Reviewer's report

Title: Individual and family environmental correlates of television and computer time in 10- to 12-year-old European children: the ENERGY-project.

Version: 2
Date: 28 June 2015

Reviewer: Aristides Machado-Rodrigues

Reviewer's report:

General Comments to the Authors

1. The study aimed to examine which individual and family environmental factors are related to television and computer time in children from some European countries.
2. The role of inactive behaviour in health is certainly a topic of great importance as we move toward a better understanding of the role that the physical, social and cultural environments have on our populations.
3. The abstract has a correct framework and, in general, summarizes the paper properly; however, further refinements in the results sub-section is need as well as a more pragmatic message of the conclusion sub-section.
4. The study appears to have been conducted well and the quality of writing is satisfactory; a number of specific revisions are suggested to aid clarity and readability.
5. This paper might have the potential to clarify the association between screen time activities and individual and family environmental factors, however, there are several clarifications and focus required in order to accept the conclusions of this manuscript.

Specific comments to the Authors:

Specific comment 1: In the abstract, the main objective of the paper was stated clear and succinctly; however, refinements in the results and conclusion sub-sections should be included to make the scientific message more pragmatic. Furthermore, further information about covariates included in the statistical models should be added as well (..what are the dependent and independent variables? ..what is the exposure and outcome? ...).

Specific comment 2: At the introduction section, the purpose of the study was stated clearly. However, in my opinion, there are some content of the introduction which could be used in the discussion section. On the other hand, as far as I can understand, the authors have identified potential mechanisms and related variables to justify that association between screen time and environment/social factors; however, some of that mediated variables were not included in the analytical approach of this study. Some content should be clarified and a better
rationale needs to be provided.

Specific comment 3: At the introduction section, some content related to studies which were cited could be complemented with rates and with further information about the specific country where those studies were developed, as well as specific characteristics of those samples. Furthermore, which is the hypotheses of the study??..perhaps that information could be also added to the manuscript.

General Comment 4. The methods section is detailed and balanced (i.e. in terms of its content) when viewed in a holistic perspective of that manuscript. However, there are some methodological decisions that must be clarified (for example, among others, how data may be generalized??; in other words, authors stated some exclusion and/or inclusion participants/criteria but my main concern is related to differences between excluded and included participants and selected schools of that study, especially in terms of the analysed variables for the statistical models used. Therefore, more important is needed to clarify how missing data was treated; when there is a large number of excluded participants it would be useful to compare some biological and behavioural variables to see if the final sample is bias. Did the authors test for differences between those children included vs. excluded? What, if any, were the differences? Please, provide these data.

Specific comment 5: At the Methods (Statistical analysis and Tables), authors set the different models of the analysis. In addition, it should be described in more detail the statistical analysis and models in that section. Also, how confounders were included in the model (i.e. continuous or categorical)?

Specific comment 6: In general, in developed countries there are some lifestyle and socio-cultural variables which are quite well related. Were socioeconomic position and area of residence include in the models? If so, did authors check multicollinearity?

Specific comment 7: The results section (pages 8-10) has a quite range of good content with important findings.

General Comment 8: In general, the discussion clearly mentioned the main findings and compared them with findings from previous research and some potential reasons for some discrepancies in these findings. However, I would like to see the authors discuss potential differences by age-group youth and discuss some other correlates of sedentary behaviours such as the built environment variables (i.e. what is rural?? What is urban??; which environmental variables are different from those 2 geographical communities??). Furthermore, it would be useful for the reader, if authors could include in that discuss to role of objective methods of sedentary behaviour on the associations between the afore-mentioned variables used in the present study.

General Comment 9: The discussion would be clearly benefit if the authors could integrate further limitations of the present study and discuss them accordingly (i.e… how geanralized are the present data??...the use of sedentary behaviour
objective methods…and so on!!).

Specific Comment 10: The conclusion is quite long. This section will clearly benefit from being cut back by stating the scientific “go home message” in a pragmatic way.

Specific Comment 11: The references are appropriate.

General Comment 12: In general, the quality of writing is satisfactory but in some places could be improved.

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

**Quality of written English:** Acceptable

**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'