Author's response to reviews

Title: It's all about relationships: A qualitative study of health researchers' perspectives of conducting interdisciplinary health research

Authors:

Kalpana M Nair (nairk@mcmaster.ca)
Lisa Dolovich (ldolovic@mcmaster.ca)
Kevin Brazil (brazilk@mcmaster.ca)
Parminder Raina (praina@mcmaster.ca)

Version: 2 Date: 26 February 2008

Author's response to reviews: see over
February 26, 2008

Dear Dr. Norton:

Please find the enclosed revised article entitled, “It’s all about relationships”: A qualitative study of health researchers’ perspectives of conducting interdisciplinary health research.” Attached to this letter is a detailed account of how we have responded to each of the reviewer’s comments.

If you have any questions about this submission, please do not hesitate to contact me at 905-522-1155 ext. 34919 or at nairk@mcmaster.ca. Thank you for your consideration of this submission.

Sincerely,

Kalpana Nair, MEd MSc on behalf of
Lisa Dolovich, BScPhm PharmD MSc
Kevin Brazil, PhD
Parminder Raina, PhD
It's all about relationships: A qualitative study to explore researcher's perspective of conducting interdisciplinary health research

**Reviewer #1 (Sara Shaw)**

**MAJOR REVISIONS**

1) P2, abstract / results - this needs rewriting. The suggestion that the choice to conduct interdisciplinary research is ‘highly influenced by funder and organisational factors’ does not resonate with findings/discussion in the main text.

   ▪ It is appreciated that the reviewer noticed this discrepancy. This has been changed to read “interpersonal and relationship-related factors”.

2) P4 - the opening paragraph works well. However the phrase ‘has further reinforced the value’ needs qualifying. Is this about the value placed on interdisciplinarity by funders or national institutions? with the subsequent sentence then affirming that we know little about researchers experience (or their perceived value?) of interdisciplinary health research. This needs to be made clearer.

   ▪ This sentence has been clarified with the inclusion of the words “funders and academic institutions” as follows: This shift in how research is funded, along with changes in academia (e.g. joint appointments; interdisciplinary programs and faculties), has further reinforced the value placed by funders and academic institutions on the conduct of interdisciplinary research.

3) P4/5 - authors should problematise interdisciplinarity more in their background section. The initial statement that ‘it has been clearly defined and operationalised’ does not appear to be the case. For instance the systematic review they cite was unable to find a clear definition and the descriptions provided on page 5 (from CAHS, from Aboelela et al. study and their own description) vary. Are these presented simply to show varied definitions or do authors intend their own description is a reworking of these definitions? This becomes more problematic later in the paper as authors refer to their analytic strategy to ‘determine whether participants’ experiences were congruent with commonly held definitions of interdisciplinary research’. This suggests that the definitions that they provide are common and accessible and thereby provide the basis against which interviewees’ knowledge might be judged. If they believe this to be the case then they need to explicitly state this. If not, then they need to rework the section on data analysis (p9) and subsequent reporting of findings.

   ▪ The authors appreciate this being brought to our attention. The intent in the introduction was to describe some current definitions and highlight that although the definitions do vary, there are commonalities between the definitions being described in the literature (i.e. at least two disciplines, shared delineation of the research question, and involvement of each discipline throughout the research process). In our analysis of how participants conceptualized interdisciplinary health research, we examined responses for whether their experiences were congruent with these three elements. In rereading the manuscript, it is apparent however, that it appears that we were intending to delineate “the definition” of interdisciplinary health research and then assess whether participants’ conceptualization was congruent with this. In an attempt for clarity, we have deleted these parts of the manuscript and have simply presented how participants’ conceptualized interdisciplinarity without reference to the elements noted above. It is agreed that there still remains lack of consensus regarding its definition and we not want to imply otherwise.
4) P4 References to multidisciplinarity and transdisciplinarity are useful but might work better if interdisciplinarity were first described and then how these differ from it.
   - This is an excellent point. Interdisciplinarity is now first described, and then multidisciplinarity and transdisciplinarity.

