CORRESPONDENCE OPEN



Responses to the comment: Anxiety and depression among Chinese adolescents during the COVID-19: an overestimation of the problem

© The Author(s) 2022

Translational Psychiatry (2022)12:64; https://doi.org/10.1038/s41398-022-01826-z

Dear Editor,

We thank Kojak et al. for their comments [1] on our recently published paper "Depression, anxiety and associated factors among Chinese adolescents during the COVID-19 outbreak: a comparison of two cross-sectional studies" [2]. Below are our responses to their remarks.

In this study featuring two separate surveys, public education on mental health and psychosocial interventions was offered to many of the adolescents who reported depression and anxiety by local health authorities in some areas following the first survey; therefore, those who completed both surveys were removed from analyses because retaining them could bias results of the second survey as noted by one reviewer of the initial submission. Notably, however, even if those who completed both surveys are included for analyses, the results are quite similar to the primary findings reported in our paper.

Compared to prevalence rates of depression and anxiety from the first survey, we found that the corresponding figures in the second survey increased (or were higher). The terms, "increased" and "higher", can be used interchangeably here as both refer to upward trends. The two terms have been widely used in similar epidemiological surveys.

If Kojak and colleagues had read the paper carefully, they would have found that we did not describe depression and anxiety as "disorders". Indeed, in the limitations section, we had explicitly stated that standardized diagnostic instruments such as the Structured Clinical Interview for the DSM-IV (SCID) could not be used due to safety requirements associated with minimizing face-to-face contacts during the COVID-19 pandemic. Furthermore, depression and anxiety are general terms in clinical practice and research that are used conventionally to describe disorders as well as symptoms.

The cutoff values of the Center for Epidemiological Studies-Depression Scale (CES-D) and the 7-item Generalized Anxiety Disorder (GAD-7) scale used in this study were based on validation studies of these scales conducted in China that we cited in the paper. Due to different socio-cultural contexts, cutoff values suggested in original validation studies of the scales are less appropriate for use in China. Kojak and colleagues mentioned GAD-7 cutoff values of 6 and 7 were used in samples of Chinese people with epilepsy and Chinese pregnant women. Cut-offs based on samples of non-adolescents are not sufficient as cut-offs for adolescents. Additionally, it is general knowledge that pooled scale cutoff

values in meta-analyses and systematic reviews based largely on samples drawn from Western countries should not be applied globally to particular non-Western populations due to differing socio-cultural contexts between countries.

We certainly agree that unmeasured factors were potentially associated with depression and anxiety in our sample. Once again, we noted this clearly with associated reasons in the limitations section of our paper. In this study, sleep duration, study duration, exercise duration, study efficiency, and concerns about entering a higher grade were included as items in the assessment of socio-demographic background and clinical characteristics of respondents. If Kojak and colleagues had attended to the "Method" section carefully, they would have found this was introduced.

Finally, this was an exploratory study, rather than a confirmatory study designed to test a specific theory or model; therefore, a priori hypotheses were not required or generated. Furthermore, as noted in the "Method" section of the paper, data were collected using the smartphone-based WeChat–Wenjuanxing application. Participants who chose to not complete all survey items could not successfully submit their responses to the researchers.

Rui Liu^{1,7}, Han Qi^{1,7}, Xu Chen^{1,7}, Teris Cheung², Todd Jackson³
Gang Wang ⓑ 1 and Yu-Tao Xiang ⓑ 4,5,6 and Yu-Tao Xiang ⓒ 4,5,6 and Yu-Tao Xiang ⓒ 4,5,6 and Yu-Tao Xiang ⓒ 1,5,6 and Yu-Tao Xiang Beijing Anding Hospital & the Advanced Innovation Center for Human Brain Protection, Capital Medical University, Beijing, China. ²School of Nursing, Hong Kong Polytechnic University, Hong Kong SAR, China. ³Department of Psychology, University of Macau, Macao SAR, China. ⁴Unit of Psychiatry, Department of Public Health and Medicinal Administration, & Institute of Translational Medicine, Faculty of Health Sciences, University of Macau, Macao SAR, China. ⁵Center for Cognition and Brain Sciences, University of Macau, Macao SAR, China. ⁶Institute of Advanced Studies in Humanities and Social Sciences, University of Macau, Macao SAR, China. ⁷These authors contributed equally: Rui Liu, Han Qi, Xu Chen. and semail: gangwangdoc@ccmu.edu.cn; xyutly@gmail.com

REFERENCES

- Kojok L, Bodenstein K, Rivest-Beauregard M, Seon Q, Sapkota RP, Brunet A. Anxiety and depression among Chinese adolescents during the COVID-19: an overestimation of the problem. Transl Psychiatry. 2021;11:624 https://doi.org/10.1038/ s41398-021-01748-2
- Chen X, Qi H, Liu R, Feng Y, Li W, Xiang M, et al. Depression, anxiety and associated factors among Chinese adolescents during the COVID-19 outbreak: a comparison of two cross-sectional studies. Transl Psychiatry. 2021;11:148 https://doi.org/ 10.1038/s41398-021-01271-4

Received: 15 December 2021 Revised: 26 December 2021 Accepted: 17 January 2022 Published online: 17 February 2022

AUTHOR CONTRIBUTIONS

Drafting of the manuscript: R.L., H.Q., X.C., G.W., Y.-T.X. Critical revision of the manuscript: T.C., T.J. Approval of the final version for publication: all co-authors.

COMPETING INTERESTS

The authors declare no competing interests.

ADDITIONAL INFORMATION

Correspondence and requests for materials should be addressed to Gang Wang or Yu-Tao Xiang.

Reprints and permission information is available at http://www.nature.com/reprints

Publisher's note Springer Nature remains neutral with regard to jurisdictional claims

in published maps and institutional affiliations.

© **()**

Open Access This article is licensed under a Creative Commons Attribution 4.0 International License, which permits use, sharing,

adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license, and indicate if changes were made. The images or other third party material in this article are included in the article's Creative Commons license, unless indicated otherwise in a credit line to the material. If material is not included in the article's Creative Commons license and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder. To view a copy of this license, visit http://creativecommons.org/licenses/by/4.0/.

© The Author(s) 2022