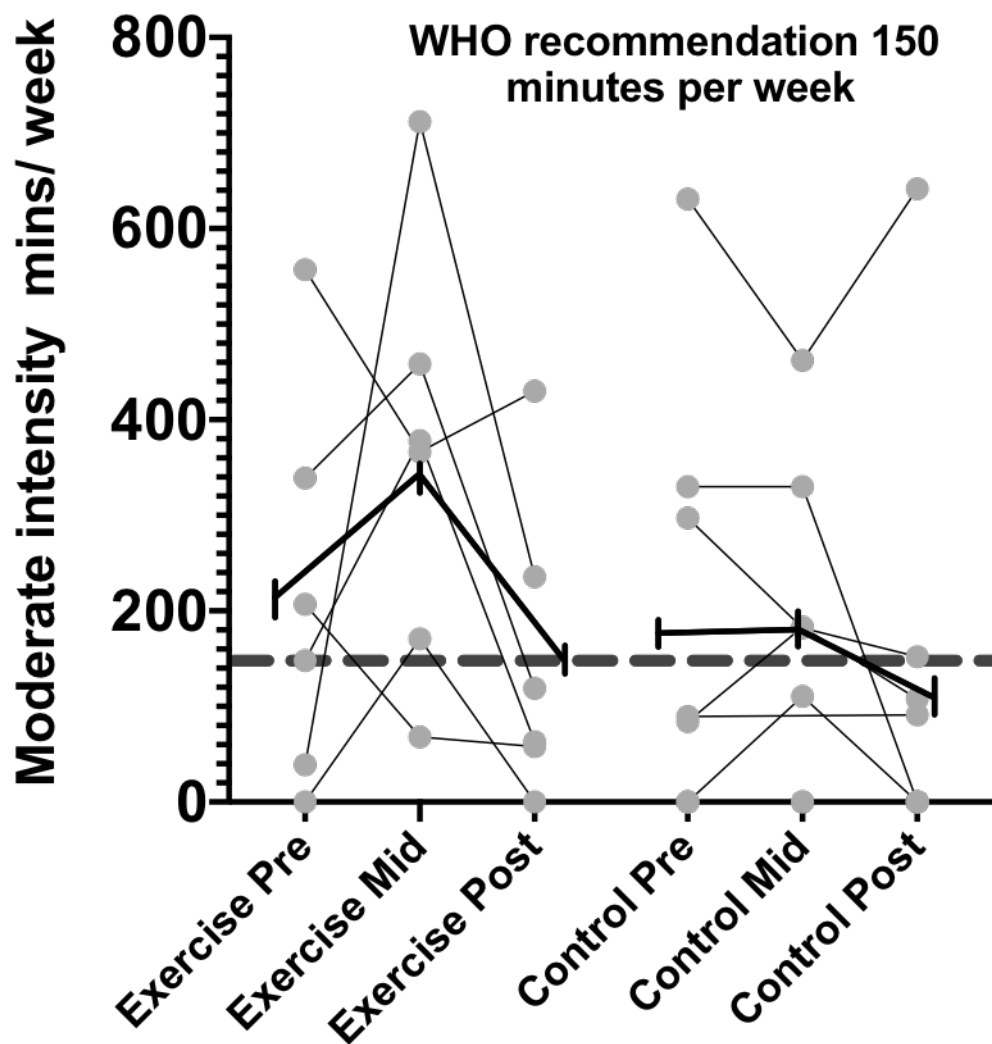


Figure 3. Moderate intensity minutes of exercise achieved at baseline, mid-point and post-intervention, alongside the threshold for WHO (World Health Organisation) recommended 150 minutes per week (grey dashed line). Data is expressed as individual values (grey dots) and mean (black).