5) P5 - Authors should provide a more detailed account of current literature in their background section. They currently refer to ‘notable commentaries’ rather than published empirical studies. Whilst they refer to ‘the considerable amount of scholarly writing relating to interdisciplinarity’ (p12) an introduction to this literature would be valuable to readers up-front. For instance, they refer to ‘commentaries’ as being ‘instrumental in laying the foundations for documenting some of the difficulties of interdisciplinary research’ but then fail to either document these or to cite the relevant literature.
   - We appreciate the feedback and have modified the paragraph to include more details regarding the commentaries cited as well as the challenges of interdisciplinary research. This beginning of this paragraph now reads as follows: “Scholars such as Julie Thompson Klein have been writing about interdisciplinarity since the early 1990s, but it is only within the last 5-10 years that there has been a marked increase in the nature and frequency of attention devoted to interdisciplinary research. A number of commentaries have described some of the challenges of interdisciplinary research in health and science. Giacomini has highlighted the pressures of feeling compelled to undertake interdisciplinary research, the peril of becoming adisciplinary, the frustration of continually re-educating new disciplines about one’s own discipline, and the hazards of interdisciplinary research to tenure and promotion. Hall et al have provided an excellent overview of how government, industry, and academia have both supported and hindered the uptake of interdisciplinary health research in Canada. For example, despite many funding initiatives focused on interdisciplinary health research, academic institutions are still primarily organized through disciplinary-based boundaries (and faculty rewarded for contribution to these disciplines), thereby thwarting incentives for moving beyond these boundaries. Others have also cited the tenure system as a major impediment to interdisciplinary research, and as a result some researchers may avoid opportunities for engagement in interdisciplinary research. Lewando-Hundt has described the process of conducting interdisciplinary research within an international health collaborative. She highlights the importance of context in shaping research questions and their findings, and the difficulties of navigating differences in terminology and culture.”

6) P7, design / sampling - authors should provide further justification for their sampling decisions. The study question focuses on interdisciplinary health research and so why did the study focus on academic research centres / health researchers and not other settings where interdisciplinary health research takes place (e.g. NGOs, government bodies, industry)?
   - It is agreed that this point requires clarification. We have inserted the word “academic health” before the word “researcher” on page 5 to indicate that this study is focused on the academic health researcher’s perspective. On page 7 in the Methods section, it is now also stated that: “The study setting was the university environment as we were interested in understanding the perspective of health researchers working within academia.”

7) The sampling section is rather confused: a number of questions remain unanswered (e.g. How many research centres were included and how were these selected? Did they have a culture of interdisciplinary research? How were researchers ‘known’ to have experience or expertise in interdisciplinary research? What is classed as expertise? Had the researchers interviewed worked
together in the past?) and in the space of five lines authors refer to snowball, purposive, critical case and maximum variety sampling. This section needs rewriting, providing readers with a clear and concise description of what they did and why they did it.

- This feedback is appreciated and further details regarding sampling have been provided in this section. We have changed the wording of “academic research centres” to “the university environment” as this was the main setting. We did not sample via research centres but by individuals, so it is hoped that this change in wording provides some clarification. The following statements have been added: “Two of the study investigators (LD and KN) generated a small list of possible participants based on their knowledge of the type of research that they did (e.g. researchers completing interdisciplinary health research or having published findings from interdisciplinary research). Researchers who had worked together were not specifically sought however, there were participants in this sample who had worked with other participants.” Further in this section, the following sentences have been added or modified: “Sampling was purposive as we were interested in interviewing a specific type of health researcher, someone involved or interested in interdisciplinary research. A number of strategies were used to ensure that participants were contributing towards the themes that were emerging. More specifically, a critical case sampling approach was used to elicit participants who typified key characteristics. For example, we explicitly sought to include researchers with backgrounds in statistics and in health policy as it was recognized that these disciplines were inherently interdisciplinary within the health field and these key informants could therefore provide this unique perspective. Snowball sampling, was also used to determine other suitable participants, as we were aware that there were likely key informants that were not known to us at the onset of the study.”

8) P8, final para - needs tightening up (e.g. A semi-structured interview guide was used to explore participants’ perceptions and experiences of conducting interdisciplinary health research, potential barriers and facilitators, and knowledge of literature in the field. Detailed questions on evaluation were also asked and will be reported as part of the wider study. All interviews were digitally recorded and transcribed with consent with any identifying information removed from transcripts to ensure confidentiality). The sentence relating to analysis should go into the subsequent section on page 9.
- This paragraph has been changed as per suggestion above. The sentence related to analysis has been moved to the Data Analysis section.

