Reviewer’s report

Title: The Adolescent Depression Rating Scale (ADRS): A validation study

Version: 1 Date: 6 July 2006

Reviewer: Glenn Alexander Melvin

Reviewer’s report:

General

This manuscript describes the development and psychometric evaluation of a new measure of adolescent depression. This is a worthy topic as few valid, reliable, and comprehensive adolescent-specific measures are available. However the article has a number of faults that require attention and is let down a number of typographical errors and awkward expression. The key limitation is the method used to classify participants as depressed, subsyndromal or not depressed which casts serious doubt over the findings of the study. In addition, further explanation of the method and results are required. The information in the present article is not sufficient for another group to replicate the study. My suggestions and are as follows:

Major Compulsory Revisions (that the author must respond to before a decision on publication can be reached)

1. Page 2, Conclusions section, first sentence. As it reads, this sentence states that the measure is for “evaluating adolescents with depression”. After reading the article, isn’t the purpose of the measure to assess adolescents for depression (i.e., depressed or not depressed) rather than to rate the magnitude of depression in those identified as depressed (which is currently implied)?

2. Page 4, Fifth paragraph. A copy of the qualitative interview questions should be accessible, perhaps as an appendix? This would provide the necessary amount of detail required for the study’s replication.

3. Page 5, Second paragraph, second sentence. The 11 item and 44 item scales are given the same name (ADRSc and ADRSp) as the 10 item final versions. This needs to be clarified to avoid confusing the reader as to exactly which version you are referring to.

4. Page 5, paragraph 4. Further details of the sample are required. Were the adolescents recruited for the study being treated? If so, what for? Were the adolescents attending a psychiatric clinic or a general medical clinic? How many adolescents declined to participate? The sample included adolescents who were up to 20 years of age. What the rationale was for including those over the age of 18? Eighteen is the often used cut off of adolescence as used in clinical trials. Were adolescents with bipolar disorder included in the sample, and if so why?

5. Page 6. The key fault of the manuscript seems to be the definition of subsyndromal depression as those that are considered to be depressed by the clinician but did not meet the DSM-IV criteria. This problem has resulted as no standardized diagnostic instrument was used, as acknowledged in the limitations section. As it is described, it seems that a classification of subsyndromal depression resulted when the clinicians did their assessment (or gave their initial or “spontaneous” assessment impressions) gave their diagnosis and when they later checked the DSM-IV criteria. This does not inspire confidence. So it remains possible that some of those labeled having as subsyndromal depression given the “spontaneous” opinion may not have been depressed at all, but possibly experiencing other diagnoses, such as, anxiety, bereavement, adjustment disorder, emerging personality traits. Further, with the data provided it is possible that some participants were experiencing a depressive disorder other than MDD (e.g., dysthymic disorder or depressive disorder NOS) but were classified as subsyndromal for MDD. The use of the term “spontaneous” also suggests that the opinion given by the clinician’s was his/her first impression and best guess in a short amount of time rather than an opinion following a comprehensive clinical interview. Was this the case? How much time did the clinician have to conduct the interview? Were those who were considered to be subsyndromal required to have a certain number of DSM-IV depressive symptoms to qualify as subsyndromal? This might be a useful way of classifying this group. As it stands, the no depression and subsyndromal group could have the same number of DSM-IV
depressive symptoms. Further details on the definition of subsyndromal depression or an alternative strategy sought for classifying participants is required, as I am not convinced of the rigor of this methodology. The lack of certainty about the diagnostic status of each participant seriously limits what can be claimed in the discussion section about the measures ability to measure depression and the psychometric properties of the measure.

6. Page 6 paragraph 1. A description of the psychometric properties of each of the instruments is required. I assume that the study was conducted in French, if so, this needs to be stated and that instruments were the French translations.

7. Page 6 paragraph 2. Further results are required. A gender and age break down for each of the three groups (depressed, subsyndromal and not depressed) is required including mean score and standard deviation for each item and the overall-per-item means, on the two initial scales. Also what were the results of the question asked of the clinicians: â€œDoes he/she require (use the singular rather than plural as written in the manuscript) a treatment for this aspect of his/her psychopathology?â€‌ Also this question seems loaded as it assumes that all participants had psychopathology, including those who were not depressed? Was this the case? If so, it would need to be stated, as psychiatric cases that are not depressed are different to normal population that are not depressed.

