Peer Review Report

Review Report on A trend analysis of adherence to the muscle strengthening exercise guidelines in US adolescents

Original Article, Int J Public Health

Reviewer: Giovanni Pes Submitted on: 19 Jul 2022

Article DOI: 10.3389/ijph.2022.1605022

EVALUATION

Q 1 Please summarize the main findings of the study.

The manuscript 1605022 aims at investigating the adherence of a large nationally representative sample of American adolescents to the guidelines for muscle strengthening exercise through a questionnaire based on a single question. The novelty of the study is that the regression models have been adjusted for selected sociodemographic factors, making this analysis more insightful than those available in the literature.

Overall, the study found that nearly half of American adolescents failed to meet the MSE guidelines, and this was more accentuated in females, African-Americans and those in higher grades.

The manuscript is generally well-written, the statistical analysis is acceptably correct, and the conclusions are supported by the findings. Figures have an acceptable resolution.

Q 2 Please highlight the limitations and strengths.

The limitations and strength of the study were duly recognized by the authors (lines 217–224). The text is littered here and there with mispellings which need to be amended

Please provide your detailed review report to the authors. The editors prefer to receive your review structured in major and minor comments. Please consider in your review the methods (statistical methods valid and correctly applied (e.g. sample size, choice of test), is the study replicable based on the method description?), results, data interpretation and references. If there are any objective errors, or if the conclusions are not supported, you should detail your concerns.

Major comments

Lines 135–136. With reference to Figure 2, the authors stated that there is a linear decreasing trend except for 11th graders. Actually, considerable fluctuations also appear in the figure for the other graders. Why the last 2017–2019 segment of 11th graders, which is on the rise, must be considered differently than the rising 2013–2015 segments of all other graders?

Line 144. Inside the parenthesis, the confidence interval is 2.32–2.81, but in Table 2 it is 2.23–2.49. Please be consistent

Minor comments

Language and writing:

Abstract, line 13. Something is missing within the brackets "3 or days a week"

Line 34. This is the first occurrence of MSE except for the abstract. Maybe it needs to be spelled-out

Line 35. Please correct "favourble"

Line 43. Please correct "desptive"

Line 82. Please correct "approaved"

Line 100. Please correct "paper-pencil questionnaire"

Line 141. The sentence seems incomplete

Line 159. Please correct "declinicng"

Line 202. Please correct "considertion" Line 209. Please correct "concering" Line 212. Please correct "receveid" and "proiority" Line 214. Please correct "multidimensionaly" Lines 218-220. This sentence is largely a repetition of the previous one. Please rephrase or eliminate it. **PLEASE COMMENT** Q 4 Is the title appropriate, concise, attractive? I would have preferred: "...in US adolescent" Q 5 Are the keywords appropriate? Yes Q 6 Is the English language of sufficient quality? Yes. Please correct mispellings. Q 7 Is the quality of the figures and tables satisfactory? Yes. Q 8 Does the reference list cover the relevant literature adequately and in an unbiased manner?) Yes **QUALITY ASSESSMENT** Q 9 Originality Q 10 Rigor Q 11 Significance to the field Q 12 Interest to a general audience Q 13 Quality of the writing

REVISION LEVEL

Q 15 Please make a recommendation based on your comments:

Q 14 Overall scientific quality of the study

Minor revisions.