Reviewer's report

Title: A systematic review of the use of theory in the design of guideline dissemination and implementation strategies and interpretation of the results of rigorous evaluations

Version: 2 Date: 17 November 2009

Reviewer: Rachael Powell

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In reviewing the revised manuscript, it was good to see the supplementary file ‘Glossary of theories/frameworks used’ – an extremely useful reference list for the theories described in the review. In the original report I made two comments under ‘Major Compulsory Revisions’:

1. Content of Background. The supplementary file very effectively addresses my concern that readers would be unfamiliar with the theories and their constructs. However, the Background still does not explain why theory might be important. The authors responded to this comment by saying ‘In general, we would argue that the arguments for and against theory have been well articulated and have chosen to reference key papers rather than reiterate these’. I agree that these arguments have been made – and made well – yet many researchers are not yet understanding the importance of this. This review tells us that, up to 1998, only 22.5% of studies used theory and the majority of these did not explicitly use theory. It therefore seems to me that the arguments can not be made often enough – especially when it explains to the reader (perhaps a reader who is unfamiliar with these arguments) why your study is important. In the discussion, the authors write: ‘the main advantage of conducting an explicitly theory-based study is that it is possible to test those hypotheses that have been deduced from the theory in order to design the study’ – so the authors do put an argument for the importance of theory – yet it appears for the first time in the Discussion. I still believe that it would be useful – both for this paper and for the discipline – to explain, albeit briefly, why theory use is important at the start of this paper.

2. The study timeframe: it is unfortunate but understandable that the authors do not have the resources to update the review - I fear that this does limit interest in the paper. The authors did not respond to my initial suggestion that it could be useful, within this review, to comment on the pattern of theory use within the time frame of the review: ‘If it is not feasible to update the review, it would be useful to know what the pattern of results were – e.g. were studies distributed evenly over the years covered, or was a steady increase seen? Have the theories chosen, and the way they have been used, changed?’ It would be useful to have an idea of the pattern of theory used because, at one extreme, if theory use was seen early on in the study period and not later then clearly that is a cause of concern for the progression of the discipline. Alternatively, if few studies used theories in the early years but towards 1998 a more substantial proportion of studies were
theory-based then it would appear that the argument for theory use is winning and the 22.5% figure for theory use may actually be a low reflection of theory use towards the end of the study period.

**Level of interest:** An article of limited interest

**Quality of written English:** Acceptable

**Statistical review:** No, the manuscript does not need to be seen by a statistician.

**Declaration of competing interests:**

I declare that I have no competing interests.