

March 30, 2023

Dear Editor:

Thank you very much for giving us the opportunity to revise our manuscript titled "Associations between Borg's rating of perceived exertion and changes in urinary organic acid metabolites after outdoor weight-bearing hiking" (No. 84120). We have checked the manuscript and revised it according to the comments.

We sincerely hope our revision addressed all the concerns and this manuscript will be finally acceptable for *World Journal of Psychiatry*.

The following are point-to-point responses to reviewers' comments

Reviewer #1

Scientific Quality: Grade C (Good)

Language Quality: Grade B (Minor language polishing)

Conclusion: Minor revision

Specific Comments to Authors: 1-this topic is interesting, but there are some limitations to this research. These limitations are mentioned at the end of the manuscript. 2- Each abbreviation needs to be given its full name when it first appears. 3- can you write the degree of freedom with each p-value. Also, can you mention the effect size of each statistical test? 4- The reference list requires revision; parts of it are not consistent with the guidelines of the journal and DOIs/PMIDs are not given. 5- Some spelling errors need to be

corrected, for example, "seperating" on page 2, line 21 should be "separating". Please check the full text carefully.

Response

1- Our research did have some limitations, which was mentioned in text. First, the number of people in the group with a score of 6-12 was slightly small, which may have affected the data to a certain degree. Second, the population in this study only included men, and the difference between men and women was not assessed. Third, the absence of more direct assessment indicators, such as heart rate, blood biomarkers and others, which might be correlated with metabolic data. All of these data together might further help to confirm the BRPE ability to differentiate metabolic profiles between higher and lower BRPE values.

2- We have changed all the abbreviation and its full name when it first appears in manuscript.

3- Freedom and effect size of each statistical test have been added to the table 1.

4- We have corrected the references according to guidelines of the journal.

5- We have checked full text carefully and corrected spelling errors.

Reviewer #2:

Scientific Quality: Grade B (Very good)

Language Quality: Grade B (Minor language polishing)

Conclusion: Minor revision

Specific Comments to Authors: Title: accurately reflects the topic and contents of the paper. Abstract: is appropriate, structured, 323 words. Key words: 6 key words, precisely define the content of the paper. Core tip: 97

words, reflects the main contents of the article. Introduction: 459 words, the reader is acquainted with some known facts about Borg's Rating of Perceived Exertion, and the exercise load and evaluate body fatigue in time in endurance training. The purpose of the study was to verify whether the BRPE could be used in the prescription of outdoor hiking with weight-bearing and reveal the relationship between the BRPE scale and urine physiological measures. Methodology: 676 words, the description of the methodology is divided into subsections, the statistics used is appropriate. Results: 571 words, the description of the results is updated with 3 tables and 7 figures. At the end 89 healthy young men were analyzed. Discussion: the discussion/analysis presents studies published in the recent past, which touch on mechanisms concerned about body fatigue and metabolism disorders. The authors also draw attention to several limitations of the study. Conclusion: 55 words, last paragraph, the authors conclude, that BRPE scale showed strong correlation with the change of urine organic acids, which could be used to monitor body fatigue in long distance outdoor hiking with weight bearing. References: 22 references, from 1972 (Eur J Clin Invest) – 2022 (Front Public Health), influential journals in this field. Conflict of interest: all authors declared that they have no conflicts of interest to this work. Study ethics: the Institutional Review Board (IRB) of Chinese PLA General Hospital Review Board has reviewed the protocol and has determined that this study is exempt from full IRB review and informed consent. Opinion of the reviewer in its present form, the manuscript is suitable for publication. There is no doubt that this study supplements data that reveal the relationship and validity of the BRPE with objectively assessed metabolic criteria, particularly the urine organic acid concentration.

Response

Thank you for your interest in our manuscript's evaluation and affirmation.

Editorial Office's Comments:

(1) Science editor:

The manuscript has been peer-reviewed, and it's ready for the first decision.

Language Quality: Grade B (Minor language polishing)

Scientific Quality: Grade B (Very good)

(2) Company editor-in-chief:

I have reviewed the Peer-Review Report, full text of the manuscript, and the relevant ethics documents, all of which have met the basic publishing requirements of the World Journal of Psychiatry, and the manuscript is conditionally accepted. I have sent the manuscript to the author(s) for its revision according to the Peer-Review Report, Editorial Office's comments and the Criteria for Manuscript Revision by Authors. Please provide the original figure documents. Please prepare and arrange the figures using PowerPoint to ensure that all graphs or arrows or text portions can be reprocessed by the editor. In order to respect and protect the author's intellectual property rights and prevent others from misappropriating figures without the author's authorization or abusing figures without indicating the source, we will indicate the author's copyright for figures originally generated by the author, and if the author has used a figure published elsewhere or that is copyrighted, the author needs to be authorized by the previous publisher or the copyright holder and/or indicate the reference source and copyrights. Please check and confirm whether the figures are original (i.e. generated de novo by the author(s) for this paper). If the picture is 'original', the author needs to add the following copyright information to the bottom right-hand side of the picture in PowerPoint (PPT): Copyright ©The Author(s) 2023. Authors are required to provide standard three-line tables, that is, only the top line, bottom line, and column line are displayed, while other table lines are hidden. The contents of each cell in the table should conform to the

editing specifications, and the lines of each row or column of the table should be aligned. Do not use carriage returns or spaces to replace lines or vertical lines and do not segment cell content. Please upload the approved grant application form(s) or funding agency copy of any approval document(s).

Response

Thanks for your comments on our manuscript. We have provided the original figure documents using PowerPoint to ensure that all graphs or arrows or text portions can be reprocessed by the editor. The picture is original, copyright information of Copyright ©The Author(s) 2023 was added at the bottom right-hand side of the picture in PowerPoint. Approved funding documents were also uploaded.

As a representative of our group, I express my sincere appreciation here to editors and specialist reviewer for your instructions and helps to the article in this special period. Looking forward to hearing from you soon.

Best regards

Sincerely yours

Man-Li Zhang, MD, Associate Chief Physician

Birth Defect Prevention and Control Technology Research Center, Medicine Innovation Research of Chinese PLA General Hospital, No. 28 Fuxing Road, Haidian District, Beijing, 100853, China.

Email: zhangmanli1982@126.com

Tel: +8610-66936514