9) P9 - the suggestion that authors are measuring awareness of participants against ‘commonly held definitions’ and ‘commonly cited standards’ for interdisciplinary research seems undue as, by its very nature, interdisciplinary research, means many things to many people (see 3 & 4 above). If authors have specifically described what they consider as the ‘common standards’ as part of each interview and asked participants to comment or reflect on these then this needs to be made explicit in the background and methods sections (and if not, it probably needs rethinking). This also needs addressing on p11 under ‘defining interdisciplinarity’, which currently reads that participants were specifically asked about this.
- Please see response to point 3 above as we have indicated that we did not ask participants to comment of current definitions of interdisciplinary research. In this section, and on page 11, we have deleted the sentences this inferred that we did.

10) P10 - the first section under results needs rewriting. Several points need to be addressed. Does the descriptions of interviews ‘from 17 to 66 minutes’ refer to the first section of interviews relevant to this particular paper or to the whole interview including the second section on evaluation? The
length of (at least) one interview at 17 minutes is concerning and raises questions about the quality of qualitative data collected; in study limitations authors should reflect on how much they can interpret from the data collected? The use of means and percentages is inappropriate. Readers need a clear and concise description of interviewees and authors might consider including a table providing readers with an overview of e.g. positions in academia, disciplinary representation, years of experience in academic health research, experience on interdisciplinary studies.

- The description of interviews ‘from 17 to 66 minutes’ refers to the complete interview. It is agreed that the one interview at 17 minutes was short, however when faced with securing a short amount of time with busy academics versus excluding those who could not provide more time, in this study the information gathered from the interviews justified the use of them. Nonetheless, we have added this as one of the study limitations: “Some interviews were shorter than expected and in one case it was evident that the interview was ‘fit in’ between other commitments. Although the findings generated were useful, this affirms the difficulties of engaging busy health academics (and in some cases clinicians) in a qualitative study that may have been perceived as “soft research”.”
- The reference to means and SDs has been deleted.
- A table has now been included that summarizes the demographic characteristics of each participant (see Table 1).

11) Remaining findings come across as somewhat confused. Firstly the section on ‘Defining interdisciplinarity’ is confusing; is this really about defining it or about saying how difficult it is to pin down and how varied participants descriptions were? At the moment illustrative quotes relate solely to the possible distinction between multi-, inter- and trans-disciplinary research and not on broad conceptualisations or definitions of interdisciplinarity (the focus of the section). It might be useful to return to the data and explore if and how those who have been extensively involved in interdisciplinary research and/or are very familiar with the literature differ in any way from those less familiar? Secondly, findings give a sense of the variability of experiences and understandings of interdisciplinary research and yet authors seem to want to offer a picture of how interdisciplinarity was conceptualised by the interviewees as a group’. This appears contradictory and needs addressing. Thirdly, the identification of a key theme ‘It’s all about relationships’ suggests that this is predominantly how participants’ conceptualised interdisciplinary research but this is not then explored, only the four sub-themes. One way of addressing these points might be to simply start by describing (with illustrative examples) participants’ varied conceptualisations of interdisciplinary research (inc relationships); explore the data further to see if and how these variations might be explained; and then focus in on key themes being explicit that these capture the broad similarities and differences across conceptualisations?

- We have renamed this section, Conceptualizing interdisciplinarity health research. We have deleted the quotes that related to the differences between multi-, inter-, and transdisciplinary research. We have added one sentence, “Both of these researchers were among the few interviewed who were more familiar with the literature about interdisciplinary research”, to better illustrate some of the differences in responses.
- It is agreed that we have presented findings predominantly in terms of similarities of experiences. The analysis of the results suggested that disciplinary affiliation was less important than one’s status as a junior or senior researcher. It was experience level that seemed to inform participant responses. We have gone through the results section and where appropriate, have included statements related to how level of experience influenced the findings.
• We have started the section, Conducting interdisciplinary research, with a paragraph exclusively focused on the primary theme, “It’s all about relationships”. This new paragraph provides a needed link to the 4-related sub-themes.

