Reviewer's report

Title: Time to rethink the systematic review catechism? Six challenges for systematic reviewers

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Reviewer: Jennie Popay

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"Systematic review methods are developing rapidly, and most researchers would recognise their key methodological aspects, such as a closely-focussed question, a comprehensive search, and a focus on synthesising stronger rather than weaker evidence".

I enjoyed reading this paper and believe that it raises important issues that have long required debate and resolution within the systematic review community. I would recommend publication subject to the author considering two suggested revisions.

The above statement in the abstract encapsulates two problems I have with the paper as it stands. Like any community, the SR review community comprises a number of more or less distinct groups. As the paper notes towards the end most if not all researchers involved in SR work would accept the principles of transparency and systematization but some SR groups would recognize the principles challenged here as a catechism they have long since rejected as irrelevant to their work. This raises two problems.

First, the paper fails to make the particular target of its critique explicit. As the author acknowledges Cochrane has recently ‘allowed’ qualitative research to be integrated into their reviews (albeit still at the margins) and other review approaches, such as realist reviews, are being used to explore effectiveness questions. But, as the author knows, there are also substantial and increasing numbers of SR researchers – for example, those utilizing meta-ethnographic type review methods and/or narrative approaches to synthesise diverse evidence - who already operate according to the alternative principles he is arguing for. In these groups, reviews often address multiple questions (and may even be hypothesis testing albeit not in the traditional ‘Cochrane’ sense), the questions may change iteratively as the review proceeds, evidence is typically selected purposely or theoretically and judged on utility for the review, rather than some rigidly determined notion of ‘quality’ or ‘strength’ and duplication may be seen as a strength providing alternative plausible interpretations of complex social phenomena.

The problem is not that the paper fails to recognize these alternative domains of SR activity, but that it fails to distinguish clearly between them and the section of the SR community the challenges are addressed to. I appreciate that defining particular ‘types’ of SR or groups within this community is not easy. However, notwithstanding these difficulties this paper seems to be primarily addressed at
those undertaking ‘effect size’ reviews who unquestioningly adopt the Cochrane catechism - as a ‘blind leap to faith’ in the same way as I was encouraged to do with the Catholic catechism as a child. I am reminded of the first Cochrane Collegium I attended in Amsterdam in the 1980’s. I was with another sociologist and we both felt we were observing a religious revivalist movement.

But I digress – my point is that I think the paper would be improved if it were more explicit about its focus on the need for change in the Cochrane principles accepted by only part (albeit probably a majority) of the SR community and at the same time was more explicit about the adoption of alternative principles by other sections of this community.

This takes me to my second point - that the connections between the six challenges could be made clearer. Being more explicit about the focus could enable the challenges to be presented as interconnected - as I believe them to be - with one flowing from, and to some extent determined by, the other. What the paper presents largely as discreet principles, are the core elements of the positivist theory of evidence that underpins the Cochrane/evidence based medicine movement. In challenging these principles the paper is challenging the theory as a whole. For me and I presume for the author the central issue facing Cochrane style reviews, is the growing recognition that to maximize the utility of SRs of effectiveness they need to address multiple questions. But once effectiveness reviewers widen their gaze beyond questions of ‘does an intervention work’ and ‘how much does it work’ to consider questions about the contexts in which it does/doesn’t works, for which groups, why it works/doesn’t work and how it is experienced; then the other Cochrane principles are inevitably challenged.

I am not suggesting that the author should get into philosophical debates about the nature of evidence (though he is clearly more than capable of doing this it may put off the readers he clearly wishes to engage). I would suggest, however, that making the interconnections between the challenges to Cochrane review methodology more obvious would strengthen the argument for change.

I hope these points are useful.