Reviewer's report

Title: What are the applications of social constructivist learning theories in knowledge translation for healthcare professionals: a scoping review

Version: 2 Date: 14 September 2013

Reviewer: Andrew Booth

Reviewer's report:

I really liked this manuscript - it is a "tight" review of theory without making pretentious claims to be a systematic review and yet conducted systematically.

Two improvements:
As mentioned in my review I would like to see some justification for choice of this theory.

I would like to see more precision in the description of studies using reference numbers for included studies in support of each category, coding or theme. A reader should be able to build on the authors excellent work in moving from their article to Included studies. So instead of only giving numbers of studies they should give reference numbers. They have already done this work they just need to share it with the readers.

Otherwise a very sound piece subject to the following improvements in either phrasing or precision.

Minor Essential Revisions

Abstract:
1. You say "for reducing these practice gaps" But you have not identified them previously.
2. "use of social constructivist theories for undergraduate learners" – shouldn’t this be “by” or “with” rather than “for”
3. Weak ending -“can be used in the broader KT enterprise moving forward”. Prefer either “can be used in moving forward within the broader KT enterprise” or “can be used in moving forward the broader KT enterprise”.

Introduction:
4. “could bear light” Prefer either “could shed light” or “could illuminate
5. You launch into a lengthy (and very clear) description of social constructivist theory without explaining why. You should precede this description with a brief explanation of why you chose to select this particular theory – perhaps using some of the material later in the description about its relation to EBP and Knowledge translation. E.g. “The fact that KT assumes, or strongly advocates for knowledge exchange between researchers and healthcare professionals to
happen in a mutually created social context, has led some to suggest (or our team to propose) that social constructivist theory may be……….”

Methods

6. “where constructivism or constructivist appeared in the title or abstract” – place in quotation marks “constructivism” or “constructivist”

7. “(searched entire database to May 16, 2011)” – give date range as you have done for other databases.

8. Describe inclusion criteria and THEN present results of process at end of paragraph “Thirty-five articles were selected from this list using inclusion/exclusion criteria”

9. “thirty articles” – but in the paragraph above you said “thirty five”!

10. “A new search 6 months later resulted in 55 new articles for screening from MEDLINE. Seven recently published articles were added for a total of 62 new articles for screening.” – Repeated use of the word “new” is confusing and imprecise here. I would suggest “An expanded search 6 months later resulted in 55 additional articles for screening from MEDLINE. Seven recently published articles were added for a total of 62 additional articles for screening”. (To avoid potential confusion between “new” as recently published and “new” as articles that were there already but not retrieved from previous search)

11. “mix method” prefer standard “mixed method”

12. “the mental health clinical environments” Why no “N= “ for this category?

13. “The healthcare professional groups targeted in the papers were nursing, that either alone, or along with physicians, patients, and interdisciplinary teams, were involved in 16 of the 35 included studies” – this is a very cumbersome sentence with two “were”s and inappropriatesubclause. Rephrase as “Nursing was the healthcare professional group most frequently targeted in the papers (16/35 included studies), either alone, or along with physicians, patients, or interdisciplinary teams.”.

14. “undergraduates learners” – typo

15. “Eight studies explored all three of the theory’s assumptions [24-28]” – this is lazy referencing. If all three of the assumptions are commonly accepted then one citation would be enough. If they are scattered across sources you would still only need three citations NOT five. Instead I would prefer to see one citation after EACH of the previously quoted assumptions perhaps to justify the authors’ choice, or even more specifically their chosen wording,

16. “to both components of the KTA framework (knowledge creation and action cycle)” You haven’t previously mentioned that the KTA framework has two components. Although many readers like myself will be familiar with the KTA you do not provide a Figure so you cannot assume prior familiarity with it. Rephrase as “The KTA framework contains two principal components, knowledge creation and an action cycle, and included studies mapped to both these components” or similar.

27. You don’t mean “Twenty-two studies addressed various steps of the action
cycle” which is imprecise. Phrase as “Twenty-two studies addressed one of the four specific steps of the action cycle”. Also reflect did they only map to ONE step? – did no articles map to more than one? i.e. is this a feature of the included articles or a characteristic of the coding process?

18. The following sentence is long, complex and very confusing: “It must be noted that although researchers in the field of KT theory advocate for explicit statements about the importance of using theory in KT research [14,15,17,19,20,66], this is mentioned for only five of the 35 papers published after Colquhoun et al.’s [19] and Davies et al.’s[20] review papers and 23 papers published on or before the germinal articles by Eccles et al. [14] and the ICEBerg group [15].”

The 35 papers were not all published after 2010 which is the date of Refs 19 and 20. So do you mean that only five papers were published after this date or that five out of an unspecified number of papers from the 35 mention theory? In the latter case you should mention the number. AND why have two cutoffs in the same sentence – the Eccles/Iceberg dates and the Colquhuon/Davies dates. Split into two sentences and make clear what you want to say.

19. Generally the sentences in the Discussion are too long, compound and complex. The worst is:

“There was very little mention of why social constructivism was a valuable lens through which to examine or discuss KT as is the case for example with planned action theories such as Craik and Rappolt’s [67] ‘Theory of research utilization enhancement’ or Moulding, Silagy and Weller’s [68] ‘A framework for effective management of change in clinical practice’ which draws from social and behavioral theory, diffusion of innovation theory, transtheoretical model of change, health education theory, social influence theory and social ecology theory.” Also both this and the previous sentence requires appropriate use of commas to break up into clauses.

20. “This prevents us from making any conclusions regarding the nature of the clinical settings that are most targeted by efforts to clarify the link between social constructivism and KT” Why does it? You find three main settings covering a large majority of papers. This is significantly LESS heterogeneity than you might have encountered. And what exactly “prevents” you – do you mean the closeness of the figures to each other? Be more precise. If so this is a different argument from the heterogeneity apparently referred to as “this” from the previous sentence.

21. I understand Limitations sections should not only say what you did not do but also should say what you could have done. Therefore in Limitations the authors could suggest that there is a potential to use key citations for a theory in citation searching to retrieve use of the theory not mentioned in Titles and Abstracts. This otherwise “invisible” theory can be searched on CINAHL, Web of Knowledge or Google Scholar (either as citations alone for this search) or combined with subject terms (for a specific application). Their scoping approach partially justifies its omission in this case but it should be highlighted as a standard procedure in systematic reviews of theory [Unpublished manuscript rejected as outside journal
22. Again in the Conclusion it would be good to distinguish between arguments for the use of theory per se from arguments for the use of this particular theory. We would like to have more of an insight why they chose to explore this particular theory – where did the idea come from? Did they already have an attachment to the theory and then see the application or did they start with KT and then identify the role of the theory. With the field being so new as they acknowledge it would be useful for this insight.

23. Ref 15 Typo – “Designing theoretically-informed implementation”

**Level of interest:** An article whose findings are important to those with closely related research interests

**Quality of written English:** Needs some language corrections before being published

**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'