Reviewer's report

Title: The relationship of psychological reactance, health locus of control and sense of self-efficacy with adherence to treatment in psychiatric outpatients with depression

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Reviewer: Michael Obermeier

Reviewer's report:

The study aimed to investigate the association of psychological reactance, health locus of control and self-efficacy with adherence to treatments in depressive outpatients. Adherence, psychological reactance and self-efficacy were measured by self-reported questionnaires. The manuscript is well and understandably written. Especially, some limitations of the study are well carved out. However, some points concerning the statistical methods should be addressed:

Major Compulsory Revisions

The logistic regression model is the main result of the study. However, it should be improved/validated. There are 13 variables and 119 patients (no missings?) in the model and a rate of 78.2% of patients are classified correctly (which cut-off? 50%?): the model might be overfitted. Probably a variable selection might be good idea. At least a model validation using test data sets seems to be necessary (split-half, cross-validation). Is there any multicolinearity in the model, e.g. between PR Affective and PR Cognitive?

The interpretation of the correlation between reactance and adherence in the results part seems to be wrong: „as reactance increases, there is a LOWER level of adherence."

Minor Essential Revisions

There is no measure about the depressive status of the patients (e.g. HAM-D). This might be an important modifier of the results. If such a scale has been used it has to be included, otherwise this point need to be addressed in the discussion.

Discretionary Revisions

In some cases other correlation coefficients than the Pearson coefficient might be sensible: e.g. point-biserial, Spearman.

The Chi-Square tests are not mentioned in the Method section. In the results only the values of the test statistics are presented. P-values should be included.

The explorative character of the study should be more emphasized.

Which time span is covered by the Morisky scale in this study?
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.