Dear Editor,

We are pleased to submit to *The* *Journal of Affective Disorders* our manuscript entitled “**Adaptation of the PHQ-4 Short Screening for Depression and Anxiety to increase its Sensitivity to Subclinical Variability**”. We believe it will attract a wide readership, including scientists and clinicians due to its practical and useable results.

Developing reliable and sensitive instruments for mood disorders screening is critical in a global context marked by international crises (pandemics, wars), where more and more surveys as done online. In this brief report, we show using Item Response Theory that a small modification to the widely popular PHQ-4 scale could increase its ability to capture the mild fluctuations in subclinical samples, thus improving its relevance in general population studies.

In line with our aim to set the highest standards of methodological rigour and reproducibility, all the materials (the raw data, the pre-processing script, and the analysis scrip containing additional analyses and the code to generate the figures) has been made **fully available in open-access** at https://github.com/DominiqueMakowski/PHQ4R.

This manuscript is original, not previously published, and not under concurrent consideration elsewhere. The data were collected in a manner consistent with ethical standards for the treatment of human subjects (NTU IRB-2022-187), and informed consent was obtained after the nature and possible consequences of the studies were explained. There is no conflict of interest to disclose. All authors have approved the manuscript and agree with its submission.

On behalf of all the authors,

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