

Esteemed Reviewers,

Thank you so much for your interest in our manuscript and to aid in the re-review of this manuscript, we have included a point-by-point response to each comment. As a consequence of the valuable suggestions, we believe that our manuscript has been improved. The reviewers' comments are italicized and the author responses are marked in red.

1. *Specifically, the review of existing research should be enhanced. The author should mention in the introduction and literature review that many studies have already used longitudinal data. These data indicate that adolescent mental health issues are a dynamic process and that there is heterogeneity among different groups. These studies should be compared and discussed in the discussion section.*

The necessary changes have been incorporated and highlighted in the text.

2. *Second, the age range for adolescents should be clearly defined, as 14 to 23 years old is not a conventional definition of adolescence.*

Although 14-23 is not conventional definition of adolescents but the age range is selected in reference to the article cited below:

Sawyer SM, Azzopardi PS, Wickremarathne D, Patton GC. The age of adolescence. *Lancet Child Adolesc Health*. 2018 Mar;2(3):223-228. doi: 10.1016/S2352-4642(18)30022-1. Epub 2018 Jan 30. PMID: 30169257.

This article clearly highlights 10-24 years corresponds more closely to adolescent growth and popular understandings in broader settings.

3. *Third, the statistical analysis section should employ more detailed research methods, such as differential analysis and regression analysis.*

The necessary changes have been incorporated and highlighted in the text.

4. *Fourth, based on the author's research conclusions, some practical research suggestions should be proposed. Especially considering the current applications of artificial intelligence in mental health, which are numerous.*

The authors have proposed some suggestions considering the current applications of artificial intelligence in mental health in the end of the manuscript which has been highlighted.