

Dear Editor-in-Chief,

Thank you very much for providing this opportunity to revise the article as per the suggestions of the reviewers. I have taken their suggestions very seriously and have made all the necessary corrections and additions.

Corrections that I made in the article are in red. I have added information from two recent articles in the paper and added them to the reference list. I have replaced two references with new ones.

The following are point-by-point answers to the reviewer's comments.

Comment: Title: reflects the overall scope of the work although the hypothesis is not clear

Reply: I have re-written the title to make the purpose of the work clear.

Comment: Abstract 1. The summary of the abstract does not tally with the title. The title suggests the author(s) intended to use data from previous studies to design a tool for measuring pleasure and drug seeking behaviours. The abstract failed to show the process the authors were going to use to achieve this goal, Also the process used to select the studies was also not mentioned. 2. Replace this “are able to” |with “can”

Reply: I have re-written the abstract to incorporate all the points in the paper and have explained how different studies were selected to generate the new framework explained in the present work.

Comment: Introduction: Although the introduction is detailed it does little to effectively explain the background and/ or scope of this frontier article. It is also very difficult to follow. The authors move arbitrarily from one school of thought to another without linking them, leaving large knowledge gaps to be filled by the readers, For example how does the information in paragraph 1 of the introduction link with paragraph 2. From the way paragraph 1 was introduced the reader expects the authors to begin to lead them in the direction of this article, but on reading paragraph 32 the reader would ask where are we going

Reply: Thank very much for your wisdom in showing this error. I think I focused on explaining the framework in detail. While doing this, I did not pay much attention to the introduction section. For a new reader, introduction section is a very important guide towards the work.

Thank you very much for your critical comments that helped to me to bridge the gap, as best as I could. I have re-written the first two paragraphs to make sure that there is a logical flow from paragraph one to paragraph two.

Comment: Page 3: inter-LINKed should be written as “inter-LINKed” to signify that it is a scientific word

Reply: I have made this change.

Comment: Page 3: This sentence “Details of how sensory qualia of semblions can be determined arbitrarily was described previously” is it a new paragraph or a part of the figure legend, please correct.

Reply: It is part of the figure legend for figure 1. I have moved figure legends to the end of the manuscript.

Comment: Page 4: LTD is an active process and hence it is not a mere reversal of a mechanism similar to that is responsible for LTP decay[17]. This sentence should be written as; LTD is an active process and hence it is not a mere reversal of a mechanism like that responsible for LTP decay.

Reply: I have made this correction.

Comment: (see figures in [21,22]) -this should be revised because your article should contain all figures or information that allow the reader to understand your message not for them to have go look for another article (s).

Reply: I have revised this.

Comment: References: For a frontier article, in my opinion a lot of the references 51 (56%) of them are 10 years and older.

Reply: Dear reviewer. I understand your concern. There are three reasons why I included works older than ten years. Firstly, this is the first work that is examining third person observations in nucleus accumbens to search for a feasible mechanism that generates first-person inner sensations of pleasure. Hence, this work used novel aspects from several previous studies. Secondly, I have only used works that were published from leading laboratories in the world.

Thirdly, interpretations made in the present work can be understood very well if the reader can refer to the original work that has all the detailed descriptions. Since I expect scientists from biological sciences, neurologists and psychiatrists will try to understand the mechanism, these original works that explains the details of the findings will provide them clear explanations. I sincerely hope that it will help the readers and will increase the credibility of the work presented here. I have made sure to include all the latest work in the field to make sure that the present work meets the expectations of a “Frontier” article. I have explained findings from a recent article in the work and added that article details to the reference section. I have also added a second reference. I have replaced two references with new ones.

The following are point-by-point answers to Editorial Office’s comments

Comment: (1) I found no “Core tip” section. Please add;

Reply: I have added a Core tip section for the article that explains novel features of this article.

Comment: (2) I found the authors did not provide the approved grant application form(s). Please upload the approved grant application form(s) or funding agency copy of any approval document(s);

Reply: There was no funding available for doing this research work.

Comment: (3) I found the authors did not provide the original figures. Please provide the Figures cited in the original manuscript in the form of PPT. All text can be edited, including A, B, arrows, etc. With respect to the reference to the Figure, determine if it is the original Figure, if not, please provide the source of the picture and the proof that the Figure has been authorized by the previous publisher or copyright owner to allow it to be redistributed;

Reply: I am uploading original PPT. of the figures with figure numbers marked on them.

Comment: (4) I found the authors did not add the PMID and DOI in the reference list. Please add the number directly.

Reply: I have added the PMID and DOI to all the references.

Comment: (5) Tables are not allowed to be inserted in the manuscript and should be moved to the end of the manuscript. Please adjust the order of references; and

Reply: I have moved the Table and table legend to the end of the manuscript.

Comment: (6) Please write the “Conclusion” section at the end of the main text.

Reply: I have added a new Conclusion section at the end of the main text.

The following are point-by-point answers to Company Editor-in-chief

Comment: 1. Do according to the Peer-Review Report, Editorial Office’s comments and the Criteria for Manuscript Revision by Authors.

Comment: I have answered questions in the Peer-Review Report, modified the article as per the Editorial Office’s comments and followed Criteria for Manuscript Revision by Authors.

Additional Points

Comment: Running title: Please shorten the running title to no more than 6 words. Abbreviations are permitted.

Reply: I have added a running title having six words in it.

Comment: Figures & Tables: Please verify the abbreviations used in figures and define them (separated by semicolons) at the end of the figure legend or table; for example, BMI: Body mass index; CT: Computed tomography.

Reply: I have expanded forms of abbreviations used in figure legends.

I take this moment to thank the reviewers who have provided their critical insights to improve the introduction section of the paper. I thank Editorial Office’s members for their contributions to improve the article. Finally, I thank the Science Editor and Company Editor-in-chief for providing additional directions.

Sincerely

Kunjumon Vadakkan