Author’s response to reviews

Title: Screen time among Spanish university students with disabilities: a Self-Organizing Maps Analysis

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AUTHORS’ RESPONSES
Thank very much for the review. It will help us to improve the paper:

COMMENT 1: David Harley, MBBS PhD FAFP (Reviewer 3): This is important and interesting work that should stimulate further research on the interaction between disabilities and the use of modern technology.

RESPONSE 1: Thank you very much for your comment

COMMENT 2: Why were "extremely atypical" values for screen time excluded (line 51-54, page 4)? As written this suggests that an arbitrary decision was made concerning which values to exclude. The authors should be more explicit about what values were excluded, and why? Was it considered implausible that a student might spend zero hours per week on screen time? And, at the other extreme, was it only implausible values (i.e. > 24 hours per day) that were excluded, or was a cut-point that was large but not implausible selected? In either case this should be stated.

RESPONSE 2: We eliminated only those cases in which the time spent on activities exceeded 24 hours a day. The wording of the paragraph has been changed as follows to avoid misunderstanding (see page 5, line 5):
“After excluding 33 respondents, who had reported implausible screen time (i.e. > 24 hours per day) or had missing data on any ST question, 1,091 participants remained for the analyses (n=529 men, n=557 women). Table 1 shows the characteristics of the sample.”

COMMENT 3: Comments needed on biases inherent in self-report of BMI. It is a notable omission that reporting bias for this variable is not mentioned in the discussion. It is probable that individual characteristics including age, gender, ethnicity and others will differentially impact biases in reporting height and weight. This could well bias the findings and must be acknowledged.

RESPONSE 3: Thank you very much for your comment. We acknowledge the potential biases in self-reporting BMI in the following new sentence included as a limitation at the end of the Discussion section (see page 12, lines 340-346):

“Secondly, self-reported measures, as used in this study, have been criticized in previous studies because they biased values for participants’ classification purposes. For instance, height has been overestimated and weight has been underestimated in obtaining BMI values, specially observed among overweight healthy adults and people with different pathologies [42-44]. However, discrepancies with direct measures of BMI were small and self-reported measures, if accurate, still provide a simple and economical method for body weight purposes [44, 45]. ASAQ may also be limited by both recall and a social desirability bias. However,…”

References:


COMMENT 4: The authors should comment on the severity of disabilities likely to be included. Because these are university students certain disability classes including schizophrenia and other serious psychiatric illness, and cognitive disabilities, are likely to be absent (or perhaps in the case of the former, extremely rare) and this should be acknowledged. It would be good, if possible, to have a bit more information on the nature of disabilities.

RESPONSE 4: We have added some more information about the severity of disabilities (see page 5 lines 107-112):

“The severity of disability is expressed by the disability grade, another variable considered in this study (see in the section below), which refers to the percentage of activity limitation. This percentage is assessed by a multidisciplinary committee according to different criteria, established officially, on the impairment and participation restrictions, as well as complementary social factors (e.g. family environment, employment situation) applied to each type of disability.”

COMMENT 5: Table 1 gives some general information, but even if a little speculative or based on other research it would be helpful to know what entities are likely to be included among these disability groups. The choice to use the Guía de Atención a la Discapacidad en la Universidad for the identification of disabilities requires greater justification. The reader should also be told more about this instrument and its performance relative to other widely used tools, particularly those from the Washington Group (see http://www.washingtongroup-disability.com/washington-group-question-sets/short-set-of-disability-questions/).

RESPONSE 5: In the Spanish context, disability type is acknowledged in the disability certificate issued to each person with a disability by the Spanish government. As explained before, this certificate also includes the disability grade, a percentage expressing disability severity according to official criteria and assessed by a multidisciplinary committee of experts. Given that this official certificate contains all relevant information regarding disability and functioning, there is no need to use a tool such as the one from the Washington Group in the Spanish context. Therefore, disability type was reported by the participants according to the information of their official disability certificate. However, examples of specific disabilities reported by the participants have been included between brackets to illustrate each disability group (see page 5 lines 104-107):

“They presented different types of disability: physical (e.g. spinal cord injury, cerebral palsy), mental disorder (e.g. Asperger syndrome, personality disorder), sensory (e.g. visual impairment, hearing impairment), chronic illness (e.g. fibromyalgia, osteoarthritis) and multiple disabilities (more than one type of disability concurrently). Table 1 shows the characteristics of the sample.”
Regarding the use of the Guía de Atención a la Discapacidad en la Universidad, we have included more information in order to justify its use (see page 4 lines 87-92):

“The Guía de Atención a la Discapacidad en la Universidad [20] was used to establish the population of students with disabilities since this is the most acknowledged institutional guide on disability care at Spanish universities. It includes relevant data such as the number of students with disabilities enrolled, disability care services contact information or the measures adopted at each university to favor inclusion (e.g. accessibility at the campus, curricular adaptations)”.

COMMENT 6: The statement in the background section (line 7, page 4) concerning the relation of sedentary behaviour and "hypokinetic diseases" is glib and vague. It should either be deleted or expanded and clarified. If the latter it is particularly important to justify the assertion that such an association exists; the fact that it is plausible is insufficient justification. In addition, the authors must clarify what "hypokinetic diseases" they refer to, at least with a few examples. These might include hypothyroidism, depression, and some neurological diseases, but as written at present one is uncertain what diseases the authors are referring to.

RESPONSE 6: The term "Hypokinetic diseases" refers to all those diseases caused by physical inactivity. We agree with the reviewer that the term "Hypokinetic diseases" can cause confusion. Therefore, we have decided to replace the term "Hypokinetic diseases" with "physical inactivity-related diseases". We have also included different pathologies we consider to be related with the term and some citations that support the claim.

“ST can play a significant role in health and quality of life insofar as it contributes a great deal to the overall sedentary behavior associated with physical inactivity-related diseases (e.g. cardiovascular diseases, hypertension, Type 2 diabetes, obesity and metabolic syndrome) [17-19]. The study of ST in this population is thus of interest, since people with disabilities form an especially inactive group.[…]

References:

