OPEN PEER REVIEW

Open Peer Review (OPR)

As a new feature for progressing towards transparency, we decided to open a new window for all of our editors as well as authors titled "**Open Peer Review**". We hope by this new facility, our reviewers will be more motivated and authors will be more satisfied with the review process. We believe that publishing our peer review reports could make a transparent and clear environment for all our efforts within a journal, but not all reviewers tend to publish their comments.

What is "Open Peer Review" process?

An "Open Peer Review" process is making the details of all review process (including reviewers, associate editors, and EICs comments) as "Public" as it is agreed by EIC, Authors, and reviewers.

Advantages of "Open Peer Review" process

- More transparency, constructiveness and tactful comments of the peer review process: leads to an increase in the quality of reviews
- More motivations for all involved roles in the review process
- Authors' satisfactions from the review process: Increases honesty between authors and reviewers
- Education of both authors and new students
- Prevents reviewers from following their individual agendas and leading to the detection of reviewers' conflicts of interests

You can find out more at:
https://sites.kowsarpub.com/kowsar/knowledgebase/category/tree.html#opr.html

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Peer Review Report for "Comparison of the Effects of Deep Brain Stimulation of the Prelimbic Cortex and Basolateral Amygdala for Facilitation of Extinction Process of Conditioned Fear"

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Review Timeline:

Submit Date: 12 Feb 2020
Revised Date: 25 Aug 2020
Accepted Date: 31 Aug 2020

Revision (0)

Here, you can see the **Reviewers**, **Associate Editors** and **EICs'** comments from the beginning to the end of the revision process.

Zahra Bahari: Reviewer | **Revision** (0) 11 May 2020

Dear AE
Thank you for giving me the opportunity to review the manuscript entitled “Comparison of the effects of Deep Brain Stimulation of the Prelimbic Cortex and Basolateral Amygdala for Facilitation of Extinction Process of Conditioned Fear”. I apologize for the delay. I was not in my office for 6 weeks due to recent coronavirus problems. The current manuscript, is a comprehensive investigation on the comparison of the effects of deep brain stimulation of the two key structures of the brain, including Prelimbic Cortex and Basolateral Amygdala, on the extinction process of conditioned fear. The experiment is well-designed and performed. The current manuscript created a few suggestions in my mind that I list below:
1. Have the authors examined c-Fos protein expression only in the amygdala? If the answer is yes, then why in the methodology section, they explained that they have measured protein expression in both areas (amygdala and prelimbic area)?
2. Authors should state the brand names of the devices/software that they used in the experiments.
3. I think it is better than the authors write direct and short sentences and avoid making

multiple statements in one sentence. The following sentences are all long and confusing:
“Most of the studies have been administered using Pavlovian fear conditioning with the aim of understanding and controlling anxiety in humans because the stressful experiences are usually manifested through their effects on the activation of several mechanisms that are linked to the onset of a variety of affective disorders”.
“Fear extinction is a process in which frequent conditioned stimuli in the absence of the aversive unconditioned stimulus result in a lessening of the expression of conditioned fear responses”.
“Although fear extinction has been well defined at the behavioral level, there is still relatively little knowledge about its neural substrates, including the regions and molecular processes whereby extinction-related plasticity arises”.
“We still know little about the mechanisms involved in anxiolytic effects of BLA DBS. Although the amygdala has been considered as a critical structure for fear processing, conclusive evidence defines an important role for medial prefrontal cortex (mPFC) as well”.
Thanks

REFEREE: Reviewer | **Revision** (0) 14 Jun 2020

Dear AE
The authors can find attached my comments for the above manuscript.
Sincerely,

REFEREE: Associate Editor | **Revision** (0) 15 Jun 2020

Dear EIC,
The manuscript needs minor revision.
Thanks.

REFEREE: EIC | **Revision** (0) 15 Jun 2020

Dear Author,
Your article is reviewed by the reviewers carefully. According to their comments, this document needs minor revision. Please follow their comments as requested.
Thanks.

OPEN PEER REVIEW

Revision (1)

Reply to Reviewers

Ideally, the reviewing process can significantly improve the submitted manuscripts by allowing the authors to take into account the advice of reviewers. Author(s) must reply to all reviewers' comments in a separate Word file, point by point. A "**Reply to Reviewers**" document is submitted along with revised manuscript during submission of revised files, summarizing the changes that the authors made in response to the reviewers' comments. The responses to reviewers' comments specifies how the authors addressed each comment the reviewers made.

You can read the authors' responses to the reviewers' comments in the next page.

First of all, the authors would like to thank the editor(s), and the reviewers very much for their very valuable comments and suggestions that largely improved the paper. The paper has been revised according to the reviewers' comments and suggestions. The responses to the comments are given as follows:

Response to Reviewer 1

The comments regarding the content have been addressed and the changes are made in blue in the revised manuscript.

