PEER REVIEW HISTORY

BMJ Open publishes all reviews undertaken for accepted manuscripts. Reviewers are asked to complete a checklist review form (http://bmjopen.bmj.com/site/about/resources/checklist.pdf) and are provided with free text boxes to elaborate on their assessment. These free text comments are reproduced below.

ARTICLE DETAILS

TITLE (PROVISIONAL)	Status and Contents of Physical Activity Recommendations in
	European Union Countries: A Systematic Comparative Analysis
AUTHORS	Gelius, Peter; Tcymbal, Antonina; Abu-Omar, Karim; Mendes,
	Romeu; Tribuzi Morais, Sara; Whiting, Stephen; Breda, Joao

VERSION 1 – REVIEW

REVIEWER	Arja Sääkslahti University of Jyväskylä, Faculty of Sport and Health Sciences
	Finland
REVIEW RETURNED	16-Oct-2019

GENERAL COMMENTS	 The article is interesting overview about the Physical activity recommendations within European countries. The article analyses the situation, but do not make any arguments, why physical activity recommendations are needed. I would expect some statement for this aspect. However, I do understand that it is challenging to define, how the countries with long history of PA recommendations differ from others. It can be suggested that because more and more countries are preparing their own recommendations, some advantages there might be. The authors were critical and tried to do their best with different languages. Language is culturally dependent and sometimes direct translation do not exists. This means that culture specific behavior may be difficult to recognize. One example for this can be found in Table 2: Part Finland, age group < 8: there is wrong translation used here: "At least 180 minutes/ day" = OK, but "2 hours moderate PA and 1 hour vigorous PA" is not right. It should be "2 hours activities of different levels of intensity" and 1 hour vigorous PA. More over, the difference to WHO should be "outdoorplay daily" (which is very clear statement and can be seen recommendation to support motor skill development through stimulating and challenging physical environment. I'll attach the English version of the document, and you can check the translation. You can find this information from pages 9 and in page 14 (as part of Figure) – Please contact publisher for this file. After this correction, the article is ready for publication.
	Congratulations for difficult, but important work.
REVIEWER	Katrina Piercy U.S. Department of Health and Human Services, Office of Disease

REVIEWER	U.S. Department of Health and Human Services, Office of Disease Prevention and Health Promotion, Rockville, MD
	I led the process to develop the second edition of the Physical

VERSION 1 – AUTHOR RESPONSE

Reviewer 1:

(1) The article analyses the situation, but do not make any arguments, why physical activity recommendations are needed. I would expect some statement for this aspect. However, I do understand that it is challenging to define, how the countries with long history of PA recommendations differ from others. It can be suggested that because more and more countries are preparing their own recommendations, some advantages there might be.

Response: Thank you very much for pointing out this important omission. We have added a section trying to provide some evidence and arguments for the need for recommendations. While we failed to find any scientific studies on the effectiveness of recommendations, we compiled statements from some of the central guideline documents on

the rationale for developing recommendations.

(2) Language is culturally dependent and sometimes direct translation do not exists. This means that culture specific behavior may be difficult to recognize. One example for this can be found in Table 2: Part Finland, age group < 8: there is wrong translation used here: "At least 180 minutes/ day" = OK, but "2 hours moderate PA and 1 hour vigorous PA" is not right. It should be "2 hours activities of different levels of intensity" and 1 hour vigorous PA. More over, the difference to WHO should be "outdoorplay daily" (which is very clear statement and can be seen recommendation to support motor skill development through stimulating and challenging physical environment. I'll attach the English version of the document, and you can check the translation. You can find this information from pages 9 and in page 14 (as part of Figure).</p>

Response: Thank you very much for pointing this out. We have adjusted Table 2 accordingly. We have tried to translate all recommendations as best as possible (using contact persons in the respective countries) while also using an English terminology that will allow for maximum comparability – but as you rightly point out, doing this while still grasping the subtle differences of the original documents was a major challenge for this comparative study.

