Author's response to reviews

Title: A qualitative systematic review of studies using the Normalization Process Theory to research implementation processes

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Author's response to reviews: see over
October 15th 2013
RE: MS: 1034393966993217

Dear Dr. O’Connor,

We are very happy to read that the paper was well received by the reviewers, and are grateful for the many valuable comments received on the paper. We hope that the following information answers the additional queries/comments that you and the reviewers outlined in your email. If you require any further clarifications please don’t hesitate to contact me.

Yours sincerely,

Rachel McEvoy.

Editor’s Comments:

That the manuscript adheres to the relevant reporting guidelines (e.g. RATS)

Response: The Qualitative Research Review guidelines have been reviewed and we are confident that our manuscripts adheres to the various elements outlined for consideration in these reporting guidelines.

- that the revised manuscript adheres to the journal word limit requirements.

Response: The abstract currently stands at 335 words, which is within the word limit requirements set by the journal. To the best of our knowledge there is no set word limit for the main body of the text.

- that the text currently under methods that relates to results (e.g. # studies found, included etc, coding agreement 100%) is moved to results.

Response: Relevant text is now moved to results (please see highlighted text on page 10).

- that the use of terminology regarding NPT (and NPM) is clarified re. the differences. I suggest you include a brief explanation of the changes in terms over time and what will be used in this paper.

Response: Please see highlighted text on page 6.

- there is no mention of the limitations of the review? This should be added.

Response: We had included information on the limits of our review under the heading of methodological critique. However, we have now changed that heading to reflect the preferred terminology of the journal (see highlighted text on page 17).

Please also ensure that your revised manuscript conforms to the journal style (http://www.implementationscience.com/info/instructions/)

Response: In reviewing the instructions, we noted some anomalies and have highlighted the following changes:

Background:

The instructions suggest that the background section should end with a brief statement of what is being reported in the article and the main question(s) of the review being addressed (which we have done previously). However, they also suggest that reference be made to participants, interventions, outcomes and study design (PICO). Hence we have made reference to the additional file here also (see page 7).

Limitations:
The Journal suggests that gaps in the information provided by the studies should also be highlighted. **Hence we have moved the comment re ethics and bias to the limitations section (see page 17).**

We also have had the final draft of this paper professionally proofread to ensure that it is adherent to all guidelines outlined in the journal's requirements.

**Reviewer 1**

**Major Compulsory Revisions**

First, you have provided a lot of tables, but not your Framework table, or your final index. You provide some information about what ended up in your index (e.g. the central constructs from the theory) but not a complete account. Could you provide your Framework table as a supplement, and perhaps your index as a figure?

**Response:** Our final index had two sections:

(i) The first section relates to our ‘a priori’ themes which consisted of the four central constructs from the NPT theory.

(ii) The second section consists of the subheadings outlined in the discussion section and our emergent themes as outlined in Tables 1 & 3:

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<th>Final Index Table</th>
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<td><strong>Emergent Themes</strong></td>
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If this is acceptable to the reviewer we will format appropriately and will include it as an additional file.

However I’m assuming your overall aim, guiding objective 3, was to determine whether or not it’s useful to use NPT in intervention research. Your own critical analysis and synthesis of the findings of the papers you reviewed would help to meet this aim, at least as well as an analysis of the authors’ comments about NPT.

I didn’t come away from this review with any sense of what NPT has contributed to the literature so far. It would be my preference to see some substantive material included, in addition to the more ‘meta’ account that you have provided.

**Response:**

Bearing in mind the involvement of four/six of our authors in the development of NPT, we had agreed at the outset of the review process that we would focus on explicit accounts of NPT in use and explicit reflections by authors on its merits/demerits, i.e. to allow the authors of the NPT papers to speak for themselves as much as possible. We favoured this approach on the basis that it would heighten the authenticity of our conclusions given our position as scholars of NPT. At the same time, we did bring critical analysis and synthesis to the review in terms of agreeing on emergent themes and reviewing the NPT coding by authors, and have reported these in our paper. Our view is that we have presented a good balance of perspectives and a clear conclusion about the merits of using NPT in implementation research.

