**Neuroscience and biobehavioral reviews**

**Convergent and discriminant neurocognitive deficits in adult patients with schizophrenia and bipolar disorder: a systematic review**

Kuswanto et al. performed a systematic review of the literature on neurocognitive deficits in adults with either schizophrenia (SCZ) or bipolar disorder (BD) and their clinical status. The authors found that the neurocognitive deficits in patients with schizoaffective disorder, and BD with psychotic features occupy a position intermediate between SCZ and BD without psychotic features. Neurocognitive deficits were also found to correlate with socio-demographic, clinical, treatment variables and lower psychosocial functioning.

I would like to commend the authors for their original work and the strengths of their review and decision to focus on cognitive functioning in relation to clinical status and global functioning as it is a relatively new concept in the field. I am suggesting very minor revisions that should be easily addressed by the authors.

1. Why did the author restrict their search from 2010 onwards?
2. While reading the paper it became unclear to me whether schizoaffective disorder was evaluated as part of schizophrenia, as a separate entity or excluded? I may be wrong but I could not find it in the summary tables. Also in the discussion the authors refer to SZ and BD but not SA. Please check this and make sure to mention SA in the results/discussion if necessary.
3. Did the authors consider the following inclusion criteria and could they please mention this in their methodology?: 1. Only standardized neuropsychological tests 2. Patients without specific comorbidities such as substance use disorder 3. Only specific age groups (e.g. adults, in order to control for cognitive changes due to brain changes 4. Diagnoses based on specific diagnostic tools such as DSM and ICD-10.
4. Were RCT, intervention studies and naturalistic studies included? Please clarify this in the methodology section.
5. I would revise and shorten the discussion section. For instance including just the first paragraph of page 20, the second paragraph of page 23 (to page 24) and the beginning of page 25. Clinical implications and limitation should be included. All together though the discussion should be max 2 pages for this kind of reviews.

*Minor points*

1. Title should be more clear and concise. The use of words such as discriminant and convergent are confusing.
2. The abstract should contain an extra sentence providing background & rationale
3. Page 3: could the authors please provide the name of the genes listed here. E.g. CACNA1C (calcium channel voltage-dependent L type alpha 1C subunit). Gene names should by the way be italicized.
4. Under clinical correlates: I would include subheaders such as illness severity, symptoms etc. to facilitate the understanding of this section
5. Please check that all acronym are explained before being mentioned in the text
6. Page 18, first paragraph: I would include the sentence starting from “of note…Arduini et al. 2003” under education and IQ.