1. Have the authors examined c-Fos protein expression only in the amygdala? If the answer is yes, then why in the methodology section, they explained that they have measured protein expression in both areas (amygdala and prelimbic area)?
Answer: Thanks to the reviewer. To address the reviewer's concern, it should be noted that the c-Fos protein expression has been examined in both prelimbic area and amygdala as well. It is clearly stated in methodology section_c-Fos protein expression_. This mentioned part is highlighted in blue in the revised manuscript. However, the caption of figure 4A did not refer to the c-Fos protein expression in both areas. Therefore, the very caption has been modified in the revised manuscript.

2. Authors should state the brand names of the devices/software that they used in the experiments.
Answer: The name of the software used in the experiments has been provided in the revised manuscript.

3. I think it is better that the authors write direct and short sentences and avoid making multiple statements in one sentence.
Answer: The reviewer is right. In order to address this comment, the manuscript was reviewed carefully to make the long and confusing sentences shorter and more apprehensible. The changes are made in blue.

Response to Reviewer 2

Thanks to the reviewer for the valuable comments. The comments regarding the content have been addressed and the changes are made in red in the revised manuscript

OPEN PEER REVIEW

Revision (1)

Here, you can see the **Reviewers**, **Associate Editors** and **EICs'** comments from the beginning to the end of the revision process.

REFEREE: Reviewer | **Revision** (1) — 5 Jul 2020

Dear AE,
Thanks to the authors for the correction which they made for many issues that I addressed.
But unfortunately, still there is a problem in the analysis part.
They can refer to my comments in the manuscript.
Thanks.

Zahra Bahari: Reviewer | **Revision** (1) — 18 Jul 2020

Dear AE
The authors sufficiently revised the manuscript.
I think the mentioned manuscript is suitable for publication in your journal.
Thanks.

REFEREE: Associate Editor | **Revision** (1) — 18 Jul 2020

Dea EIC,
The manuscript still needs revision.
Thanks.

REFEREE: EIC | **Revision** (1) — 18 Jul 2020

Dear Author,
Your article is reviewed by the reviewers carefully. According to their comments, this document needs minor revision. Please follow their comments as requested.
Thanks.

OPEN PEER REVIEW

Revision (2)

Reply to Reviewers

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You can read the authors' responses to the reviewers' comments in the next page.

Response to the reviewer 1

Thanks to the reviewer. The reviewer is right. As it is mentioned in the legends, this should have been changed to $p<0.05$. It has been modified in the revised manuscript and the changes are made in red in the highlighted manuscript.

OPEN PEER REVIEW

Revision (2)

Here, you can see the **Reviewers**, **Associate Editors** and **EICs'** comments from the beginning to the end of the revision process.

REFEREE: Reviewer | **Revision** (2) 31 Jul 2020

Dear AE
The authors can find my comments in the manuscript.
Sincerely,

REFEREE: Associate Editor | **Revision** (2) 1 Aug 2020

Dear EIC
The reviewer(s) have recommended publication, but also suggest some major revisions to the manuscript. Therefore, I invite the author to respond to the reviewer(s)' comments and revise his manuscript.
Kind regards,

REFEREE: EIC | **Revision** (2) 1 Aug 2020

Dear Author,
The reviewers' comments are mentioned. Please correct the details as mentioned above carefully according to reviewers' request.
Thanks.

OPEN PEER REVIEW

Revision (3)

Reply to Reviewers

Ideally, the reviewing process can significantly improve the submitted manuscripts by allowing the authors to take into account the advice of reviewers. Author(s) must reply to all reviewers' comments in a separate Word file, point by point. A "**Reply to Reviewers**" document is submitted along with revised manuscript during submission of revised files, summarizing the changes that the authors made in response to the reviewers' comments. The responses to reviewers' comments specifies how the authors addressed each comment the reviewers made.

You can read the authors' responses to the reviewers' comments in the next page.

Response to the reviewer

Thanks to the reviewer. The reviewer is right. After reviewing the initial data with a statistician, it was found that the problem was in the plot and there was no statistically significant difference between the BLA-DBS treated group and the PL-DBS treated group and the Negative Control group. Plot and text modified and the changes are made in red in the highlighted manuscript

OPEN PEER REVIEW

Revision (3)

Here, you can see the **Reviewers**, **Associate Editors** and **EICs'** comments from the beginning to the end of the revision process.

REFEREE: Reviewer | **Revision** (3) 31 Aug 2020

Dear AE,
The authors can find my comment below.
Sincerely,

REFEREE: Associate Editor | **Revision** (3) 31 Aug 2020

Dear EIC,
The manuscript is acceptable now.
Thanks.

REFEREE: EIC | **Revision** (3) 31 Aug 2020

Dear Author,
The document is reviewed carefully by the reviewers. According to their comments and your revisions as requested, this manuscript is accepted.
Thanks.