Author’s response to reviews

Title: Thoracic dysfunction in whiplash associated disorders: a systematic review and meta-analysis protocol

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Author’s response to reviews:

Kosice, 25th January 2016

Dear Editor,

upon the e-mail from Celine Zapanta of the 21st January 2016, please find enclosed our revised manuscript entitled "Screen-based behaviour in school-aged children with long-term illness" (PUBH-D-15-00838) by Daniela Brindova, Andrea Madarasova Geckova, Lukas Blinka, Anna Sevcikova, Jitse P. van Dijk and Sijmen A. Reijneveld, which we are submitting for exclusive consideration of publication in BMC Public Health. Below please find a point-by-point responses to required editor's comments:

(1) Please confirm that the ethics committee who approved this work explicitly approved the passive consent procedure. Please add a statement to the manuscript to this effect.

RESPONSE: We confirm that ethics committee obtained the protocol of the HBSC study, which contains information about the passive consent procedure, before approval of this survey. We added this information to the text as follows:

METHODS:
“The study was approved by the Ethics Committee of the Medical Faculty at the P. J. Safarik University in Kosice. Procedure of approval includes assessment of the protocol of the HBSC study which contains information about the passive consent
procedure. Parents were informed about the study via the school administration (explanation of study and consent through the children or on parent-teachers meeting) and could opt out if they disagreed with their child’s participation.”

(2) Provide more details on how the school administration contacted parents; independently or through the children.

RESPONSE: Thank you for this clarification comment. Parents were informed about the study via the school administration (explanation of study and consent through the children or on parent-teachers meeting) and could opt out if they disagreed with it. Moreover, when children disagreed with participation on the study from any reason, they were opted out from this study.

(3) Please ensure that all author names are consistent from the submission system to the title page.

RESPONSE: We checked all names of authors and I confirm that the name of the first author was changed. Changes are highlighted in the text. Other names are correct.

On behalf of all co-authors

Yours faithfully,
Daniela Husarova

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Dear Editor,

Thank you for your comments and the opportunity to revise the manuscript. Below you will find a List of changes relating to the manuscript PUBH-D-15-00838 entitled “Screen-based behaviour in school-aged children with long-term illness”. We provided a point-by-point response, with each response preceded by the reviewer’s comment, and followed by a literal presentation of the adapted text. The changes made are further highlighted in the manuscript with track changes. We then continued with the editor’s and external reviewers’ comments. Once again we would like to thank the editor and the reviewers for their stimulating comments, which were of great help in the process of revision.

Besides the changes in the manuscript I would like to announce the change in my name.

Your sincerely,
on behalf of the co-authors,
D. Husarova (Brindova), MSc.

List of changes
Reviewer 1:
Background

R 1.1 Please introduce more literature for long term illness and learning disabilities in relationship to screen-based behaviours.

RESPONSE: Thank you for your raising comment. We added som other references as follows:

“BACKGROUND
Children use of electronic media, including Internet and video gaming, has increased also among children with health condition like ADHD. The Internet environment and virtual reality offers very attractive features for them. It provides very broad content for potential stimulations or various activities in simultaneously open windows, which might lead to fixation to the online world. Furthermore, video games offer immediate rewards with a strong incentive to increase the reward by trying the next level (Weiss et al. 2011, Ko et al. 2012). “

References:

Methods

R 1.2 Line 30: What was the criteria for this selection.

RESPONSE: Thank you for your comment. As for the selection criteria, questionnaires containing measurement on excessive use of internet were randomly distributed in sample with aim to collect data of at least half of them. We revised relevant part of the Methods:

“METHODS
…. Questionnaires containing measurement on excessive use of internet were randomly distributed in adolescents 13 years and older (7th, 8th and 9th grade) with aim to keep collect data of at least half of them. Therefore, the final sample comprises 2,682 adolescents (mean age: 14.11; 49.7% boys), who filled the questionnaire which contain also measurement on excessive use of internet.”

R 1.3 Line 54: Is this a validated Questionnaire? If not what is its background?

