Reviewer’s report

Title: The association between electrodermal activity (EDA), depression and suicidal behaviour: A systematic review and narrative synthesis

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Reviewer: Johan Siqveland

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The association between electrodermal activity (EDA), depression and suicidal behavior: A systematic review and narrative synthesis

This manuscript reviews research on electrodermal activity (EDA) in persons with depression and suicidal behavior. This is an important area of research and well worthy of a systematic review.

Main comment

My main concern with the manuscript is that it is actually not a narrative synthesis. The results from the included studies are presented (in a rather unsystematic way) and not very well discussed. The findings are not sufficiently and transparently compared to other findings, their relative importance not sufficiently discussed in terms of the quality of the original studies, as is to be expected from a narrative synthesis. While the criteria for what constitutes a "narrative synthesis" compared to a "narrative review" are not very clear, I think that the manuscript lack too much in stringency and transparency for a narrative synthesis. At present the manuscript can be more correctly classified as a narrative review. Even for being a narrative review without the quality standards for a synthesis, the manuscript needs to be substantially more stringent and organized according to logical principles of questions discussed and types of studies included; this goes for both the text and the tables.

Starting with this rather harsh comment I would also say that the authors have taken on a monumental task of revieweing no less than four questions in the same review. This is often a very difficult task, and I think my struggles in navigating the manuscript partly stems from this. Accordingly I believe that the manuscript can be improved by focusing on less questions and perhaps divide the findings into two: one on suicidal behavior and one on depression. In the very least they need to make separate summary tables for these two issues.

More emphasis should be put on the authors working on striving for the goals of narrative synthesis (even if they decide to present it as a narrative review); relate their findings to theories of causal relationship between EDA/ depression and suicidality, explore the relationships in the data and assess the robustness of the included studies/ synthesis. Also the issue of robustness of the findings need to be more thoroughly discussed. The included studies are all graded in terms of quality, but what has this to say on the interpretation of the findings?
While I think the manuscript needs a major revision a think it will be worthwhile doing so, because the topic is of potentially high relevance and importance for the field.

Minor comments:

1. Is there a protocol for the review? Has it been pre-registered?

2. The authors state that it was not possible to do a meta-analysis or other form of quantitative synthesis on the material, yet do not provide any reasons for this being so. I would imagine that some of the questions raised in the review would be suitable for a meta-analysis, for instance the sensitivity and specificity of the EDA test in identifying persons with depression.

3 In general the language needs to be improved and language edited. Some phrasing such as "schizophrenic patients” needs to be changed: patients are persons and more than their disease.

Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

No

Does the work include the necessary controls?
If not, please specify which controls are required in your comments to the authors.

Unable to assess

Are the conclusions drawn adequately supported by the data shown?
If not, please explain in your comments to the authors.

Yes

Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?
If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.

Not relevant to this manuscript

Quality of written English
Please indicate the quality of language in the manuscript:

Not suitable for publication unless extensively edited

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