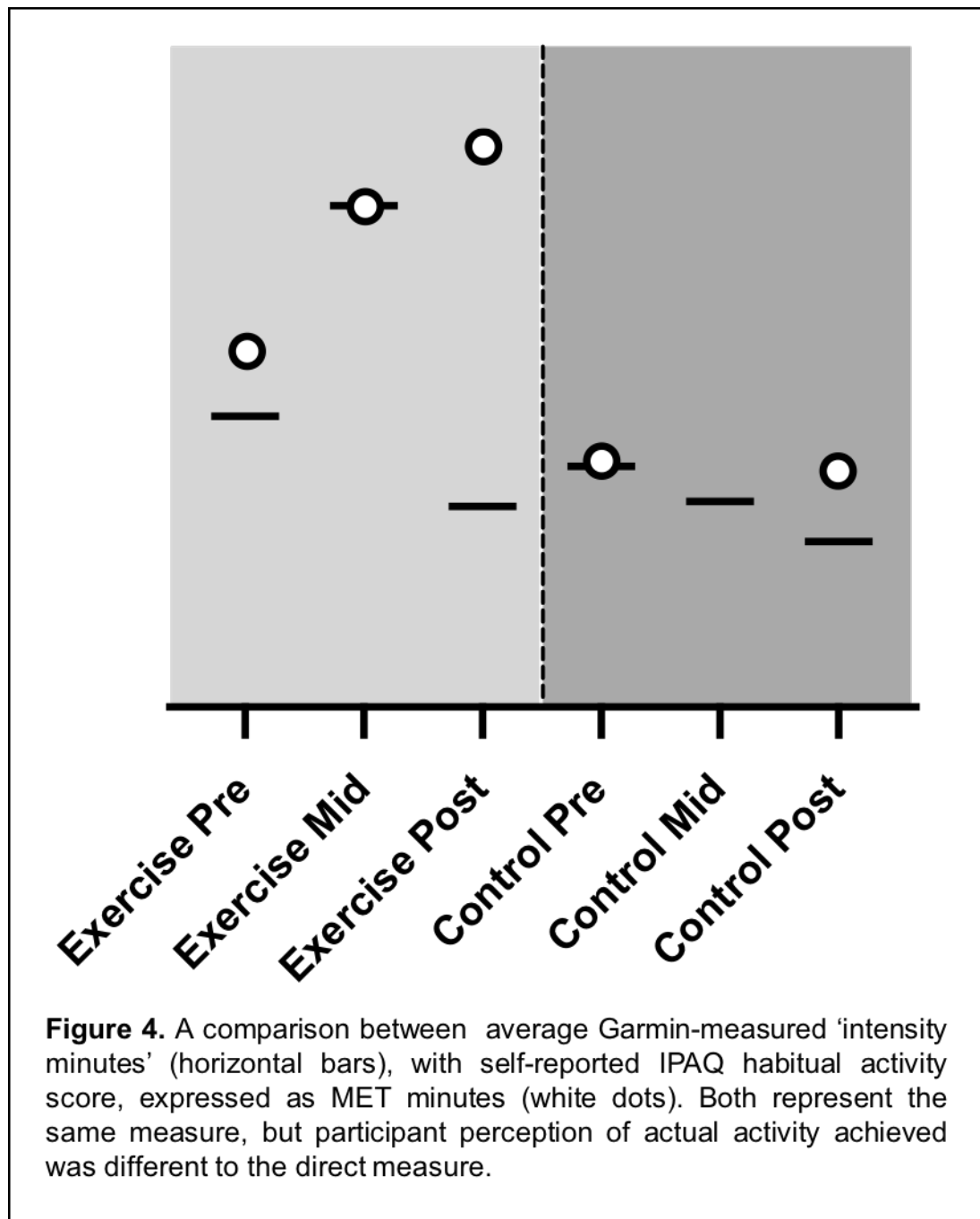


Figure 4. A comparison between average Garmin-measured 'intensity minutes' (horizontal bars), with self-reported IPAQ habitual activity score, expressed as MET minutes (white dots). Both represent the same measure, but participant perception of actual activity achieved was different to the direct measure.