Reviewer 2:

(1) The authors reference the 2010 WHO Global Recommendations for Physical Activity, but make no mention of the United States Physical Activity Guidelines for Americans (available at <u>https://health.gov/paguidelines/</u>). The 2010 WHO report is largely based on the work of the United States as compiled in the 2008 Physical Activity Guidelines for Americans. If you compare the quantitative recommendations, they are nearly verbatim. Several other countries also adopted the United States Guidelines after the 2008 version was released. All of the work from the United States' systematic reviews are publicly available online. The United States recently released an updated edition in November 2018, so I would anticipate that other countries may use that as a reference when they update their Guidelines. The WHO physical activity group is currently working on an update and several members from the 2018 United States Physical Activity Guidelines Advisory Committee were chosen to be a part of that process. This is an oversight of the manuscript to not acknowledge where the work of the WHO derived from since the WHO is used as the comparing document. I led the process to develop the second edition of the Physical Activity Guidelines for Americans and would be happy to discuss the process/additional details with the authors.

Response: Thank you very much for this important comment. While we are well aware of the ground-breaking work (both past and on-going) in the United States and its crucial role for the development of the WHO Recommendations, we realize that this may not have become sufficiently clear from our manuscript. We have therefore amended both the introduction and the discussion in several places to point to the American guidelines, their recent update, and the fact that they were the main basis for the 2010 WHO recommendations. We have also added the forthcoming update of the WHO recommendations and provided a reference to the WHO Guideline Development Group.

(2) Also, if possible, this manuscript would really benefit from a discussion on how Guidelines/recommendations were developed in various countries. I realize this may be challenging due to the wide range of languages, etc., but there is no discussion about who/how the targets were set In the United States, we have a rigorous, multi-year process to develop Guidelines which are based on a thorough systematic review of the science by an outside academic group. The Committee delivers their findings to the government and then a team of physical activity and public health experts translate the work of the Committee into the Guidelines. I know other countries tend to rely more on expert opinion vs. systematic reviews to inform their decisions, so it would be an interesting addition to discuss how other countries develop their guidance.

Response: Thank you very much for this point, which actually ties in perfectly with our own research agenda and publication plans. We are currently working on a second paper that will provide details about how EU Member States developed their current recommendations. We

obtained some basic information from the questionnaires used for the present article and got in touch with the National Focal Points to provide more information. We have added some of the preliminary results to the manuscript, which indeed indicate that countries have been using different approaches to guideline development, not always including systematic reviews. We would be more than happy to keep you updated on this research and would be thrilled if you found the time to discuss the matter with us and provide the American perspective on this!

Formatting amendments:

(1) No Corresponding author email address.

Response: We have added Dr. Peter Gelius's e-mail address (peter.gelius@fau.de)

(2) Figure/s should not be embedded.

Response: We have removed Figure 1 from the manuscript document and included it as a separate file.

(3) We have implemented an additional requirement to all articles to include 'Patient and Public Involvement' statement within the main text and your main document. If there is no patient involved in the study, please state "No patient involved" under the sub-heading 'Patient and public involvement'.

Response: We have added the following statement at the end of the Methods section: "Patient and Public Involvement: No patient involved."

We believe that the reviewers' comments have been very helpful to further improve the manuscript, and we sincerely hope that it is now acceptable for publication in BMJ Open.

REVIEWER	Arja Sääkslahti
	University of Jyväskylä, Faculty of Sport and Health Sciences,
	Finland
REVIEW RETURNED	23-Dec-2019
GENERAL COMMENTS	All the comments suggested were included in this manuscribt. Great
	- those changes improved the manuscribt.
REVIEWER	Katrina Piercy
	U.S. Department of Health and Human Services, Office of Disease
	Prevention and Health Promotion, United States
	I led the development of the Physical Activity Guidelines for
	Americans, 2nd edition in the United States.
REVIEW RETURNED	05-Dec-2019
GENERAL COMMENTS	Initial edits/comments have been appropriately
	addressed/responded to. I have no further comments.

VERSION 2 – REVIEW