

## Response to reviewers

Dear Editor,

We greatly appreciate all the thoughtful and valuable comments on our manuscript. We addressed all points raised by reviewers in the revised manuscript. The following are the responses to the inquiries and recommendations of editor and reviewers. We are looking forward to hearing from you soon.

Sincerely,

*Walid kamal*

### **Editor's Comments**

I have reviewed the Peer-Review Report, the 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. Before final acceptance, the author(s) must add a table/figure to the manuscript.

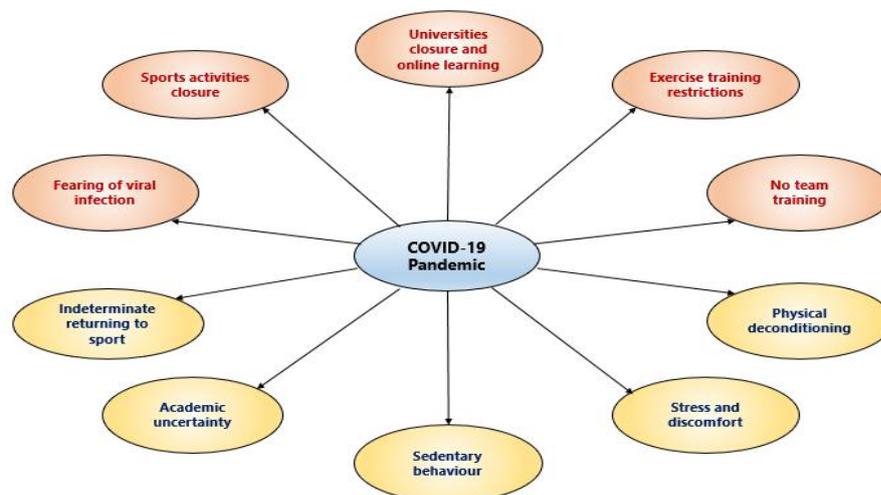
**Response:** One table and two figures have been added to the manuscript.

### **Summary of the Peer-Review Report**

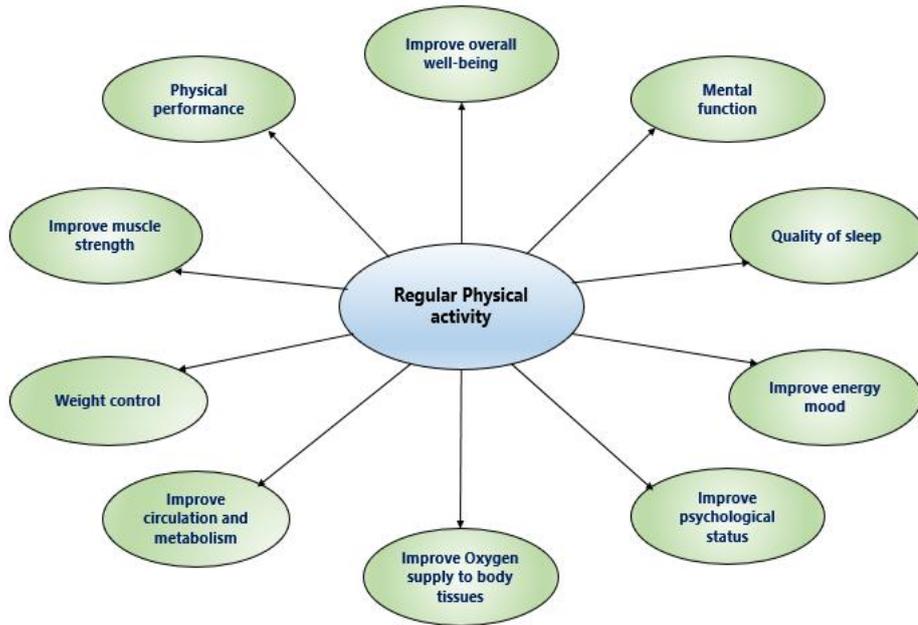
Physical activities may reduce inflammatory responses, improve angiotensin-converting enzyme-2 responses, and improve mental well-being during self-isolation and social distancing policies related to COVID-19 pandemic.

