

# Measuring Depression, Anxiety, Stress: China's Case

The symptoms of anxiety and depression are highly overlapping with each other and are hard to differentiate in clinical settings. Researchers have attempted to develop measures specifically capturing and differentiating symptoms of these two constructs. The Depression Anxiety Stress Scale (DASS) was developed to meet this challenge and has been shown to capture depression, anxiety, and stress in both clinical and non-clinical populations. Dr. CHAN Raymond from the Institute of Psychology and his international collaborators have previously shown its preliminary psychometric properties in the non-clinical samples. However, it is still not very clear whether the Chinese version of the DASS shows a robust factor structure in clinical samples.

Given this, Drs. CHAN Raymond and WANG Kui from the Institute of Psychology and their international collaborators have conducted a cross-cultural validation study on the abridged version of the DASS, DASS-21. In study 1, they administered the DASS-21 and a set of questionnaires capturing mental health to 1815 Chinese college students and conducted a confirmatory factor analysis to examine its factor structure. Their findings showed a robust three-factor model consistent with the previous results they got from the full version

of the DASS in non-clinical Chinese sample. The DASS-21 showed good to excellent internal consistency and good test-retest reliability over a six-month interval. In study 2, Drs. CHAN and WANG administered the DASS-21 to a group of 166 patients with schizophrenia and 90 healthy controls. They found that patients with schizophrenia reported higher depression and anxiety but not stress subscale scores than healthy controls. Discriminant function analysis further showed that a composition of the linear combination of three subscale scores could correctly discriminate 69.92% of patients from the controls.

Taken together, these findings suggest the DASS-21 has a robust factor structure capturing the constructs of depression, anxiety and

stress and has a good clinical utility for assessing mental health in both clinical and non-clinical samples in the Chinese context. The authors hope that the use of the DASS-21 can reduce the gap between the demand and delivery of mental health services in mainland China.

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The paper is now available online from *Psychological Assessment*.