12) Throughout findings, direct quotations need to include a short descriptor of each interviewee and not the ID number/code: perhaps their disciplinary background? Or their level of experience? If participants were sampled from more than one site then this might be worth making clear. Developing the table under point 10 might assist with this.
• This is an excellent point and all quotes have been changed to include the participants’ discipline. As well, as per point 10, a table describing participant characteristics has been added.

13) Table 1 is inadequate. It refers to three key challenges but it is unclear where these have emerged from, if there was consensus across all participants that these were the only three (authors mention ‘some of the challenges’ in the text on p12 but we don’t know what these are, were there more challenges, why are only these 3 cited?). Strategies are uninformative and need rethinking: for instance what kind of ‘leadership’, in what circumstances and to achieve what ends? What is meant by power dynamics; between whom? Is this just about people or about institutions, systems?
• We appreciate this feedback. Participants consistently provided strategies to the three challenges mentioned, and this formed the basis of Table 1 (now Table 2). We have moved this section to the end of the results section and have provided more detail in the table regarding each strategy.

14) Authors do not adequately tease out similarities and differences amongst participants across the different findings sections. This needs to be addressed throughout. For instance, on page 14, first para - it would be helpful to know in which disciplines was this evident? And what do interviewees refer to about tenure and promotion that indicates these need to be revisited? On the same page, authors refer to four factors noted by participants as contributing to the pursuit of ID research but it is unclear if there was agreement across all participants about this or not?
• We appreciate the reviewer’s comments. However as noted in point 11, while conducting the analysis, it became evident that the similarities and differences amongst participants related less to their particular disciplinary affiliation and more to their level of experience; that it junior vs. more senior investigators experienced interdisciplinary research differently and were able to navigate through potential difficulties differently. We have made an effort to go back through the results section, and where appropriate have added in whether the findings related to junior vs. senior health researchers.
• We have the statement: “For example, one researcher described a scenario whereby a colleague opted not to join an interdisciplinary research team, as his department did not recognize the contribution of multi-authored papers in the tenure and promotion process.”
• We have added the word, “consistently” to the following statement: “There were four factors consistently noted by participants…” in order to clarify that these were factors where there was agreement across participants.

15) The discussion section reads well and provides some much-needed clarity (e.g. it is only here that readers find out that there was a uniformity of experiences and perceptions across disciplines, though this contrasts with p14 where authors suggested that interdisciplinarity was not valued by some disciplines!) A few points need clarifying. P21, para 2 needs clarifying (e.g. what is interdisciplinary research as ‘second nature’? what is the relevance of interdisciplinary graduate programs to the field of study? Is it really ‘evident that there is an emerging breed of researchers’ or does some of the existing literature simply suggest this?) Para 2 - the sentence that ‘researchers’
focused primarily on the practicalities of conducting interdisciplinary research’ might be better in findings.

- We have added the word “general” prior to the statement “uniformity of experiences…” to convey that this was generally the case.
- On page 21, para 2, (now page 23) we have made a number of changes to provide clarity. First, this paragraph is now prefaced with the statement, “Interdisciplinary research was unconsciously undertaken by some participants and was seen as intrinsically part of their research scope”. This will hopefully make a suitable link to the statement regarding interdisciplinary research programs as this was included to show that there are related areas where researchers are more likely to conduct interdisciplinary research due to their prior exposure to working and thinking in this way. The final statement in this paragraph has been changed to the following: “It may be that there is an emerging breed of researchers who are better equipped to manage the challenges of interdisciplinarity in health research due to their early exposure of working in this manner.”
- Regarding the statement in paragraph 2, we have also included this in the findings section, but have chosen to keep this in the discussion section as it reflects how this study may be different from other published literature. The following statement has been added on page 19: “Overall, participants were attuned to the practicalities of conducting interdisciplinary health research.”

16) Authors might consider incorporating study limitations within the main discussion and should reflect on how the inclusion of academic health researchers (and not other researchers or institutions) impacted on their findings, as well as the potential transferability of these findings.

- The heading “Limitations” has been deleted, and this section now forms the last paragraph of the Discussion section. The following sentence has been added to address the impact of only examining the perspective of health researchers: “As well, this study’s exclusive focus on the perspective of researchers involved in interdisciplinary health research may impact the transferability of findings to other types of researchers and those working outside of academia. Future research examining the views and experiences of researchers from a broad spectrum of environments and foci would be of interest.”

