Abstract:

In Japan, there are currently no reliable rating scales available for the evaluation of subjective cognitive impairment in patients with bipolar disorder. We studied the relationship between the Japanese version of the Cognitive Complaints in Bipolar Disorder Rating Assessment (COBRA) and objective cognitive assessments in patients with bipolar disorder. We further assessed the reliability and validity of the COBRA. Forty-one patients, aged 16-64 years, in a remission period of bipolar disorder were recruited from Hokkaido University Hospital in Sapporo, Japan. The COBRA (Japanese version) and the Frankfurt Complaint Questionnaire (FCQ), the gold standard in subjective cognitive assessment, were administered. A battery of neuropsychological tests was employed to measure objective cognitive impairment. Correlations between COBRA and FCQ scores were determined using Spearman’s correlation coefficient and compared to the results of the neuropsychological tests. The Japanese version of the COBRA had high internal consistency. We observed good retest reliability and convergent validity. A significant correlation was also observed between the COBRA and certain objective cognitive measurements. The findings of the present study are the first to demonstrate that the Japanese version of the COBRA is clinically useful as a subjective cognitive impairment rating scale in Japanese patients with bipolar disorder.

Comments: Novel line of work in line with evidence that individuals are generally poor at evaluating their own cognitive functioning, with the discrepancy between perceived and objective cognitive functioning being especially evident in patients with psychiatric and chronic diseases. I have a few comments on the methodology and psychometric validation that could be easily addressed by the authors.

1. Were healthy individuals included and if not why? This represents a limitation for a proper psychometric validation as it limits the measurement of the sensitivity of the instrument,e.g. is it specific to psychiatric disorders? Does it differentiate between HC and BD? This should be addressed in the discussion
2. How were convergent (concurrent) and discriminant validity measured? I saw that the authors refer to concurrent validity in figure 1 but it’s not properly discussed in the manuscript. I couldn’t find references discriminant validity. Both these steps are important and should be addressed.
3. The authors did not include results of exploratory/confirmatory factor analyses. Please include in the manuscript along with intraclass correlations.
4. Please compare current findings to those retrieved by the validation of the Spanish version of the CTQ to provide evidence of equal psychometric properties.
5. Section 3.3. How many correlations were performed and did you correct for multiple comparisons? I think that having a correlation matrix with COBRA and neuropsych measures in the supplementary section would be helpful.
6. Also could the authors report correlations between neuropsych measures? I am wondering if the correlation between TMT-A and COBRA indicates “overthinking” or is rather due to slowness in processing written verbal information. If the authors had included healthy individuals one could see whether this represents a challenge. I would suggest that the authors discuss this in their conclusions.
7. Did the authors calculate correlations between estimates of IQ and cobra? Could they please address this topic in their manuscript.
8. This study provides very preliminary evidence of the psychometric “robustness” of this questionnaire. I would therefore reword the conclusions and avoid strong statements such as “it is a valid and reliable instrument”. Current findings don’t provide evidence of the internal structure of the test, discriminant validity and sensitivity.