Reviewer's report

Title: A Mixed Methods Examination of Knowledge Brokers and their Use of Theoretical Frameworks and Evaluative Practices

Version: 0 Date: 12 Aug 2019

Reviewer: Theresa Norton

Reviewer's report:

Overall, the authors are to be congratulated for addressing the important topics of evaluation and theoretical underpinnings for knowledge brokering practice.

Abstract:

Page 2, Line 30: As the study is specific to Canada, I suggest adding "in Canada" after "to examine how KBs."

Page 2, Line 42: I suggest adding "in Canada" after "demonstrates that KBs" as the authors state that their findings are for KBs in Canada.

Page 3, Line 9: A word appears to be missing: add "be" before "clearly."

Page 3, Lines 14-16: I wonder if the last sentence in this paragraph should be re-worded. It gives the impression that meeting the needs of clients is counter to evaluating KB activities using theories or models specific to KB (related to the previous sentence).

Background:

Background Overall: Given that the study was limited to KBs in Canada and the Van Eerd et al scoping review looked at models relevant to healthy aging in Canada, I would have liked to see text in the Background about the Canadian healthcare context and how knowledge brokering is instituted in Canada (which I suspect is more mature than in other geographic locations) to give context to the findings. The current background appears to make broad statements about knowledge brokering regardless of location.

Page 3, Lines 37-42: This list seems to mix KB functions (information communication) with ideal traits (high level of credibility). I suggest rewording the sentence to make the difference clear. Also, it is not clear what you mean by "area of specialization." Do you mean healthcare area, such as Pediatrics, or KB area, such as Library Science? Not all KBs are health experts.
Page 3, Lines 42-43: KBs also help find research relevant to practice, so I suggest adding "and practice" to read "finding relevant policy and practice research."

Page 3, Lines 56-57: I suggest clarifying what you mean by "capacity building." Do you mean capacity to appraise evidence or incorporate evidence in policy decisions or conduct searches, for example?

Page 4, Lines 7-9: The sentence about lack of standard job description and KB qualifications raises an important point. Can you add text to the Discussion section about how your research findings may contribute to creating standard job descriptions for KBs in different roles (per Glegg and Hoens) and a list of desired KB qualifications?

Page 4, Lines 12-14: I am not sure that the positioning of the KB role (inside or outside the organization) is the greatest influencer on the flexible nature of the KB role, given that the rest of the manuscript discusses at length the influence of client needs and desires. You may want to reword the example.

Page 4, Lines 52-54: I cannot find in the Nilsen article any mention of advising KBs to use models. Please clarify.

Page 5, Lines 11-12: Is "WHICH?" an error?

Page 5, Lines 18-28: The study seems to rely heavily on the findings of the Van Eerd et al. scoping review as opposed to multiple reviews. Given that the Van Eerd et al. review focuses on health aging, it may have been informative to use multiple reviews. Was the scoping review the first phase of the current study? Please clarify.

Page 5, Lines 28 and 33: Is there text missing in the underscored blank after "Innovations"?

Page 5, Lines 35-38: What does the last sentence in this paragraph mean, regarding "examining such pluralism"? Do you mean there has been no research on the reason for multiple theories or the reason why there is no KB-specific theory? Please clarify.

Page 5, Line 42: Regarding the first sentence in the paragraph, the authors might consider expanding the discussion of reasons. Multiple theories and frameworks are needed to inform types of KB roles, types of knowledge brokering circumstances or client requests, and the decision process of KBs in selecting evidence to synthesize among the abundance of evidence that is available (for reference, see https://doi.org/10.1186/s12961-019-0463-9).

Page 5, Line 52: This is the first time that the term "knowledge management" is used in the text, and the reader may get the impression that it means the same thing as knowledge brokering, which it does not. I suggest re-wording.
Page 5, Lines 54-57: In the last sentence on page 5 and throughout the manuscript, the terms "impact," "effectiveness," and "successful" are used interchangeably. I suggest being consistent in usage and specifying what is meant. The literature notes distinctions between how well a knowledge broker performs his or her duties to satisfy client requests, how much the knowledge brokering leads to more evidence-informed decision making or capabilities to appraise evidence, and to what extent knowledge brokering leads to better population health outcomes.