RESPONSE: Thank you for your question. The validity of the measures were assessed by Škařupová et al. 2015, Mazur et al. 2013, Schmitz et al. 2004.
“RESULTS
.... Around 20% of adolescents had a long-term illness or medical condition that has been diagnosed by a doctor (Table 1). Moreover, more than half of adolescents exceeded the recommended time for screen-based activities, such as watching TV, playing PC games and computer work. The prevalence of screen-based activities and excessive use of the Internet was relatively similar for children with and without a chronic condition or learning disability (Table 2). Children with a long-term illness and learning disability did not differ from their peers in screen-based activities, such as watching TV, playing computer games and working with a computer. However, children with asthma had 1.59-times higher odds of excessive playing of computer games in comparison with their peers (Table 2). Children reporting learning disabilities, but not reporting long-term illness or asthma, had 1.76-times higher odds of excessive use of internet. Interactions of the effects of gender and long-term illness, asthma or learning disabilities were not statistically significant (not shown).

Discussion
R 1.5 Line 4: this is not clear from the presented results.

RESPONSE: We have followed the reviewers comment and we reformulated the relevant part of the Discussion.
“DISCUSSION
…… In addition, the present study showed that adolescents with a learning disability are at higher risk of developing symptoms of excessive Internet use in comparison with their peers. There might be two alternative explanations. ….”

R 1.6 Line 26: this should be in background

RESPONSE: Thank you for your suggestion. We have made some changes in background as well as in appropriate part of Discussion.

“BACKGROUND
Children use of electronic media, including Internet and video gaming, has increased also among children with health condition like ADHD. The Internet environment and virtual reality offers very attractive features for them. It provides very broad content for potential stimulations or various activities in simultaneously open windows, which might lead to fixation to the online world. Furthermore, video games offer immediate rewards with a strong incentive to increase the reward by trying the next level (Weiss et al. 2011, Ko et al. 2012). “

“DISCUSSION
…… Although learning disabilities and ADHD are not identical, they are closely related and overlapping – e.g. children of both groups have attentional difficulties and are easily bored [37]. Moreover, Cook et al. (2015) indicate that multiple factors, like poor motor skills and executive function deficits in children with learning disabilities, might contribute to low levels of physical activity and to high levels of sedentary behaviour subsequently. This offers a possible explanation as to why children with learning disabilities may become fixated to the online world and why these children should be a prime target of prevention. Although further research with more sophisticated design is needed, it is worth mentioning that the present study opens a gate to this issue. ….”

Reference:

Reviewer 2:

General Comments:
This paper provides information on screen-based behavior and long-term illness, asthma and learning disabilities. The manuscript suffers from some issues relative to the, methods and results description and presentation. These issues are described below. Therefore, the methods section should be better carefully described and justified and results section should respond to the concerns pointed by this revision. In this current version the manuscript should not be accepted.
Abstract
R 2.1 The abstract is appropriated.
RESPONSE: Thank you for your positive comment.

Introduction
R 2.2 Although the introduction is reasonably well written it should be more informative regarding the last findings in this field.
RESPONSE: Thank you for your suggestion. We enriched the Introduction part as follows:

“BACKGROUND
Children use of electronic media, including Internet and video gaming, has increased also among children with health condition like ADHD. The Internet environment and virtual reality offers very attractive features for them. It provides very broad content for potential stimulations or various activities in simultaneously open windows, which might lead to fixation to the online world. Furthermore, video games offer immediate rewards with a strong incentive to increase the reward by trying the next level (Weiss et al. 2011, Ko et al. 2012). “

Methods
The methods should be in detail and should be written in order to allow the replication of the study. There is much information that misses in methods section:

R 2.3 Authors stated in lines 82-83 that the "Following the recommendations of the American Academy of Pediatrics [20], responses were dichotomized into two categories of children…". This not correctly said. American Academy of Pediatrics did not recommend to dichotomized responses into two categories. Authors should complete their description to inform readers properly.
RESPONSE: Thanks for raising this issue. We revised relevant text as follows:

“METHODS
… Responses were dichotomized into two categories of children: those who spent less than 2 hours per day and those who spent 2 or more hours per day on screen-based activities, as AAP recommended that children should not spend time with media no more than 1 to 2 hours per day.”