17) The paper is somewhat wordy and, in places, repetitive. It would benefit from close attention to language and a thorough edit (akin to some of the suggestions above and below).

- The paper has been reread a number of times in order to ensure that the repetition and wordiness have been reduced.

MINOR REVISIONS
18) P1 - The title needs revision - it should either read ‘A qualitative study to explore the researcher’s perspective of’, or ‘A qualitative study of researchers’ perspectives of’

- Excellent point. We have changed this part of the title to: ‘A qualitative study of health researchers’ perspectives of…’.

19) P2, abstract / methods - drop ‘individual’ as key informant interviews are, by their nature, individual.

- This change has been made.

20) P2, abstract/results - Replace ‘As well’ (e.g. ‘In addition’)

- This change has been made.
21) P5 - is this study about ‘the researcher’s perspective’ or about ‘the health researcher’s perspective’?
   ▪ This study is about the health researcher’s perspective and the word “health” has been added to clarify this point.

22) P7 - perhaps omit the reference to focus groups? It seems a little out of place. Also tighten up the opening sentence (e.g. ‘This was a descriptive study utilizing qualitative interviews to allow for exploration of the experiences and perceptions of health researchers’).
   ▪ The statement related to focus groups was included as the author instructions noted that BMC Health Services Research utilizes tools such as RATS (for review of qualitative research) and one of their criteria relates to the provision of why a particular data collection method (i.e. interviews) was chosen. In this case, we felt that denoting why the other possible data collection method, focus groups, was not used was relevant to include. However, we would be fine with the omission of this sentence.
   ▪ The first sentence has been tightened as per reviewer suggestion.

23) P7, para 2 ‘with known experience of, or expertise in, interdisciplinary Research’
   ▪ This change has been made.

24) P8, top of the page - perhaps ‘when no new information was gained’. This sentence also refers to data collection and should be moved to the subsequent section. Similarly the first paragraph of the section on data collection should be moved into sampling. Alternatively, authors might merge these together into one section on ‘Sampling and data collection’.
   ▪ We have changed this statement to ‘when no new information was gained’. It is agreed that the Sampling and Data Collection sections can be merged together, and we have done so.

25) Authors refer to both ‘respondents’ and ‘participants’ and should pick one of these to use throughout.
   ▪ It is appreciated that the reviewer noticed this. All references to respondents have been changed to participants.

26) P9, end of first para on ‘Data analysis’ - shorten sentence to ‘Illustrative quotes are included within findings.’
   ▪ This change has been made.

27) P9, final sentence of ‘Study rigour’ section this might be better at the start of the section and simply stating that the study proceeded once ethics approval had been gained from the appropriate body.
   ▪ Good suggestion – this has been changed as per suggestion.

28) P11, first section of ‘Defining interdisciplinarity’, it would be useful to read more about the kind of interdisciplinary research that participants were involved in. Authors also refer to defining ‘interdisciplinarity’ and ‘interdisciplinary research’ though it is unclear if they see these as the same?
   ▪ We have added the following statement at the beginning of this section (now called ‘Conceptualizing interdisciplinary health research”) to reflect the range of research that participants were involved in: “Participants were involved in a variety of interdisciplinary health
research studies that included clinical trials, health services research, health policy analysis, environmental health, and patient and clinician-related interventions.”

- We have used the terms “interdisciplinarity” and ‘interdisciplinary research’ interchangeably however recognize that this may not be appropriate in all circumstances. When using the term interdisciplinarity, we are referring to the research context. We have examined each occurrence of the term interdisciplinary to ensure that it is clear that this is what we are referring to.

29) P12, last sentence - optimizing might be the wrong word here as it implies There’s a fixed optimal level of interdisciplinarity. Something about maximizing the benefits from interdisciplinarity might be more appropriate?
- Excellent suggestion – this change has been made.

30) P13, last para - the phrase ‘There was a concerted recognition’ needs changing (perhaps widespread recognition?)
- As per suggestion, this has been changed to widespread recognition.

31) P15 final para - should be ‘incentives’
- This word has been changed to incentives.

