Reviewer's report

Title: Development and validation of comprehensive free software for meta-analysis of causal research data

Version: 1 Date: 15 September 2006

Reviewer: Alex Sutton

Reviewer's report:

General

This paper outlines a new and freely available software package for teaching and conducting meta-analysis. I beta tested the original release of this software and know it to be worthy of wide dissemination. Although it is non-commercial I consider it to be a professional product.

The account of the software in this paper is clear and informative. Given the non-contentious nature of the paper my comments are all relatively minor.

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

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Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)

I think it is important to point out that while you validate your software against STATA, what you are really doing is validating it against a set of user written macros for STATA which are not part of the main package. It would also be helpful to give references to the macros (and if possible version numbers because several of them have had recent updates etc - and although perhaps not directly relevant here serious errors in metareg have been discovered and corrected etc) used in the validation exercise. e.g.


e etc.

If the information is easily obtainable, it may also be helpful to describe how the STATA macros and CMA were themselves validated.

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Discretionary Revisions (which the author can choose to ignore)

It strikes me as a little surprising that no references to previous publications on meta-analysis software are provided. Perhaps including one or two of the below may help to tie this paper into the previous literature:


Clarify the abbreviation CMA in the abstract

On page 7 where you refer to the current version of the MIX program give the version number.

What next?: Accept after minor essential revisions

Level of interest: An article of importance in its field

Quality of written English: Acceptable

Statistical review: No

Declaration of competing interests:

I am an author of a book on meta-analysis (for which I receive royalties). Datasets used in this book are included in the software described in the paper in order that some of the analyses and graphics in the book can easily be reproduced in the software (i.e. as an educational companion tool). Therefore it could be construed that I have a vested interest in this software being as widely disseminated as possible since it is conceivable that increased sales of my book could result from people downloading and using the software.