

## Peer Review Report

# Review Report on Associations between Parental Employment and Children's Screen Time: A Longitudinal Study of China Health and Nutrition Survey

Original Article, Int J Public Health

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### EVALUATION

#### **Q 1** Please summarize the main findings of the study.

The paper addresses the relationship between parental workload and children's time spent in front of a screen (ST). This is an original topic in the context of family determinants of physical activity limitations.

#### **Q 2** Please highlight the limitations and strengths.

The text is well written and a large sample applied. Some issues related to the sample used need clarification. I also suggest standardizing terminology and abbreviations and expanding the section describing the limitations of the study.

#### **Q 3** 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.

The authors use a varying sample size. According to the abstract it is 2977 children and according to the table it is 8148 from the five waves. This poses some methodological problems because the data are dependent. It is likely that some children had one measurement and others had five. On the other hand, the average age of the subjects is similar and slightly increases in the last two surveys. It would have been worthwhile to be more precise about how many children had repeated measurements. It would have been worth describing in more detail how such data was handled. The notation about "fixed effects" with the method of model building is very general. For example, were attempts made to include the year of the survey as a variable in the model. The models are described with an equation, but only for the parents' employment with no mention of the other two models with their work time and overwork. In addition, the model parameters are referred to by three different symbols or terms – as alpha in the equation, as beta in the text and as estimates in the tables. Please use the same symbol or term.

When describing key variables, it is worth adding that the overwork variable is 0–1.

It is unclear how the child's physical activity was studied. Can one indicator be used here for the younger and older group.

It is worth completing the limitations of the study, referring to 2015 as the last measurement point and referring to the problem of linked data. Now the ST problem is more complex, since modern media activities are not equivalent to sedentary behaviour. Instead, there are issues of mental health risks.

A separate limitation is the relatively low R<sup>2</sup>.

One of the main findings is that parental employment positively predicted children's ST. Here are two issues for clarification. Alternatively, other description is recommended. First, when the moderating effect is introduced, negative values of the regression parameter will appear. Second, the word "positive" implies the direction of the relationship but also connotes a positive effect in the sense of valuation, which is misleading. For the health of the child, the effect is negative.

PLEASE COMMENT

**Q 4** Is the title appropriate, concise, attractive?

yes

**Q 5** Are the keywords appropriate?

yes

**Q 6** Is the English language of sufficient quality?

yes

**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?)

Literature carefully selected and includes many items from recent years

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



**Q 14** Overall scientific quality of the study



REVISION LEVEL

**Q 15** Please make a recommendation based on your comments:

Minor revisions.