Reviewer #1:

**Scientific Quality:** Grade B (Very good)

Language Quality: Grade B (Minor language polishing)

**Conclusion:** Minor revision

**Specific Comments to Authors:** This study is very interesting. The authors proposed to explore the correlation between cognitive impairment and intestinal microbiota imbalance in patients with schizophrenia. The tables help the readers to make a more understanding of the study. The whole manuscript is well drafted; however, some concerns have been noted including:

1. The abstract needs to be re-organized. The current abstract has 445 words, which is too lengthy. It is not necessary to list all the data in the results section, but only the core data.

Thank you for your feedback on the abstract. We have carefully reorganized and condensed the abstract to make it more concise and focused. The revised abstract now highlights the core findings of the study without providing excessive details. By rearranging the content, we have improved the overall organization and clarity of the abstract. We believe these modifications effectively address the concerns raised regarding the length and content of the abstract. If you have any additional suggestions or requests for further revisions, we would be happy to address them.

2. Data in tables are very good. Please edit the tables carefully. For example, What does '+ / -' mean in Table 3?

Thank you for your feedback regarding the tables in the manuscript. We appreciate your positive comment about the quality of the data presented in the tables. We have thoroughly reviewed and carefully edited the tables to ensure the accuracy and clarity. Specifically, we have rectified the format of Table 3 and replaced "+ / -" with the appropriate notation. These changes have been made to enhance the understanding and interpretation of the data presented in the tables. If there are any further suggestions related to the tables or any other aspect of the manuscript, please let us know. We are committed to addressing all reviewer comments to improve the overall quality of the study.

3. A minor language editing is required. Some minor language polishing should be corrected.

We appreciate the reviewer's feedback regarding the need for language editing in the manuscript. We acknowledge that some minor language polishing is necessary to enhance the clarity and coherence of the text. We have carefully reviewed the entire manuscript and improve the overall readability and quality of the manuscript to ensure that the scientific content is effectively communicated to the readers. If there are any specific areas or sentences that require further revision, please let us know so that we can address them accordingly.

4. Manuscript should be edited according to the journal's guidelines.

Thank you for your feedback regarding the alignment of the manuscript with the journal's guidelines. We appreciate your guidance in ensuring that our submission adheres to the specific requirements set by the journal. In response, we have carefully reviewed the guidelines provided by the journal and made appropriate edits to comply with them.

These adjustments include formatting, citation style, referencing, and any other specific guidelines outlined by the journal. We are grateful for the reviewer's reminder and we apologize for any oversight in our initial submission. Please let us know if there are any further edits are needed. We value your input and are committed to meeting all necessary requirements.

Reviewer #2:

**Scientific Quality:** Grade C (Good)

Language Quality: Grade B (Minor language polishing)

**Conclusion:** Minor revision

Specific Comments to Authors: Many clinical studies have shown that there is a certain correlation between schizophrenia and cognitive function. Effective intervention on patients' overall cognition, god and society will make patients' schizophrenia effectively transformed. In this study, the authors found that patients with schizophrenia had a larger decline in learning, memory, fine motor, social cognition, working memory, category fluency, information processing ability and kinetic energy rating compared with healthy people, which suggested that cognitive function was related to schizophrenia. In addition, they also found that the relative abundance of gut microbiota in patients with schizophrenia is very different from that in healthy people, and there is a phenomenon of intestinal microbiota imbalance in patients with schizophrenia. Authors adequately described the background, presented status and significance of the study. I have some minor suggestions: for the general data in the material method section, there is actually no need to list demographic data, because it belongs to the content of the results section. Here only need to introduce the research methods and grouping clearly. In addition, this part can also add a table to list the basic demographic data, which will make the presentation of the results clearer. Finally, I thought the article required a minor revision, both for the language and the format.

Thank you for your valuable feedback on our study. We greatly appreciate your positive comments regarding the background, significance, and findings of our research. We have carefully considered your suggestions for improvement.

Firstly, we agree with your suggestion to remove the demographic data from the material and methods section. To enhance clarity, we revised this section to focus solely on describing the research methods and grouping of participants. Additionally, we appreciate your recommendation to include a table presenting the basic demographic data. This indeed made the results section more organized and reader-friendly. We incorporated this suggestion by including a concise and clear table to present the relevant demographic information. Lastly, we acknowledge your comment regarding the need for minor revisions in both language and format. We have conducted a thorough review to ensure that the manuscript meets the highest standards of language clarity and adheres to the required formatting guidelines.

We sincerely appreciate your constructive feedback and are committed to addressing these suggestions to improve the quality and presentation of our study. If you have any further comments, please do not hesitate to let us know.