32) P20, 1st para, line 10 - insert ‘as’
- This word has been added.
Reviewer #2 (Kevin Dew)

Major Revisions:
1. There is a fairly succinct but limited discussion of the literature e.g. commentaries from researchers about the actual process of interdisciplinarity could be included e.g. Lewando-Hunt (2000) in Social Policy and Administration Also on page 5 it states that papers have documented the difficulties of interdisciplinary research; it would be useful to have a brief summary of these difficulties.
   - We have modified this paragraph to provide more details regarding the difficulties of interdisciplinary research and have also include the suggest citation by Lewando-Hunt. The beginning of this paragraph now reads: “Scholars such as Julie Thompson Klein have been writing about interdisciplinarity since the early 1990s, but it is only within the last 5-10 years that there has been a marked increase in the nature and frequency of attention devoted to interdisciplinary research. A number of commentaries have described some of the challenges of interdisciplinary research in health and science. Giacomini has highlighted the pressures of feeling compelled to undertake interdisciplinary research, the peril of becoming adisciplinary, the frustration of continually re-educating new disciplines about one’s own discipline, and the hazards of interdisciplinary research to tenure and promotion. Hall et al have provided an excellent overview of how government, industry, and academia have both supported and hindered the uptake of interdisciplinary health research in Canada. For example, despite many funding initiatives focused on interdisciplinary health research, academic institutions are still primarily organized through disciplinary-based boundaries (and faculty rewarded for contribution to these disciplines), thereby thwarting incentives for moving beyond these boundaries. Others have also cited the tenure system as a major impediment to interdisciplinary research, and as a result some researchers may avoid opportunities for engagement in interdisciplinary research. Lewando-Hundt has described the process of conducting interdisciplinary research within an international health collaborative. She highlights the importance of context in shaping research questions and their findings, and the difficulties of navigating differences in terminology and culture.”

2. In my opinion more discussion on methods and methodology is required. Under ‘Sampling’ reference is made to a number of strategies; a definition of a critical case approach should be provided and an illustration of how it was used in this research. It is common to cite ‘saturation’ as a reason for completing an emergent sampling framework but it is stated somewhat glibly here. Does that mean no more ‘themes’ emerged, or that all the theoretical constructs were ‘saturated’?
   - Further details about the sampling and data collection have been provided in the Methods section. We have changed the wording of “academic research centres” to “the university environment” as this was the main setting. We did not sample via research centres but by individuals, so it is hoped that this change in wording provides some clarification. The following statements have been added: “Two of the study investigators (LD and KN) generated a small list of possible participants based on their knowledge of the type of research that they did (e.g. researchers completing interdisciplinary health research or having published findings from interdisciplinary research). Researchers who had worked together were not specifically sought, however, there were participants in this sample who had worked with other participants.” Further in this section, the following sentences have been added or modified: “Sampling was purposive as we were interested in interviewing a specific type of health researcher, someone involved or interested in interdisciplinary research. A number of strategies were used to ensure that participants were contributing towards the themes that were emerging. More specifically, a critical case sampling approach was used to elicit participants who typified
key characteristics. For example, we explicitly sought to include researchers with backgrounds in statistics and in health policy as it was recognized that these disciplines were inherently interdisciplinary within the health field and these key informants could therefore provide this unique perspective. Snowball sampling, was also used to determine other suitable participants, as we were aware that there were likely key informants that were not known to us at the onset of the study.”

- The reference to saturation has been clarified with the addition of the statement: “Saturation was the main determinant of how many interviews were completed, and data collection stopped when no new information was gained for each of the main themes generated.”

Under Data Collection reference is made to three email attempts and if no response was received no further contact was initiated; but the authors also claim that all of those who were invited agreed to participate. So it is not clear what actually happened here.

- On page 8 at the end of paragraph one, it actually states that “All those invited to participate agreed to participate with the exception of one person who had scheduling conflicts.” As well, at the beginning of the Results section, it is noted that “Nineteen researchers (out of 20 approached) agreed to take part in an interview.” In order to reduce possible confusion, we have changed the statement in the data collection section to read “Almost all those invited…”

Under Data Analysis it is claimed that a content analysis approach was used to ‘extract recurrent themes’. No rationale is provided as to why only recurrent themes were of interest and this seems to contradict the search for ‘disconfirming evidence’. However, it is not clear what ‘disconfirming Evidence’ means in this context, as the authors have not talked of developing a theoretical model, so what is being disconfirmed?

