Revision of the paper “Sensitivity and specificity of the Major Depression Inventory in outpatients” (MS: 1606478436131799) according to the points raised by the reviewers

Reviewer 1

Comment: This is a clinically interesting study evaluating the use of the Major Depression Inventory in psychiatric outpatients. The study examined the possibility to use MDI in order to differentiate between subjects with MDD and other mental disorders.
Revision: We thank the reviewer for his/her positive comments.

Comment: Major Compulsory Revision: The main problem with the study is that the psychiatrists, whose diagnosis of depression was the gold standard, used no diagnostic instruments. How many psychiatrists were involved? Did they have any consensus meetings? How about interrater reliability?
Revision: This is indeed an important weakness of this study. In the revised paper we have presented some more information: “Mental disorders were assessed according to the DSM-IV criteria by six experienced psychiatrists in a regular diagnostic interview. These psychiatrists had three-weekly consensus meetings during which they discussed the diagnoses of the included patients.” Unfortunately, interrater reliability was not measured.

Comment: Subjects and procedure: I do not fully understand the sampling of the subjects. First it is stated that 465 subjects were used, of those 99 did not have a diagnosis and 108 did not have sufficient MDI data. That makes 258 patients. After this it is stated that the subjects that were removed did not show up at the first appointment etc.
Revision: In the revised paper, this paragraph is rewritten: “A consecutive sample of 465 subjects was used for this study. Of these 465 subjects, 99 were not assigned a diagnosis during the intake phase (because they did not show up at their first appointment at the outpatient clinic, or dropped out during the intake phase) and were removed from the dataset. Of the remaining 366 subjects, 108 did not fill in the MDI (N=90) or not completely (N=18), mainly because of language problems. Of the remaining 258 subjects with an MDI, 208 had a SCL-D score.”

Comment: Table 1 presents the characteristics of the included sample not outpatients in mental health care in general.
Revision: The title of Table 1 has been changed: “Table 1. Selected characteristics of the included sample outpatients in mental health care (N=258)”

Comment: How could gender and age be unknown?
Revision: These data were missing. We have replaced the term ‘unknown’ by the term ‘missing’ in Table 1.
Comment: In the text below table 1 the diagnosis are listed. This seems to be made twice, the authors must choose which one they would like to present. (One includes all codes the other is shortened).
Revision: We are very sorry that both methods were presented in the paper. We have choosen to present only the brief list of diagnoses. In the revised paper, the extended list is removed.

Comment: In table 2 it is interesting to see that several patients with the other diagnosis reached a score over 26. How many patients? Did false positives had something in common?
Revision: We agree that these are interesting questions. However, we already have conducted many analyses for this study, and further analyssys examining these questions would complicate the paper too much. However, we will think about this idea further, and may use this in another paper on these data.

Comment: In figure 1 it is stated that the diagnosis of MDD was the gold standard. Does that mean according to the psychiatrists? Again there is no documentation of the used instrument.
Revision: The assessments of the diagnoses is described in the Methods section (subsection “Subjects and procedure” and subsection “Measures”). We have added a footnote to Figure 1 in which more information about the golden stardard is presented: “Mental disorders were assessed according to the DSM-IV criteria by experienced psychiatrists in a regular diagnostic interview”

Comment: Table 4 could be deleted since it only concludes that MDI cannot be used to differentiate between subjects with MDD and other mental disorders. This could be stated in the text
Revision: We have removed Table 4 and have added the most important information to the text.

Reviewer 2

Comment: This is a very interesting study. However, the authors should consider the following issues:
Revision: We thank the reviewer for his/her positive comments

Comment: On page 3, line 6 from the bottom, the authors correctly say that the number of studies with the Major Depression Inventory (MDI) has been limited to psychometric-oriented investigations. Therefore, for diagnostic classification, studies with mixed groups of outpatients are needed to confirm the validity and applicability of the scale.
Revision: We have added the following sentence to this paragraph: “Furthermore, for diagnostic classification, studies with mixed groups of outpatients are needed to confirm the validity and applicability of the scale.”
Comment: The study the authors have performed is such a naturalistic investigation including 258 outpatients in mental health care.

Revision: We have changed the last sentence of the Introduction section: “In the current study, we will examine the sensitivity, specificity, and psychometric qualities of the MDI in a naturalistic investigation including 258 outpatients in mental health care.”

Comment: On page 4, line 12 from the top, the authors have stated that 90 patients did not fill in the MDI and 18 patients not "completely". The authors should more clearly describe why the patients had not filled in the scale.

Revision: We have rephrased the paragraph describing this procedure (see third comment of reviewer 1). We have added that most persons who did not fill in the MDI did so because of language problems: “Of the remaining 366 subjects, 108 did not fill in the MDI (N=90) or not completely (N=18), mainly because of language problems.”

Comment: On page 3, line 13 from the top, the authors say that the MDI items are rated on a five-point scale. Actually, it is a six-point scale from 0-5, i.e. six categories.

Revision: This is true of course. We have changed this in the revised paper.

Comment: On page 8, line 5 from the bottom, the authors should call the correlation coefficient of 0.24 for only statistically significant, because this numerically very low coefficient explains approximately 5% of the variance between MDI and the age of the patients.

Revision: We do not exactly understand which changes the reviewer proposes here. In the revised paper, we have rephrased this somewhat more cautiously: “However, we did find a significant correlation between MDI and age (r=0.24; p<0.05), indicating a somewhat higher MDI with increasing age.”