Reviewer #1:

Scientific Quality: Grade B (Very good) Language Quality: Grade B (Minor language polishing) Conclusion: Minor revision

Specific Comments to Authors: In this study, a random sampling method was used to select 2% effective questionnaires from the effective data of mental health status of 40874 college students for analysis, and logistic regression method was used to analyze the factors affecting their mental health. The results showed that 11.3% of college students had psychological problems. Doctoral students had more mental health problems than junior college students. The mental health of students from rural areas was more likely to be abnormal than that of urban students. And students who had experienced significant life events and divorced parents were more likely to have an abnormal status. The nomogram predicting model obtained by multivariate analysis included 6 predictive factors: the place of origin, whether they were single children, whether there were significant life events, parents' marital status, regular exercise, intimate friends, and the PHQ-9 score. Overall, the study is very well designed and the results are very interesting. The sample size is enough and methods are very clear. Discussion is good. The risk prediction model constructed in this study can not only help us understand the mental health problems faced by college students more comprehensively, but also provide valuable reference for preventive strategies. It can also identify and intervene in mental health problems at earlier time points to avoid further deterioration of problems. Therefore, I have no corrections to do and the manuscript can be published unaltered.

Reversion#1: Thanks for your review

Reviewer #2:

Scientific Quality: Grade C (Good)

Language Quality: Grade B (Minor language polishing)

## **Conclusion:** Minor revision

Specific Comments to Authors: So far, studies on mental health of college students mainly focus on the main influencing factors, and there are few studies on risk prediction analysis. However, the diversity, complexity, variability, contingency and uncertainty of mental health problems in college students challenge mental health risk prediction. Therefore, the construction of risk prediction models is conducive to screening mental health problems, preventing and treating risk factors of disease occurrence, and reducing the incidence. In this observational study, the mental health status of current university students was determined by a questionnaire by Mao XL et al. On the basis of influencing factors, logistic regression was used to construct the mental health risk prediction model for college students, which could provide reference for guiding the mental health problems of college students in the future, and help to provide better mental health care for college students. The methods of data analysis are very clear, and the results are presented well. I have a minor comment, The conclusion should be a final summary based on the data from this study. There should be no cited references.

Reversion#2: I checked the original text and did find that there was this problem. What you said is very reasonable. I have revised the problematic parts of the article.