Reviewer's report

Title: No interaction between Serotonin Transporter Gene (5-HTTLPR) Polymorphism and Adversity on depression among Japanese Children and Adolescents

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Reviewer: Norio Mori

Reviewer's report:

This study examines whether adverse parental environment interacts with 5-HTTLPR polymorphism to predict patient’s symptoms of depression in a Japanese pediatric sample. Based on some statistical analyses, the authors concluded that adversity and sex showed a significant main effect despite of no G×E interaction.

Today, because G×E interaction is a most crucial controversial issue, a wide range of evidence have been accumulated. Further, the assessment of depressive symptoms in Japanese children and adolescents is of interest to clinicians and researchers in psychiatry, and therefore this study is investigating an important question despite of small sample number.

This paper may contribute to the current issue, but seem to have some problems as follows:

Major problems

1. The aim of the study needs to be clarified before hypothesis is mentioned. The authors should not only mention the aim but also the necessity and novelty of this study to let the readers fully understand the significance of this paper.

2. The authors have to mention the reason why there are no significant differences in SES between two groups. Why did you consider the interaction effects between variables such as SES×age, SES×FSIQ, and Sex×age ?

3. The authors conducted both binary and multivariable logistic analyses. Please give your views about the reason for those approaches.

4. The discussion is lengthy. The fourth paragraph and the first half of fifth paragraph are not needed since these don’t include consideration relating to this investigation results. The logical plot is quite complicated, so you need to go through a major revision.

Minor problems

1. Figure 1 is not needed because the results were written in the text.

2. There are some grammatical errors. English proofreading by professionals is highly recommended.
Level of interest: An article of outstanding merit and interest in its field

Quality of written English: Acceptable

Statistical review: No, the manuscript does not need to be seen by a statistician.