**Comment:** There is no table and figure.

**Response:** One table and two figures have been added to the manuscript.



**Figure 1** Negative effects of COVID-19 pandemic on Physical and mental well-being



**Figure 2** Positive effects of regular physical activity on physical and mental well-being

**Table 1** Physical activity and mental health during COVID-19

References	Measures	Findings & Recommendations
Wright et al., 2021 [32]	Incidence of fear, physical activity, and mental well-being indicators questionnaires.	Physical activity may improve mental well-being and protect against the undesirable impacts of COVID-19. Regular physical activities should be encouraged to improve mental well-being during COVID-19 pandemic.
Xiao et al., 2021 [33]	Lifestyle and home environment, physical and mental well-being, and occupational environment questionnaires.	Significant reduction in physical and mental well-being including impaired physical activity, increased junk food intake, and absence of coworker communications.
Faulkner et al., 2021 [34]	Short form of IPAQ, WHO-5 well-being index, and depression, anxiety & stress scale-9.	Negative changes in physical activity before COVID-19 containment policies presented poor mental well-being, while positive physical activity behavior showed a better mental well-being.
Meyer et al., 2020 [35]	Self-reported physical activity, anxiety and depression status., social connection, loneliness, and stress.	Adherence to physical activity contributions and restrictive screening time during unexpected societal alterations may alleviate the consequences of mental well-being.
Carriedo et al., 2020 [36]	International Physical activity questionnaire (IPAQ), 6-item self-report scale of depression symptoms, Connor-Davidson CD-RISC resilience scale, and positive & negative affect schedule.	Regular moderate or vigorous physical activity provide positive resilience and reduce depression symptoms during COVID-19 quarantine.
Maugeri et al., 2020 [37]	IPAQ and psychological general well-being Index.	Reduced physical activity have a greatly undesirable effects on psychological status and mental well-being. Adherence to a regular physical activity program is the main approach for improving physical and mental well-being during COVID-19 confinement.
López-Bueno et al., 2020 [38]	Short form of physical activity vital sign and single-item question for mood and anxiety.	Adherence to regular physical activities associated with better mood and lower anxiety with WHO recommendations during COVID-19 quarantine.
Duncan et al., 2020 [39]	Online survey on perceived changes in physical activity due to COVID-19 mitigation and mental well-being using 10-item perceived stress scale and 6-item anxiety subscale.	COVID-19 mitigation policies may affect physical activity and mental well-being. Participants with reduced physical activity levels showed higher anxiety and stress levels.
Jacob et al., 2020 [40]	Self-reported physical activity	During COVID-19 social distancing, participants adherent

	questionnaire, Beck anxiety and depression inventories, and 7-item short Warwick-Edinburgh mental well-being scale.	to vigorous and moderate physical activity showed better mental well-being.
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Comment: Language evaluation: Classification: Grade C (A great deal of language polishing).

Response: English Language has been reviewed and edited by English language editing service.

Comment: Academic norms and rules: The authors provided the Biostatistics Review Certificate, the signed Conflict-of-Interest Disclosure Form and Copyright License Agreement, and the Institutional Review Board Approval Form. Written informed consent was waived. No academic misconduct was found in the Google/Bing search.

Response: Thanks a lot for your thoughtful revision.

The language classification is Grade C. Please visit the following website for the professional English language editing companies that we recommend: <https://www.wjgnet.com/bpg/gerinfo/240>;

Response: English Language has been reviewed and edited by English language editing service.

(2) The “Author Contributions” section is missing. Please provide the author contributions.

Response: Author contributions have been added. Page #11

(3) PMID and DOI numbers are missing in the reference list. Please provide the PubMed numbers and DOI citation numbers to the reference list and list all authors of the references.

Response: PMID and DOI numbers have been added to the references list. Pages # 11-16

(4) The “Article Highlights” section is missing. Please add the “Article Highlights” section at the end of the main text

Response: Article highlights have been added.

Method: The main and fundamental purpose of writing a review is to create a readable synthesis of the best resources available in the literature for an important research question or a current area of research. So both why and how is important in designing the review. Though it’s a mini review, but it need to specify that how researchers differentiating relevant research from irrelevant one in respect to the research question or objective is must follow protocol. Even if it considered as narrative review instead of systematic review, even then it is need to mention the procedural and critical approach with specific method used to find out, and select the relevant best quality researches so as to respond to the research questions to minimize the bias.

Response: Thanks a lot for your valuable and thoughtful revision. We added one section included recent studies that have assessed the relation between physical activity and mental well-being during COVID-19 pandemic. Also, figures presenting the negative effects of

COVID-19 on physical and mental well-being and positive effects of regular physical activity on physical and mental health have been demonstrated in two separated figures.

In the discussion of Physical activity and mental health—as it was main research interest of this review article, sequencing of the research findings are not coherent. This discussion needs to redesign with more substantial findings in a sequential manner. If the issue of cardiovascular impact of exercise training is needed to address, need to address it separately with substantial findings.

Response: The findings are based on recent publications focused on the main question of the review "relationship between physical activity and mental health during COVID-19" as presented in Table 2.

Conclusion remain mere repetition of the introduction. The conclusion should established the core findings of the review which should indicate specific focus of future research.

Response: This section includes the summary of the review with future recommendations based on recent studies related to the topic.

Finally, we would like to acknowledge all reviewers for their valuable and thoughtful revisions which help us to provide the best possible version of our manuscript.