8. Page 6 Last sentence. It is stated that â€œanalyses of our data were performed for the three groupsâ€‌. However separate factor analyses were only run for the depression and subsyndromal depression group. A clear justification of why no factor analysis was run for the â€œnot depressedâ€‌ group should be provided, otherwise an analysis of all participantâ€™s data should be provided and a careful discussion of how loadings were evaluated.

9. Page 7, First paragraph. Definitions of â€œfloorâ€‌ and â€œceiling effectsâ€‌ should be provided as it is currently unclear how this was determined (also Page 8 paragraph 2, sentence 2).

10. Page 7, Sixth paragraph, first sentence. Calculating sensitivity and specificity analyses are required to estimate the ability of a score to discriminate between groups. Outcomes of both sensitivity and specificity analyses should be reported and interpreted.

11. Page 7, Seventh paragraph. Why is it reasonably to estimate a â€œclinically relevant differenceâ€‌ on the basis of a regression slope? A rationale should be given for the use of the CGI (perhaps for those less familiar with the measure) and CGI data should be presented as the standard of comparison in this regression. Also the results of the regression analyses should be provided.

12. Page 8 First paragraph, first sentence. 126 + 139 + 137 = 402 yet the total sample was 409. Please account for these seven participants. Were they drop outs? If not include their diagnostic status.

13. Page 8 Fourth paragraph. As it reads this paragraph initially states that Table 1 refers to a factor analysis of the eleven item version. Then there is mention of the removal of an item and a second factor analysis is performed. Following this the reader learns that Table 1 actually refers to a second factor analysis of the ten item version. This needs to be clarified. Also it should be stated that you are referring to the ADRSc for these analyses.

14. Page 8, Fifth paragraph. A description of the criterion/a for â€œstabilityâ€‌ should be presented, as should the results of the analysis comparing the factor structures.

15. Page 9, Second paragraph. More information on the process of item removal is required. The construction of a short form of an instrument is usually on the basis of statistical considerations. This could be provided using a table which lists the item loadings and the considerations which led to their removal. Without this the reader is left wondering exactly how and why 34 items were removed.

16. Page 13, Second paragraph, last sentence. How do you know that further investigations will confirm its relevance and utility? This statement must be toned down. I think further research would need to start with a sample of participants with diagnoses determined by diagnostic interview.

17. Page 16, Table 1. The items from each scale (both pilot versions and the final 10 item versions) need to be presented in the body of the article rather than including only the final versions in the appendices.

18. Appendix. Item 6 of the ADRS (Self rated version) reads â€œWhen I feel this way I wish I were deadâ€‌. This item is unclear as it does not specify what â€œthisâ€‌ refers to.
Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)