**Minor Essential Revisions**

You use the acronym NPT in the abstract without spelling out first.
Response: Text amended (see highlighted text page 3).

On p6, your comment on Ref 16: this seems to refer to communities of practice – worth using the formal term?

Response: Text amended (see highlighted text page 6).

P8 You might want to mention that PICO doesn’t neatly fit your research questions and discuss how you have modified it in the table.

Response: Additional text added to reflect this suggestion (see highlighted text page 10).

Reviewer 2

Major Essential Revisions

1. I think the background needs some re-structuring. It would be useful to have a paragraph at the end of the background section that summarises the background and clearly articulates the problem that this review will address. This summary and the review questions appear before the description of Normalization process theory so may be a simple job of re-structuring.

Response: Background restructured to reflect this suggestion (see highlighted text page 7).

2. Given that this is a qualitative review I would like to see a sentence or two that positions the authors in relation to the review. This is particularly important given they were involved with development of the theory. The authors are not neutral and need to acknowledge this.

Response: Additional text inserted (and highlighted) to acknowledge the positions of the authors in relation to the review (see page 18).

3. In the method, critical appraisal, there is discussion of the issue of ethics and reporting, but no discussion about bias. It seems important to include that as well:

Response: In using the Hawker Payne, et al. [27] Quality Appraisal Tool (see Additional File 3) we reviewed both ethics and bias (element 6 in the Tool). We have amended the text in the article to reflect this (see page 17).

4. The authors clearly state that this review is qualitative yet the findings are presented in a very quantitative way reporting the number of papers. I would like to see the findings, particularly for pat (iii) presented in a more interpreted thematic way that demonstrates synthesis of the papers. For example, the last paragraph states "Four papers also made reference to the further development..." could be written "Suggestions for further development of NPT included...".

Response: Text amended to reflect this suggestion (see highlighted text on pages 13 & 14).

5. Additional file 2 PICO table
In the description of study design I would expect to see qualitative designs named such as case study, qualitative descriptive. Interviews are the data collection approach not the study design. Perhaps the heading needs to be changed.

Response: Heading amended to reflect this comment, see Additional file 2.

Minor Essential revisions

1. Abstract: How many databases instead of several.

Response: Text amended (see highlighted text on page 3).

2. Please refer to comments and track changes on the attachment.
Response: Comments and track changes reviewed and amended/justified (see pages 3, 6, 7, 10, 12 and 17). The reviewer also comments on the use of the word multi-perspectival. Whilst we too found no English language dictionary reference for the word ‘multi-perspectival’ in Chambers 20th Century, Oxford Dictionary etc., we typed ‘multi-perspectival qualitative research, definition’ into Google and got many references - where people are using it in a range of fields, including Kellner 1995 (psychology) and others in the qualitative field in terms of the straightforward meaning we have always ascribed to it of ‘many perspectives’. The term is also used in the following Implementation Science Reference:


Hence unless the reviewer has particularly strong objections to the use of this word, we would prefer not to make this change.

3. Discussion
Consider why the comparison is made to Helfrich’s finding about another framework. I am not clear what this adds to the discussion.

In relation to the reviewer’s comment above, I would welcome any further contributions that you may have to this response:

Response: The comparison to Helfrich’s critical synthesis of literature on the promoting action on research implementation in health services (PARIHS) framework (2010) is made to demonstrate how the benefit of using a theory such as NPT resonates with similar studies in the literature, and thus evidence as to how we see an expanding evidence base about the use of theory in studies about translational gaps.

In relation to the point about providing a rationale for the choice of NPT in paragraph 6, can you offer a recommendation?

Response: We have reviewed this comment and noted that whilst we offered the recommendation in the Abstract we neglected to draw it out in the main text. This oversight has been corrected (see page 16).