Page 5, Line 57: What does "supporting each other's work" mean? Does this assume that KBs are working in a team? KB teams may not be widely common. I suggest re-wording.

Page 6, Lines 7-9: You may want to reword the first sentence to clarify use of word "its," such as "scale up its interventions." Do you scale-up of knowledge brokering or healthcare interventions? Also, this is the first time that "scale-up" is used and may require explanation for the reader.

Page 6, Line 12: As stated previously, I suggest using the words "impact" and "effectiveness" consistently.

Page 6, Lines 14-17: Using the word "how" instead of "to what extent" suggests that all KBs use theories and evaluate. I suggest re-wording.

Methodology:

Page 6, Line 40: I have heard "triangulation" defined as making use of three independent data sources (Miles, Huberman, and Saldana 2014). Please explain how you are triangulating with two datasets.

Page 6, Line 47: I think "Participant" is meant to read "Participants."

Page 6, Line 49: I suggest including text about why you restricted your participant selection to KBs practicing in Canada.

Page 6, Lines 49-52: How did you identify that names on websites represented "eligible participants"? Was it based on their job titles?

Page 7, Lines 16-19: Related to my question above, how did you determine that you were e-mailing "all eligible participants"?

Page 7, Lines 45-47: Where you say that only participants who identified themselves as professional KBs were invited to participate, how does this relate to getting the names of "eligible participants" from websites? When did they get the opportunity to self-identify?
Page 7, Line 9: I wonder if "constructionist, grounded theory approach" is the best label. Your study collected data on whether the KBs used theories and evaluated their work. Do you regard this as subjective reality? Also, I wonder if the study generated theory, which I associate with the outcome of a grounded theory approach.

Page 7, Line 21: Should "identified" read "self-identified"?

Page 7, Line 28: I wonder about the use of the word "triangulated" with two data sources.

Page 7, Line 38: Was the research assistant trained in interviewing? What were her or his qualifications?

Page 7, Line 50: Did you ask KB opinions only about evaluation or did you ask whether they did evaluation?

Page 9, Lines 4-5: Who analyzed the data? How many team members did the analysis? Were there any activities to ensure intercoder reliability?

Page 9, Line 26: What does "WHO?" mean?

Page 9, Lines 43-45: If the survey was anonymous, to what were you asking survey respondents to consent?

Page 9, Lines 47: I would be interested in knowing why the questionnaire items were based on the Van Eerd et al. scoping review.

Findings:

Page 10, 45: Overall, in the Findings section I had difficulty understanding how the QUAN and QUAL data was merged or transformed as a convergent design. You may want to consider a side-by-side display of data to make the convergence understandable.

Page 10, Line 52: Why did the team decide to use two mutually exclusive groups? How did you make sure that the QUAL participants did not answer the survey?

Page 11, Lines 21-24: The second sentence does not seem to be an either/or statement. Why is giving consent to participate the opposite of self-identifying as a KB?

Page 11, Lines 35-38 and Table 1: I suggest being consistent in listing percentages and numbers, and checking the numbers in the text and table. The text says 33 respondents were from Ontario, but the table shows 35. The text shows 56 total respondents, but elsewhere the text said that data from 55 respondents were analyzed.
Page 12, Lines 45-48: In the statement about participants describing use of the PARIHS model and KTA framework, it is unclear if this data came from the interviews or the survey. Including the survey in Appendix A would be helpful to see which information was collected by multiple choice and which by open-text entry, particularly where asking about models and frameworks the KBs used.

Page 12, Line 49: There appears to be an error in the phrase, "break down the their KB initiatives."