- It is appreciated that this issue has been brought to our attention. We were interested in elucidating themes that were consistent across interviews as we wanted to strengthen the potential transferability of findings. Within each theme, we wanted to ensure that there breadth in the nature of responses extracted. It is agreed that the term “disconfirming evidence” is confusing and does not connote that we simply wanted to ensure that we were not narrow in our lens of examination the data. We have made the following changes in order to ensure that this discrepancy does not exist: the words “disconfirming evidence” have been changed to “range of responses within each theme”.

3. The discussion notes that researchers in this sample did not ‘deeply ponder epistemological debates’. I personally found this rather intriguing. Given the different epistemological positions that are likely to be present in interdisciplinary research, particular between social scientists and clinicians, it seems very surprising that these issues did not feature in the interviews. Could the authors reflect on why there was an absence of talk about epistemological differences and the difficulties that can arise, for example, in the interpretation of data. Was this a product of the interview schedule used, the interests of the research team or something else?

- We too were surprised that the participants interviewed generally did not spend a great deal of time pondering their epistemological positions and views. Upon reflection and review of the interview data, we feel that this likely reflects that the training of many of those interviewed would not have focused on this as well as the reality that busy academics may not have sufficient time to critically think of and discuss these issues (even when this is important to them). As well, it should be recalled that all of the researchers interviewed were actively engaged in health research, and this may have been a unifying thread that minimized disciplinary boundaries and foundations. We have added the following statement at the end of
this section: “This lack of explicit attention towards epistemology and knowledge construction may also be reflective of this sample’s focus on one type of research, health research, which may have more fluid disciplinary boundaries and foundations.”

4. A number of statements are made in the ‘Conclusions’ that have not been supported by references or evidence (and this could occur if a more thorough discussion of the literature and the context of interdisciplinarity was included in the paper) e.g. that a scenario had been created that interdisciplinarity was ‘a trendy or passing ideal’, and that interdisciplinarity had been made ‘suspect’.
  • We appreciate the suggestion. We have changed the words “trendy or passing ideal” to “with mixed emotions”. Further information has been added to the introduction regarding the lack of acknowledgement of interdisciplinary research in the tenure system and this supports the conclusion that interdisciplinarity has been made suspect (see point 1 above).

Minor Essential revisions:
1. As far as I am aware numbers less that eleven are usually written out e.g. not ‘2 disciplines’ but ‘two disciplines’.
  • Many thanks for pointing this out. The paper has been revised accordingly.

2. There are some typographical errors e.g. ‘better how cognizant’ on pg 9.
  • This particular statement was deleted in the revision of the paper, however, the manuscript has been reviewed to catch any remaining typographical errors.

3. In the ‘the way we work’ section there is a paragraph on junior researchers at the bottom of pg 13; this paragraph does not fit with the title of the section and so should be moved elsewhere or the section re-titled.
  • This was a helpful comment. This section title has been changed to: “Involvement in interdisciplinary health research”.

Discretionary revisions:
1. Some points could benefit from further discussion or clarification e.g. pg 16 refers to the view that some felt that small teams were ideal. Is that just a personal preference or is there some theoretical reason related to interdisciplinarity that explains this? Or alternatively, would this idea vary according to the research question being asked and what sort of expertise would be required?
  • We have clarified this point on page 16 (statement is now on page 13) with the addition of the words: “Working in large teams (more than five or six people) was not seen as a productive mode of research; often working closely with one to three people was seen as the ideal as this would better allow for focused attention and integration regarding what each discipline could contribute to the study.” Unfortunately, it is difficult to speculate as to what sort of expertise would be required as this was not explicitly explored in the interview.

2. In the Discussion it is suggested that, as there is a gap between the literature definitions and researcher definitions of interdisciplinarity, this ‘warrants more explicit exploration’. But why? What would be gained from such an exploration and if something is to be gained how would this be explored?
  • This is a good observation. Upon reflection, it is agreed that more explicit exploration would not yield anything useful. As a result, this sentence has been deleted.