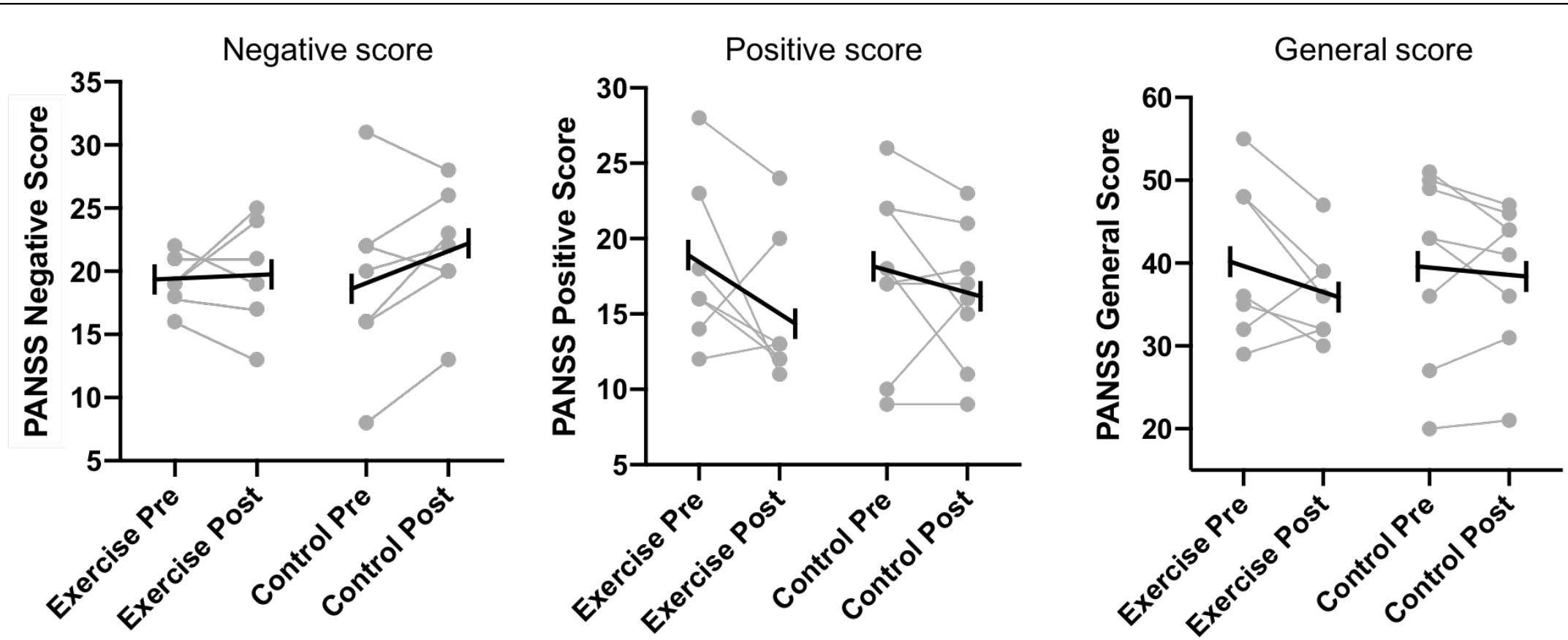


Figure 5. PANSS (Positive and Negative Symptom Score) psychotic symptom interview results at baseline and post intervention for exercise and control arms of the study. Individual results are expressed (grey) versus mean values (black).

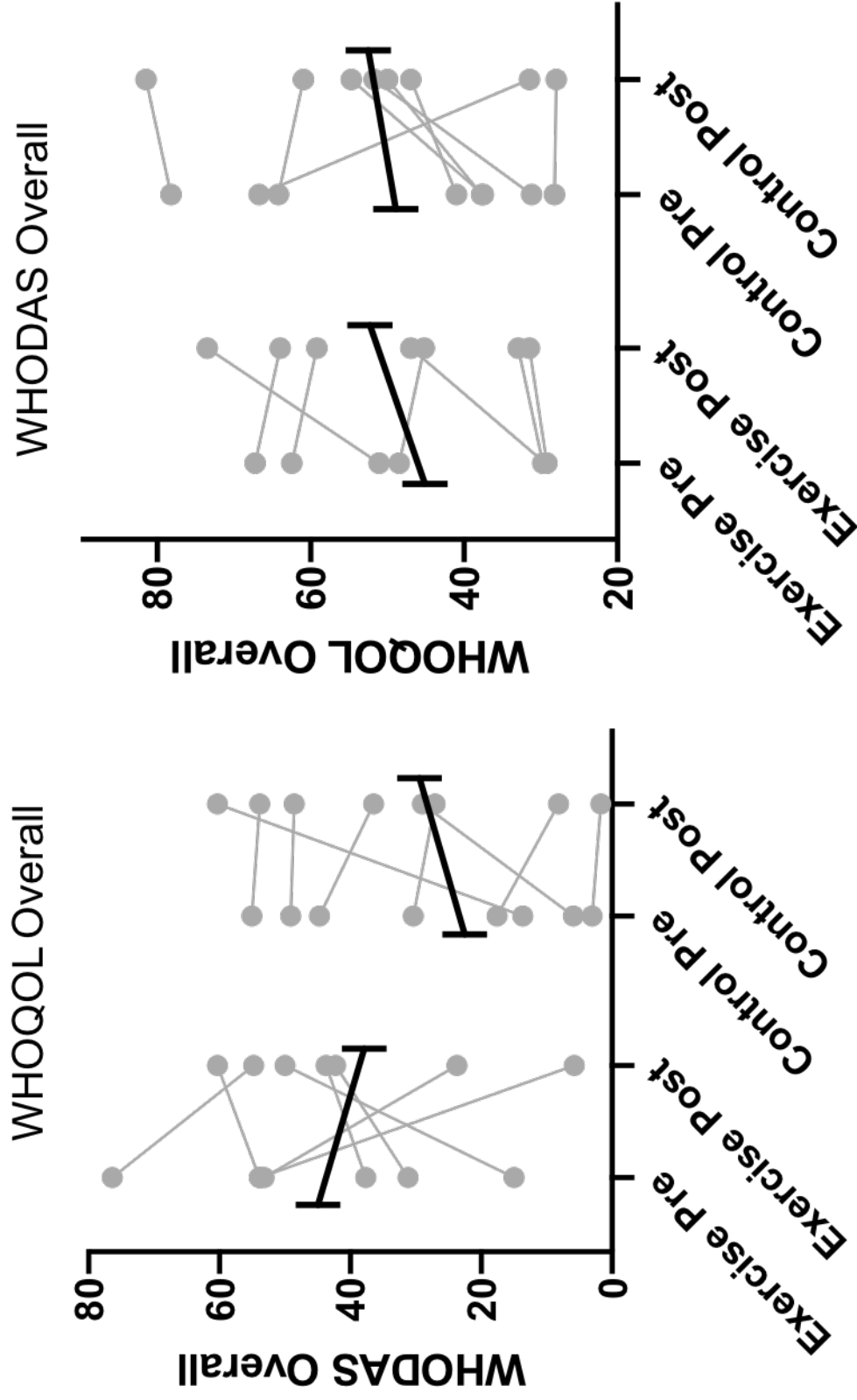


Figure 6. WHOQOL (World Health Organisation Quality of Life scale) and WHODAS (World Health Organisation Disability Assessment scale) questionnaire results. Individual results are expressed (grey) versus mean values (black).