Reviewer 3

Minor Revisions

1. Abstract: The acronym NPT is used in the Background, before it is spelt out in full (in the Objectives).

Response: Amended, see highlighted text page 3.

2. Method: Who undertook the screening – one or two reviewers? How were discrepancies resolved?

Response: The screening was undertaken by one reviewer, the first author (RM). The final list was then circulated to a number of experts in the field of NPT and no additional papers were noted. The issue of discrepancies did not arise (see page 8).

3. Method: Was the quality assessment undertaken by one or two reviewers? How were discrepancies resolved?

Response: Quality assessment was undertaken by three reviewers (see highlighted text p10, 2nd paragraph). No discrepancies arose.

4. Method: In the description of the analysis process the a priori themes are reported to be the
four NPT constructs. What were the *a priori* categories that are also referred to in the description of the analytic process (in the Method section, paragraph four under the heading Data abstraction and framework analysis)?

**Response:** This was an oversight in terms of the consistency in terms being used and the term *categories* has now been amended to read *themes* (see page 9).

5. Method: While it is important to state in the Method section how the screening was undertaken and what process was adopted for quality assessment, I recommend that reporting of the results of the screening and quality scores and weaknesses (which is currently included in the Method, in the second paragraph under the heading Search terms and strategy) be moved to the Results section.

**Response:** Reporting of the results of the screening and quality scores and weaknesses has now been moved to the results section (see highlighted text page 10).

Discretionary Revisions

1. Title – suggest, for clarity, re-wording the title to: A qualitative systematic review of studies using the Normalization Process Theory.

**Response:** In discussion with our co-authors we feel that this suggested rewording may also be somewhat misleading but would like to suggest the following revision.

*A qualitative systematic review of studies using the Normalization Process Theory to research implementation processes* (see page 1).

2. From the results of this review it appears that to date NPT has been used as an analytic framework and for guiding recommendations for future implementation. However, the theory does not appear to have been used to inform study design or intervention design, which are key benefits of using theory. These appear to be areas for future use of the theory. Discussion of this potential would provide a constructive addition to the manuscript.

**Response:** In reviewing Table 2, column 3 we can see that NPT has been used to inform study and intervention design, for example:

- Forster et al. [5] outlined how their survey and interview questions were designed to reflect the four constructs of the NPM;
- MacFarlane and O’Reilly-de Brún [40] used the NPM to inform their research questions, sampling, coding and data analysis;
- Sanders et al. [41] outlined how their semi-structured interviews were organised around the four dimensions of the NPT.

However, given that the reviewer has raised this point, we questioned whether we had drawn this out sufficiently enough in our discussion. Hence, to make it more clear to the reader we have added a sentence to explicate the fact that NPT has been used to inform study design or intervention design, which are key benefits of using theory (see page 12).

**Please note that we also made several minor changes within the body of the text which were noted when being proof read. These are also highlighted in yellow in the body of the text:**

- Page 1 and page 2, authors request that their initials be included
- Page 3, Objectives heading deleted and text incorporated into background information as per journal guidelines
- Page 4, change in one of the key words, deleting evidence based policy and replacing with translational gaps
- Page 6, full acronym for NPM spelled out, as to do so only in the heading was not considered sufficient
- Page 7, order of the additional files changed to correspond with reviewers comments and suggested changes
- Page nine, delete *(i.e. the four NPT constructs)*, as this information was not considered necessary
Page 10, last line, deleted the word *settings* and inserted the word *fields*. It was highlighted that e health isn’t a healthcare setting so suggest that we are consistent in our use of the term field.

Page 12, 4th paragraph, 4th line, deleted *formal*, inserted *service providers and other personnel in*. We thought it important to explicitly mention other actors here.

Page 15, 3rd paragraph, minor editing to ensure clarity for the reader.

Page 19, addition to list of abbreviations: NPM.