Reviewer’s report

Title: The influence of organizational context on the use of research by nurses in Canadian pediatric hospitals

Version: 2 Date: 28 April 2013

Reviewer: Jan Florin

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Overall impression: This is a very interesting study with high relevance and importance for the field of research regarding research utilization and the complexity concerning factors, on different levels, contributing to research use, here with pediatric nurses as an example. The study adds new knowledge regarding organizational factors (dimensions), supports previous findings and also presents partly contradictory findings regarding some individual factors (dimensions) to the current knowledge.

Major compulsory revisions

1. Aim: The aim of the study is clearly stated but have slightly different wording in the manuscript and in the abstract. The aim in the abstract is more broad where the aim is narrowed into instrumental and conceptual research use. In the abstract the use of “self-reported use of…” The manuscript would gain clarity by using the exact wording in both the main text and in the abstract. Further, the aim is focusing on dimensions of organizational context, but the manuscript also address an individual level. Suggestion: Rephrase the aim with a broader description so that also the individual level is addressed, and be consistent in both the text and the abstract.

2. Methods: The current study is part of a larger ongoing research project and the authors provide a description of the methods used partly relying and referring to previous publications emanating from the overall project. They are to a great extent published by other authors than for the current study and often focusing on other issues, even though related. Now the reader receives information regarding inclusion criteria for physicians and unit managers even though the respondents in the current study solely are pediatric nurses. It makes it harder for the reader to understand the information regarding the features of the current study and to evaluate the methods used. Suggestion: The method description would benefit if it would be more elaborate so that this article could stand alone and not rely on other sources. Describe the design, sample, inclusion criteria and data collection for the present study in more details. Make proper references to the overall project where found necessary but provide sufficient information here to guide the reader’s understanding of how the study was conducted.

3. The following sentence on page 5 is hard to grasp: "….were invited to complete the TROPIC staff survey on two occasions; individuals were not linked across the two time points." Suggestion: If the current study is described in more
details and a clear description is provided regarding the connection to the main research project, then the reader can better understand the situation that there were two separate data assessments of the same respondents, whereas this study is using data from the second occasion.

4. Dependent variables (page 6 at the top): The dependent variables are clearly described in the method section. However, the authors might consider if the different types of research use should be described briefly in the introduction. Now it is stated in the aim that instrumental RU and conceptual RU were used, and a description of the dependent variables are provided in the method-section. However, the reader is not introduced to different types of RU, probably since it is so self-evident to the authors what it stands for. Suggestion: I think the readers would benefit from knowing about the three types of research use earlier in the introduction, that is, also know about persuasive RU.

5. The use of the term “study” makes it confusing to the reader. On page 7 in the middle – it is described that reliability and validity was previously demonstrated using year 1 of data from this study. The authors are here referring to a previous study conducted within the same overall research project, not the current study. Suggestion: make a clear division between the current study which you are presenting here and other parts of the overall research project.

6. Individual variables as independent variables: If the aim is to identify dimensions of organizational (unit) context that influence instrumental and conceptual research use – Why then utilize individual variables as independent variables? The title talks about organizational context, so does the aim – but the results report some findings regarding individual variables on an individual level, both regarding IRU and CRU. Further, the discussion highlights the importance of individual characteristics and the conclusion also address the importance of individual characteristics as important predictors. Suggestions: Rephrase the title and the aim so that also the individual level is incorporated.

7. Results: Why using two separate levels of statistical significance to identify predictors? First using 5 % level, but then also mention four variables that had p-values < 0.10. The meaning of that is somewhat unclear, it might be regarded as if you see it as a tendency, or so. It would be preferably to avoid being vague. Suggestion: Decide on one level for statistical significance and stick to that. Even if other factors are “near that cut off”, there is still too high a probability that chance was at play.

8. Results. The identified predictors are reported in the text as well as in table 3. However, it is not stated if it is in a positive or negative direction. Further, it is mentioned in the discussion section that culture and formal interactions leads to less CRU. That ought to have been reported in the result section, and then addressed with a critical discussion.

9. Results: Three factors fall out as predictors for both IRU and CRU which could have been reported in the result section.
10. Discussion/Limitations: The authors state that generalization to other professional groups or other contexts cannot be done. The response rate was here 39%, that is 37.4% when the LPN-responses were excluded. Does that mean that N= 1997 RNs? How about representativity of the sample? Suggestions: Address how well the sample represent the population of RNs.

Minor essential revisions

11. Results/table 1: The categories representing age does not cover the whole range. Now it is divided in “……; 50-59; >60 years” It ought to be > 60 years, otherwise all 60-year olds are not represented.

12. Results/reliability and validity measures: the information provided regarding recommendations from the literature (references made to reference 37, 38) ought to be presented in the method section instead in relation to the description of the indices.

Discretionary revisions

13. Instruments (page 7 at the top): It would be preferably to provide a reference directly in relation to mentioning the Alberta Context Tool. Now the reference is provided 9 lines below in relation to reliability and validity. Suggestion: Provide a reference direct after the ACT.

Level of interest: An article of importance in its field

Quality of written English: Acceptable

Statistical review: Yes, but I do not feel adequately qualified to assess the statistics.

Declaration of competing interests:

'I declare that I have no competing interests'