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Dear Drs Trinder and Kwon,

Thank you for the helpful and constructive reviews of our manuscript entitled "Running: How is it taught and evaluated in British Columbia Schools." We have taken on board the reviewers comments and have revised the manuscript accordingly. We have responded to all of the reviewer’s comments in detail and have uploaded a clean copy of our revised manuscript to the journal website. Please find our responses to the reviewer’s comments below.

We would appreciate your review of our revised manuscript.

Thank you for your consideration.

Sincerely,

Shubhayan Sanatani

**Executive Reviewer 1**

**General**

**The paper doesn’t adequately address whether a good running program (where equally high number of teachers and students are satisfied) leads to forming good running habits in students** 🡪 **can this be discussed better**

*The introduction was modified to include a paragraph about physical literacy. Running is a fundamental movement skill that is required for participation in various sports. It is believed that physically literate individuals are more active over their lifespan and we now note this in the manuscript.*

**There wasn’t enough evidence that supported the rationale of conducting this study – does having a proper running program lead to improvement in cardiovascular health in young populations?**

*We now incorporate better rationale concerning running as a key component of physical literacy for children, and the importance of considering cardiovascular health and chronic conditions in the PE curriculum to more clearly identify the rationale for this study.*

**Executive Reviewer 2**

**General**

**Article methodology is not detailed enough to allow reproducibility**

*We have rewritten the methods section of the paper to allow for reproducibility.*

**The article does not discuss the risk of bias and major limitations (e.g. response rate)**

*We have modified the ‘Limitations’ section and have addressed the issues of low response rates and risk of bias.*

**Clearly labelled and defined graphs, charts, and other figures would improve manuscript**

*We now include an additional chart and table.*

**The relevance of the results need to be contextualized with the emphasis of exercise as medicine, obesity epidemic, etc.**

*We now better contextualise the results, emphasising the key role of running in the context of physical literacy and the beneficial relationships between physical literacy, physical activity, body composition and health.*

**Specific**

**Title should reflect that the data is opinions of students and teachers**

*We have modified the title of the paper.*

**Methods**

**- please specify inclusion/exclusion criteria in beginning**

**- line 74-76: comment on social media is unnecessary**

**- line 76-80: could condense to approved by BC PE association, ministry, BCTF, school district superintendents**

**- line 80-01: on superintendents contacting schools – unnecessary**

*The Materials and Methods section has been modified. The following sentences about inclusion/exclusion criteria were added: All teachers and students who taught PE or were taking PE classes who were interested in participating in the study were included. All school districts, schools, teachers and students that did not respond were not included in the study. We have incorporated the other minor edits noted.*

**Statistics**

**- What are the primary and secondary outcomes and how are they going to be measured/described statistically? Should relate to objectives previously stated in intro. Comparing student vs teacher response?**

*This was not a hypothesis-driven study. We sought to gather information on student and teacher perspectives on the teaching of running in school. As such we were not able to identify primary and secondary outcomes a priori. We now show comparisons of student and teacher responses in Table 1. Our approach to data analyses and statistical comparisons is described in the methods section.*

**Results**

**- line 92: 60 school districts -> should be inclusion criteria in methods**

*This sentence has been deleted.*

**- line 93: “their” = superintendent?**

This sentence has been modified

**- comment on response rate of entire school districts**

*The following sentence was added/modified: There was a response rate of 32% from all school districts, with 19 school districts agreeing to participate; 25 not replying after repeated email and telephone contact, and 16 declining participation (****Figure 1****).*

**- line 97-98: Comparing 2 different things (students in rural vs teachers in non-rural). Confusing -> comment on this separately**

*This sentence has been clarified.*

**- Figure 1 should be separate file, no followup (25) should be no response**

**- Figure legend - Very long, Focus on important info, ie how many schools finally completed surveys.**

*The figure has been moved to a separate file. “No Follow-up” has been changed to “No Response”. The figure legend has been changed and condensed.*

**- make table for personal characteristics**

*We considered this carefully, and have decided not to include a table of personal characteristics. We did not include many questions in this regard – only whether students or teachers ran outside of school, the relevant grades, and the student age and sex. Accordingly, these data are provided in the narrative of the article.*

**- line 135-137: explain differences in types of stretching further**

*We now include these data in Table 1.*

**- line 144-146: report %s**

*We have included these percentages.*

**- line 148: contrast to what? What was % of teachers who thought gym class was satisfactory?**

*We have clarified these data.*

**- Be consistent with using gym or PE**

*We have changed the word ‘gym’ to ‘PE’*

**Discussion**

**- line 176-178: How was formal education assessed? What part of results?**

*We have modified this sentence to read the following: Although there were a variety of methods in place to teach aspects of running, teachers reported that they did not specifically teach about running form or the associated health benefits of running.*

**- line 213: explain Achievement Goal Theory**

*We now better define achievement goal theory.*

**generally should compare to existing literature and report specific rates when applicable (i.e. line 228, 231)**

*We have modified this statement.*

**- line 236-238: what is significance of this?**

*A specific medical form for PE teachers may be important ‘as some children may be graded unfairly based on a lack of understanding of their medical condition and may also be put into unsafe conditions for their health’.*

**- line 242-244: Are there any tools available for younger students?**

*We now discuss the use of the PAR-Q and the PAR-Q+ and their suitability for young students.*

