Reviewer's report

Title: Association between physical activities and school records in Korean adolescent students

Version: 7 Date: 6 March 2012

Reviewer: Nancy Brener

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Generally speaking, the author has been responsive to the reviewers' comments, and the manuscript is greatly improved as a result. Only a few minor essential revisions remain:

1) In the Abstract, the author states that “Compared to boys who did not regularly participate in any vigorous PA, those who did so 2, 3, or 4 times a week were more likely to report an average or above-average academic performance” and uses similar language throughout the Results paragraph. The use of “more likely” here is not technically correct because odds ratios were used to determine the extent of this relationship. To be accurate, the phrase “had greater odds” should be used, as is done in the Results section of the paper.

2) In response to my concern about the inclusion of records containing “unknown” education level in the analysis, the author notes that other published studies have incorporated the same assumption in their analyses. To me, that is not a satisfactory reason to do the analysis this way. I strongly suggest, as I did in my previous comments, that the author re-run the analysis without those records to see if the results change. If they do not, that is an argument for keeping them in. If they do change, this issue needs to be included as a study limitation.

3) The Results contain 2 important errors that need to be corrected. For both boys and girls, the odds ratios describing the relationship between strengthening exercises and academic performance are <1. Therefore, instead of saying “those who participated in strengthening exercises 5 or more times a week had greater odds of average or above-average academic performance,” it should say “lesser odds.” Similarly, at the end of the paragraph, instead of saying “…the following participants had greater odds of average or above-average academic performance, it should say “lesser odds.”

Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Needs some language corrections before being published

Statistical review: No, the manuscript does not need to be seen by a
statistician.

Declaration of competing interests:
I declare that I have no competing interests