R 2.4 In lines 84-122 authors explain the "excessive Internet use" variable. They stated: "Responses were measured on a 4-point scale: very often, often, rarely, never [21]. We computed a sum score and dichotomized it into two categories represented by (1) adolescents with no symptom and (2) adolescents with at least one symptom." My questions are: how was this converted in a score? How many points were attributed to which question regarding the 4-point scale used? Do we need a score when it is only needed one symptom in a dichotomized variable?
RESPONSE: Thank you for noting. We clarify the way of using the variable and revised the text.
“METHODS

…. Those who reported to experience the particular situation very often or often during past year were considered to „have a symptom“. Then we divided adolescents on those who do not have any symptom excessive use of internet and those who have at least one symptom of excessive use of internet.”

R 2.5 I have several major concerns and doubts regarding the variables Long-term illness and chronic diseases. Authors need to describe carefully the terminology and concepts used and supported them with appropriated references, justifying the inclusion of which one illness, disability or medical condition in the respective variable. For example, why do you characterize hearing impairment as a chronic disease and diabetes as a Long-term illness?
RESPONSE: We agree with the reviewer that we did not use right these terms and it can be confusing. We corrected part of the Methods as follows:

“METHODS

…. Long-term illness prevalence was assessed using the item: “Do you have a long-term illness, disability or medical condition (like diabetes, arthritis, allergy or cerebral palsy) that has been diagnosed by a doctor?” with “yes” and “no” as the response categories. The response used in statistical analyses referred to the occurrence of long-term illness.” Besides this question we asked adolescents if they have asthma and learning disabilities (dyslexia, dysgraphia, orthography, dyscalculia) confirmed by a doctor.

Results

R 2.6 I have also several major concerns in the results section. The results section should be improved to characterize the participants in order to a better understanding of the results and to answer properly to the aims of the study. Authors wanted to study a human behavior and they do not provide to the reader any other variables that help them to know who the participants are, in order to understand their behavior. Their condition is not the whole explanation why they choose to engage in a Screen-based behavior. Therefore, their gender, sex, socioeconomic condition, etc are basic important information that should be in this table. Furthermore, literature in this field has already found other important variables associated to sedentary behavior that authors also needed to acknowledge and controlled in their analyses. Without these potential confounders' are acknowledged we cannot interpret properly the results and authors are not contributing to move this field forward.

RESPONSE: We would like to thank for your comment. We agree that more possible variables associated with screen-based behaviour among adolescents exist. Moreover, a lot of evidence is present focused on the social context of screen-based behaviour, like parental rules or availability of electronic devices in bedrooms (e.g. Brindova et al. 2014, Livingstone et al. 2012). However, our aim was not to study all possible variables associated with the social context, because this would require another type of analysis which could be part of another manuscript. Despite of this, we took into consideration your suggestions and in our analysis we added other possible confounders, such as gender and family affluence represented by e.g. having a computer, car or bathroom, into our model. The results showed that the effect of gender and family affluence were
significant only in case of PC games and PC work. Boys with long-term illness, asthma and learning disabilities had a significantly higher chance of excessive playing computer games. Children with long-term illness, asthma, learning disabilities and low socio-economic position had significantly lower chance of excessive computer work. However, no interactions were confirmed. Results are presented in the following table. We do not add these findings into Result part as significance of main findings did not change.

References:


Table 2 Screen-based behaviour of children with and without long-term illness, asthma and learning disabilities: Logistic regression models, adjusted for gender and family affluence
watching TV
(≥2 hours)

playing PC games
(≥2 hours)

computer work
(≥2 hours)

excessive use of internet
(≥1 symptom)

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<th></th>
<th>N (%)</th>
<th>OR</th>
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<td>256 (50.5)</td>
<td>1.12 (0.91-1.38)</td>
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<td>936 (49.0)</td>
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<td>1,168 (61.3)</td>
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<td>1 (ref)</td>
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* p<0.05, ** p<0.01, *** p<0.001

N=number of children with and without long-term illness, asthma and learning disabilities in each screen-based behaviour and excessive use of internet

Discussion
R 2.7 Discussion should be revised in order to incorporate the changes proposed to the results.
RESPONSE: As we did not enriched results part, we did not revised discussion, respectively.