**Abstract**

The PHQ-4 is an ultra-brief (4 items) screening questionnaire for depression and anxiety. In this brief report, we test the benefits of adding one additional response option ("Once or twice", in between "Not at all" and "Several days") to improve the scale's sensitivity to milder alterations, and thus increase its usefulness in subclinical populations. In study 1 (N=485), we provide evidence using Item Response Theory (IRT) that the new response option does improve the scale's psychometric quality and extends the sensitivity to the measured constructs on the lower end of the spectrum. In study 2 (N=836), we show that the refined version offers an improved sensitivity to subclinical variability in depression (indexed by the BDI-II) as compared to the original version. In conclusion, adding the "once or twice" response option is a low-cost no-downsides way of increasing the PHQ-4's sensitivity to subclinical variability, making it a tool of choice for general population research.