1. Page 2 Results section. It should be reported that the â€œBDI-13â€ was used rather than the â€œBDIâ€.
2. Page 3 First paragraph, second sentence. â€œâ€¦the population in casesâ€ should read â€œâ€¦the population into casesâ€?
3. Page 3 First paragraph, fourth sentence. This sentence is a little awkward. Perhaps the following might be better â€œâ€¦are best implemented using a dimensional modelâ€?
4. Page 3, Second paragraph, first sentence. This sentence is somewhat awkward, in particular â€œThe development of clinical trialsâ€. Do you mean that the relevance of clinical trials depends on the availability of valid and reliable outcome measures?
5. Page 3 Second paragraph, fourth sentence. Insert â€œRevisedâ€ after Childrenâ€™s Depression Rating Scale (CDRS-R).
6. Page 4 First paragraph, second sentence. The following expression is not clear â€œdepression cases that not fulfilled the full DSM criteriaâ€ perhaps something like â€œdepression cases that did not fulfill DSM-IV criteriaâ€ would work better.
7. Page 4 First paragraph. Be careful here to keep the details of the method out of the background, for example, the details of how diagnoses were established should go in the method.
8. Page 4 Fourth paragraph, first sentence. Instead of â€œA first qualitative phaseâ€ substitute â€œThe first qualitative phaseâ€.
9. Page 4 Fourth paragraph, first point. The time span covered by the Medline and PsychInfo searches should be included, e.g., 1985 to November 2005.
10. Page 4 Fourth paragraph, last sentence. I am unsure of the meaning of this sentence.
11. Page 5 First paragraph, first sentence. There is a full-stop missing from this sentence.
13. Page 5 Third paragraph, last sentence. This sentence is unclear. Could a further explanation of the â€œguideâ€ be provided or could it be put in the appendices?
14. Page 5 Fourth paragraph, last sentence. This sentence is awkward. Perhaps the following might be briefer. â€œThe sample comprised subjects with a wide range of disorders and different levels of depressive severity, including subsyndromal depression â€œthe population in casesâ€. Ideally you would report on the comorbid disorders experienced by the sample.
15. Page 6 First paragraph, first sentence. This sentence should read â€œBDI-13 item versionâ€ instead of BDI-13 items versionâ€.
16. Page 7 Second paragraph, second sentence. Throughout the paper the abbreviation â€œBDI-13â€ should be used consistently instead of BDI.
17. Page 8, Fifth paragraph. This sentence is very awkward. Could it please be reworked?
18. Page 9 Third paragraph, first sentence. The full stop has been misplaced.
19. Page 9 Second paragraph, second sentence. Insert â€œmeasureâ€ or a similar term after â€œself-reportâ€.
20. Page 9 Second paragraph, third sentence. Avoid the use of â€œetcâ€ as it sounds unscientific. If there were further criteria these should be clearly stated.
22. Page 16 The word â€œmetâ€ should be deleted and replaced with â€œmetâ€.
23. Page 18 The words â€œratingâ€ and â€œscaleâ€ ought to be capitalised.
24. Page 16-19 Abbreviations are not usually used in table titles.
25. Page 19. The words â€œinventoryâ€ and â€œrating scaleâ€ ought to be capitalised.

Discretionary Revisions (which the author can choose to ignore)

1. Page 3. Second paragraph. The Background section mentions the use of measures of adolescent depression in clinical trials. Since the ADRSp has been designed for epidemiological studies, it would be worthwhile including a comment about measures that have been used in previous epidemiological studies.
2. Page 4. Second paragraph, first sentence. A further, brief description of Myers and Wintersâ€™ recommendations would also be useful.
3. Page 4 Third paragraph, last sentence. The word â€œmulti-lingualâ€ might be more appropriate than
â€œmulti-languageâ€. Also this sentence might be more appropriate in the discussion section, under future research.

4. Page 4, Fifth paragraph, first sentence. Quoting the range of years of experience of the â€œexperienced cliniciansâ€ might be a way to establish their credentials.

5. Page 5 Third paragraph, first sentence. Could a more specific term be used instead of â€œNon-emotionalâ€ as it refers to only two symptoms (mental slowing and sleep disturbances)? Perhaps the term â€œbiologicalâ€ could be used as an alternative.

6. Page 7 Sixth paragraph, first sentence. The word â€œbetweenâ€ could be substituted for â€œamongâ€ to enhance this sentence.

7. Page 8 First paragraph. According to the journal instructions, details of the sample should be in the method section rather than in the results section.

8. Page 12 Last paragraph. This paragraph raises a third limitation of the study and could easily be joined with the previous paragraph which also addresses limitations.

9. The authors have focused on major depressive disorder. If space permits, could the authors comment on dysthymic disorder? Also I note that there is no mention of appetite disturbance, a symptom commonly experienced by adolescents with depression (e.g. 80% of a 14-18 year old depressed sample (Lewinsohn, Rohde & Seeley, 1998)). I would be interested to hear your thoughts on why this wasnâ€™t included.

What next?: Unable to decide on acceptance or rejection until the authors have responded to the major compulsory revisions

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

Quality of written English: Needs some language corrections before being published

Statistical review: No

Declaration of competing interests:

I declare that I have no competing interests