Appendix A

NEWCASTLE-OTTOWA QUALITY ASSESSMENT SCALE

(adapted for cross-sectional studies)

Selection: (maximum of 5 points)

1) Representativeness of the cases:
    a) Truly representative of the average in the target population (consecutive or random sampling of cases). *
    b) Somewhat representative of the average in the target population (non-random sampling, stratified sampling). *
    c) Selected demographic group of users.
    d) No description of the sampling strategy.

2) Sample size:
    a) Justified and satisfactory.*
    b) Not justified

3) 3) Non-Response rate:
    a) The response rate is satisfactory (≥75%) *
    b) The response rate is unsatisfactory or no description is provided.

4) Ascertainment of the screening/surveillance tool:
    a) Validated screening/ surveillance tool. **
    b) Non-validated screening/surveillance tool, but the tool is available or described.*
    c) No description of the measurement tool.

Comparability: (maximum of 1 point)

1) The potential confounders were investigated by subgroup analysis or multivariable analysis.
    a) The study investigates potential confounders. *
    b) The study does not investigate potential confounders

Outcome: (maximum of 3 points)

1) Assessment of the outcome:
    a) Independent blind assessment. **
    b) Record linkage. **
    c) Self-report. *
    d) No description.

2) Statistical test:
    a) The statistical test used to analyze the data is clearly described and appropriate and the measurement of the association is presented, including confidence intervals and the probability level (p-value) *
    b) The statistical test is not appropriate, not described, or incomplete.

This scale has been adapted from the Newcastle-Ottawa Quality Assessment Scale for cohort and case-control studies, and the adapted scale used by Modesti et al. (2022) to perform a quality assessment of cross-sectional studies for the integrative review, "The Lost Years: An Integrative Review of Mental Health and Social Impact of the Pandemic on Children and Adolescents". This scale is a modified version of the NOS scale, also used by several other studies that have felt the need to adapt the NOS scale to appropriately assess the quality of cross-sectional studies.

A score of 7 or more is considered a "good" study (see McPheeters et al. 2012; see Appendix G page 103-104 in http://www.ncbi.nlm.nih.gov/pubmedhealth/PMH0049229/). Therefore, we used this criterion as a cut-off for good quality study.

References

McPheeters, M.L., Kripalini, S., Peterson, N.B., Idowu, R.T. et al. (2012). Quality Improvement Interventions To Address Health Disparities. Evidence Report/Technology Assessment. Rockville (MD): Agency for Healthcare Research and Quality (US). http://www.ncbi.nlm.nih.gov/pubmedhealth/PMH0049222/pdf/TOC.pdf

Modesti, P. A., Reboldi, G., & Cappuccio, F. P. (2016). Newcastle-Ottawa Quality Assessment Scale (adapted for cross-sectional studies). *PLoS One*, *11*(1), e0147601.

Wells, G. A., Shea, B., O'Connell, D., Peterson, J., Welch, V., et al. The Newcastle-Ottawa Scale (NOS) for assessing the quality of nonrandomized studies in meta-analysis. 2011. http://www.ohri.ca/programs/clinical_epidemiology/oxford.asp