**Limitations**

**- line 247-254: long-winded explanation for a significant limitation – does not actually lessen the fact that the sample size was a very small % of overall school pop’n. Could condense or eliminate**

**- line 255-257: separate strengths of study from limitations**

**- line 261-266: very long run-on sentence**

*The ‘Limitations’ section has been condensed and modified.*

**line 270-271: what is clinical significance? Why do you want data on older pop’ns? What about younger pop’ns? What age range is most at risk of chronic medical conditions such as childhood diabetes + obesity.**

*We have modified this section as follows: ‘The majority of responses in this data set were from students in grades seven to nine which is another area of bias. Physical activity patterns are known to decline with age and progression through the school system(17). As such, future studies in both younger and older students may lead to further insight into how student attitudes and motivation change as they age.’*

**line 272-274: What is the effect this could have on the results?**

*This sentence has been modified to: ‘Finally, while teacher and student surveys were reviewed by a group of four teachers who were currently teaching elementary and middle school grades, a representative student population would be helpful to validate the survey for students. A validation study was beyond the scope of this project.’*

**-another limitation is that data is on perception of curriculum, not an actual assessment of curriculum**

*Thank you for your comment. We agree that we did not evaluate the curriculum.*

**Conclusion**

**line 278: No sure what this is based on? Did not actually assess curriculum**

*This sentence has been removed.*

**Student Reviewer**

**General**

**Several times throughout the paper, the author cites discrepancies between the students’ and the teachers’ questionnaire response as support for the improper teaching of running in schools. I believe this point needs to be expanded further. Several confounding factors may come into play as to why there is a statistical difference between how to students respond vs. the teachers. (How the survey was administered, do the students fully understand the questions, etc.)**

*We now include a comparison of student and teacher responses (Table 1). We now discuss the possibility that students, particularly younger students, may not have fully understood the questions. We believe this concern was minimised by having a small group of teachers review the student survey at the development stage for appropriateness of language.*

**Specific**

**Line 67 – 69: “If approval was obtained from the superintendent, and then the school principal, teachers who taught PE and students taking PE classes responded to the survey, which included 4 to 12 “** 🡪 **Unclear what this sentence is saying**

*The Materials and Methods section has been modified.*

**Line 95: please clarify what is meant by schools in “rural areas” vs “non-rural areas”.**

*This sentence has been modified.*

**Line 126: please clarify how much do students “run outside of school”. Important distinction between running occasionally vs. training competitively.**

*We did not collect this information.*

**Line 128: Did the students of every teacher who were surveyed fill out a response. As this study is looking at discrepancies between the teachers’ vs students’ survey response, perhaps certain students filled out the survey while their PE teacher did not. This can partly explain the difference in response and the lack of agreement between teachers and students.**

*Responses were received from students and teachers in the same classes. We now clarify this.*

**Line 139: The finding of more teachers than students reported that the grading of students with medical conditions would be tailored to their physical limitations may not be accurate. Teachers may have an accurate understanding of the various medical conditions in the class, while a student may not know the medical conditions their peers have.**

*The point is well taken. However, we were most interested in the perspectives of students and teachers concerning the way PE is tailored for students with physical limitations. If the students do not believe accommodations are made then there is scope for improvement, either in the accommodations themselves, or in the way that this is communicated. We now better emphasize this in the manuscript.*

**Line 160: Was this the case for every school district? Or only a few schools surveyed?**

*We now provide the percentage data here.*

**Faculty Reviewer**

**General**

**I admire the effort and determination to examine the teaching of running in the school curriculum. Despite the difficulties of getting responses the authors persevered to get a small amount of useful information. The article would strongly benefit if a link to running and active lifestyle was made.**

*The introduction was modified to include a paragraph about physical literacy. Running is a fundamental movement skill that is required for participation in various sports. It is believed that physically literate individuals will be more active over their lifespan and we not better cite this.*

**Unfortunately I believe the sample size if too small to provide reliable information. It would appear that the underlying reason for examining how running is taught is because running can be one way to help maintain an active lifestyle. However, evidence suggests that walking is the activity of choice for those who are regularly active. Thus, I don't believe focussing on running is the best way to promote an active lifestyle.**

*Thank you for your comment. While we appreciated that walking is the activity of choice of adults who are regularly active, there is limited evidence to suggest that this is the activity of choice for children. Running is a fundamental movement skill that not only can be performed on its own, it is also important for many sports that can be played into adulthood. It is also possible that if we teach running in a structured way, more people would enjoy running as they age.*

**I don't believe the sample size is large enough to ensure much validity other than that there is not enough education about running. It seems as though the authors are trying to use running** as a **method to lead to an active lifestyle but no evidence is provided to back this up. 🡪 conclusions too strong.**

*We have modified the conclusion.*

**Part of the issue of running is that even by grade 7 only those who feel they are good at running are still doing it. By then most students don't feel they can run well enough as only those who do well get the good marks. One of the comments in the article is that grades should not be given based on performance but on improvement and effort. That would be worthwhile focussing on.**

*Thank you for your comment. We agree that evaluation of running should not be focused on performance. In the introduction, we have highlighted that ‘grading based on performance is not appropriate.’ We have also highlighted this in the discussion as we state that ‘it may be more appropriate to set student goals and tailor exercise programs based on individual improvements’.*