Reviewer's report

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

Version: 1 Date: 19 September 2014

Reviewer: Mark Pearson

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Major Compulsory Revisions:
1. My main point relates to the need for the commentary to acknowledge wider debates about systematic review methods and bring these together with Cochrane Collaboration methods for substantive development (see point 3 below).

2. This commentary strongly makes the case for (and provides examples of) the development of systematic review methods from straightforward hypothesis-testing to context-dependent explanation. Importantly, this is done in a way that encourages the reader to critically reflect on their own practice. The way in which key questions are succinctly posed, and directly addressed, to researchers makes the commentary relevant and usable. The use of 'catechism' in the title is provocative but justified. The commentary treads a careful and thoughtful line between acknowledging the contribution of conventional approaches to systematic review and the methodological developments that it is argued are required to make methods fit-for-purpose for the future.

3. The commentary would benefit from acknowledging previous work in developing systematic review methods that endeavour to take account of complexity – Penny Hawe’s work on ‘theorising interventions as events in systems’ is justifiably cited, but there was also a flurry of methodological work in the mid-2000s as EBM methods spread outside of medicine – some important debate was published in the journal of Evidence & Policy in the period 2005-08 (for example, debate between Iain Chalmers and Martyn Hammersley) and methodological work by, for example, Jenny Popay and colleagues (Health Development Agency (2003-06)), Mary Dixon-Woods’ critical interpretive synthesis (BMC Med Res Methodology, 2006), Trish Greenhalgh’s meta-narrative review (Social Science & Medicine), and (as briefly noted at the start of the commentary), Pawson’s realist review. The real strength and added value of this commentary could be in bringing together debate and development across these areas and integrating it with the Cochrane Collaboration methods.

Minor Essential Revisions:
1. Is the challenge not only to systematic reviewers, but also to those who commission research and decision-makers who use the outputs? Researchers can propose methodological developments until they’re blue in the face, but if
those with the power to fund and use the research aren’t listening (or not even addressed) then good seeds risk falling on barren ground. Whilst I acknowledge that this wider audience is not the focus of the commentary, it would seem an oversight to not note the important role played by these stakeholders.

2. Section 1 (“Do systematic reviews really need a focused question?”, p3-4) – I worry that this sub-title as a starting point may be a hostage to fortune. The nub of the section is an argument for configurative approaches to systematic review (perhaps from a systems perspective?), which seems to me to be a far more positive and defensible topic to include in the sub-title.

3. Section 3 (searches) p6, paragraph starting ‘In such cases...’ – the background argument to why a staged approach to searching may be warranted is expressed rather awkwardly – namely (in summary) ‘value of info should be considered, but additional studies may not increase confidence, but they might in principle reduce publication bias’. The section on p5-6 contains many substantive points, so it would be a shame to ‘lose’ the reader by not expressing the arguments as clearly as possible.

**Level of interest:** An article of outstanding merit and interest in its field

**Quality of written English:** Acceptable

**Declaration of competing interests:**

I declare that I have no competing interests