Page 13, Line 47: What organizational change and capacity building was being attempted by the KBs and why? This is the first mention of organizational change. Please explain.

Page 14, Line 14: As this sentence has the first mention of "behavior change," I suggest explaining how the concept relates to knowledge translation.

Page 15, Lines 7-9: Are knowledge users different people from the KB clients? Please clarify.

Page 15, Lines 44-53: I wonder if this quote may confuse the reader about the meaning of knowledge brokering impact. The quote seems to reflect a huge leap in logic—to say that if rates don't go down, then the knowledge brokering was ineffective. A KB could meet a goal of getting evidence incorporated in policy, for example, without affecting health outcomes. I wonder if there was a shared understanding among study participants and researchers about effectiveness and impact.

Page 16, Line 43: There appears to be missing text in "Knowledge Broker ____."

Page 16, Lines 50-55: Throughout the findings, I would like to see a greater inclusion of percentages and numbers and less use of terms such as "similar portion" and "nearly a quarter." I had trouble envisioning the values.

Page 17, Line 14: I am not sure that "accessible" is a common indicator of success; "use" may be a better term. I think website visits and file downloads are more commonly reported metrics versus "clicks."

Page 17, Lines 27-35: Do the indicators mentioned come from the interviews or survey data? I had difficulty identifying the source of the indicators listed, such as "newly created partnerships" and "informal assessments."

Page 17, Line 40: I am not sure what is meant by "the partners waits to see." Should this read "the partners want to see" or "the KBs want to see"?
Discussion:

Page 17, Line 49: Where in the data did respondents describe their roles and skills? During the interviews or in the survey?

Page 18, Line 12: I do not see a mention of "repeat customers" in the findings. I suggest including the associated data in the Findings.

Page 18, Lines 23-27: Please clarify in which environments are formal evaluations rare and why it is unlikely to be able to initiate processes for KB evaluation.

Page 18, Line 33: This is the first mention of "quality improvement." I suggest explaining how the concept fits into this study. Is there a quality improvement problem with knowledge brokering in Canada that this study was seeking to address?

Page 19, Lines 28-33: This sentence seems to exclude knowledge brokering for policy formulation. I suggest re-wording.

Page 19, Line 50: As stated previously, I suggest specifying what is meant by "effectiveness" versus "impact" or "success."

Page 20, Line 14: You may want to add "and survey respondents" after "interview participants."

Conclusions:

Page 20, Line 40: I suggest clarifying what you mean by "intervention outcomes." Are you referring to knowledge brokering as an intervention or implementation of evidence?

Page 20, Line 54: I suggest specifying what is meant by "impact on its targeted knowledge users."

Page 20, Lines 56-57: What does it mean for KBs to describe and understand KB activities? Please clarify.

Page 21, Lines 5-7: This sentence seems to suggest that KBs cannot use theory and evaluate their activities as well as meet the needs of users and clients. Why are these mutually exclusive? Please clarify.

References:

Page 24, Line 30: Do you mean to have "c" in front of "2007"?
Titles and Legends:

Page 24, Line 50: I suggest changing the title to read "Survey respondents characteristics and demographics" to be consistent with previous use of the terms "respondents" and "participants." Also, I suggest including "n=55" somewhere in the table or title.

Table 1:

Overall: I suggest adding percentages to the table.

Areas of Employment: I think "non-for-profit" should read "not-for-profit". It may be helpful for non-Canadian readers to explain why Private Sector and Public Sector are grouped together (which is less commonly done in other locations), but Government is separated from Public Sector.

Figures 1-3:

I suggest including percentages and numbers.

Figure 3:

I suggest including the complete text for the options beginning with "Self-reported" and "Building capacity" instead of using ellipsis.

Appendix A:

I suggest including the survey questions as well as the interview guide.

Level of interest
Please indicate how interesting you found the manuscript:

An article whose findings are important to those with closely related research interests

Quality of written English
Please indicate the quality of language in the manuscript:

Needs some language corrections before being published
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