Reviewer's report

Title: Personality dimensions of schizophrenia patients compared to control subjects by gender and the relationship with illness severity

Version: 2
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Reviewer: Lindy-Lou N Boyette

Reviewer's report:

In my opinion, the revised manuscript is an improvement from the original draft. In particular, it has improved in readability, specifically, but not limited to, the methods and results sections. However, I still have major concerns, mainly whether the chosen methods fit the authors’ conclusions. At the current stage, I do not feel that my original concerns regarding this matter have been sufficiently addressed.

Major compulsory revisions:

- Patients differ from controls in HA and RD, also when females and males were examined separately. The authors state that ‘the differences (LLB: between patients and controls) were higher and more significant for HA among males and for RD among females’ (Abstract, Results), which seems to be based on an at face-value comparison of the magnitudes of patients-control mean differences, and their subsequent p-values.

Within the control group, males and females differ in HA, RD and C.

The authors reported no test whether patients and controls have different TCI scale means depending on gender (= interaction).

Taken together, I do not feel that the current analyses and results justify the authors’ conclusion that ‘schizophrenia patients may have a specific personality profile based on gender’ (Abstract, Result – also main text Conclusions). This has not been demonstrated.

And I do not see adequate support for specific personality profiles for schizophrenia patients in which RD is not mentioned for males and HA is not mentioned for females (Abstract, Results & Abstract, Conclusions, as well as Text, Conclusions). To a reader, this implies that male patients do not differ in RD from male controls, and female patients do not differ in HA from female controls- which they in fact do. There may be smaller or larger differences in HA and RD between patients and controls for males or females, but to come to this conclusion, this should be the results of statistical analyses (I would say: demonstrated interaction between gender and group status in a two-way MANOVA for HA and RD).

To meet publication standards, the authors should provide more substantial
evidence for their claim that schizophrenia patients may have specific personality profiles based on gender. I'm afraid this cannot be avoided, since this constitutes one of their main conclusions.

- Some important psychometric characteristics, namely reliability, factor structure and –above all- temporal stability, of the TCI have not yet been examined in schizophrenia patients, which at the least should be noted as a limitation. This limitation is especially important because the authors report correlations with clinical features, that have occurred before TCI assessment. In the current form, the authors cannot rule out that the current TCI scores of patients have been affected by course of illness. The authors cannot even rule out that the present clinical state may affect TCI scores in patients. The authors’ counterargument that ‘no prominent symptoms were present’ (Limitations of the study) would be more convincing if psychotic symptom levels had actually been assessed. Perhaps there were no severe positive symptoms apparent, but positive symptoms may still have been present to some extent, as well as negative symptoms, or common comorbidities such as depression. In other words, they may in fact be finding that, not personality, but severity of illness is correlated to severity of illness. This possibility should also be noted as a limitation.

Minor essential revisions:

- It may be due to a technical problem (I’m using Word 10), but Figure 1 was not visible to me. Also, Table 3 did not show a line explaining which columns are male subjects and which columns are female subjects.

Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Acceptable

Statistical review: Yes, and I have assessed the statistics in my report.

Declaration of competing interests:

I declare that I have no competing interests