Reviewer’s report

Title: How active are women who play bingo: A cross-sectional study from the Well!Bingo project

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Reviewer: Britni Belcher

Reviewer's report:

- This manuscript employed a self-report and objective measure to describe physical activity and sedentary time in low socioeconomic Scottish women who regularly attended bingo. The authors stated the goal was to use this data for intervention development in the target population. Not surprisingly, the findings indicated that physically active time was over-reported via questionnaire compared to accelerometer data. In addition, older women were more sedentary and less physically active than younger women.

- The manuscript was well-written, however the data analysis was somewhat simple (only providing cross-sectional descriptive statistics), and prior research has already determined that these two methods of assessing physical activity and sedentary behavior do not often correspond. While I agree that it's important to develop tailored interventions for this population, this was not expanded upon on the Discussion section and it is unclear what this analysis adds to the literature.

- Were the self-report questionnaires and accelerometer data collected over the same week? If so, it seems that the authors may be missing out on a unique opportunity to use the self-report questionnaire data to provide information on the types of physically active and sedentary behaviors that were being performed as captured by the accelerometers. This could be important because it could help target specific activities that could be encouraged (e.g. walking) or discouraged (e.g. time spent watching TV). This seems important for intervention development, which the authors state is the overall goal of the project. Suggest adding some statistics on concordance between self-reported activities and acceleration-measured time spent in each activity category.

- Were there differences in the self-report and accelerometer-measured activity levels by health status? Was one measure more strongly associated with health status? This could be added to the analysis.
- What activities accounted for older women spending more time sedentary and less time physically active than younger women? They have time diaries, so it seems like they could get that information to possibly target specific types of activities to limit throughout the day, or to replace with light or moderate PA.

- Tables 1 and 2: there are different sample sizes for each of the items. Was this due to women not completing the questionnaire, or that they didn't report certain activities (e.g. 'Time spent sitting on a weekday' has an n=90 but 'Meeting 150 mins PA guidelines' has an n=139.

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?
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I am able to assess the statistics

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