Predicting research use in public health policy environment: results of a logistic regression analysis

Major revisions
This study describes the development of a survey, administered to 372 respondents and then analysed for variables which predict research use. The dependent variable (research use) is derived from self-report. The study reveals five key variables as predictive of research use: perceived relevance of research; skills for research use; internal prompts; intention to use research; and organisation.

1. I would like to have seen a bit more substantive analysis of the findings. I think some of this in the text (eg page 10) however the discussion tends more to repeat the results, rather than take the analysis further. By way of a trivial example ‘intention to use research’ as one of the five predictive variables, is perhaps a less than helpful finding, inasmuch as it simply confirms that past behaviour is a predictor of future behaviour. More substantively, though, there is a literature that could be referred to for each of the predictor variables. In particular, I hark back to Carol Weiss’ work. While she is best known for her ‘ways of research utilisation’ (engineering, political, enlightenment and so on) she has published a body of work that has included interviews and surveys, analysed quantitatively, with decision-makers (eg: Weiss & Weiss, 1981; Weiss & Bucuvalas, 1980). Both these papers provide insights into variables associated with research use by policy makers. Importantly, the latter paper, using factor analysis, found a factor called ‘relevance’. Weiss & Buculavas go on then to explore this notion of relevance, drawing out two key aspects to research use: truth and utility. Discussion of this kind would substantially strengthen the current paper (as an aside, Weiss’ work also suggests the possibility that ‘relevance’ is a marker for ‘supports what I know already’!!). A third example is the ‘skills’ variable. While the authors cite Moore et al, reference to the original research and some more detailed commentary about why the skills factor was significant in this study but has yet to be shown to be effective (Taylor et al., 2004; Denis et al., 2008) would strengthen the paper. Finally, it is always interesting to comment on what was not significant, especially in light of existing literature.

2. There is no discussion of limitations. The most important limitation is the very high potential for response bias (socially desirable responses). This is particularly
the case where the agency managers sent out the email reminders. Were respondents advised that their answers were confidential and to be de-identified? Other limitations include the survey design itself – and the extent to which it has tapped into the major possible predictive variables.

Minor revisions

3. It would be helpful to see the questionnaire. For example, I wasn’t sure exactly how many questions were asked in total (I note 5 questions in part 2 and 16 questions in part 3 (but not the # of questions for Part 1), which then led me to ponder where the” 49 independent factors” came from. Is this simply the total number of questions in the survey?

4. I’m not entirely sure about the approach to excluding part 1 questions as independent variables (aside from the demographics). It is possible that factors such as purpose of use of information could predict research use (dependent variable). Although in the absence of being able to see the questionnaire it is difficult to evaluate what questions were excluded from the regression analysis.

5. I was interested to see that no questions from part 2 – sources of academic research – were significant. This is an unusual finding and does sit in some contradiction to other literature arguing for the role of communication, collaboration and ongoing dialogue between researchers and end users (this point is made by the authors).

6. There are of course many more questions that arise from the data, such as the extent to which the five variables which predicted academic research evidence use, are the same or different from those which would predict other types of information/evidence use (eg internal data and reports; or experience).

7. There is a sentence page 9, first paragraph (“The five significant predictors… This indicates that research translation interventions developed for these agencies will need to focus on the policy setting as the primary target for intervention rather than the academic setting”) which is unclear. I am not sure this is a valid conclusion to draw (if I have understood the point correctly). How can this study tell us where we should intervene in the knowledge translation process? By way of example, one of the five variables was ‘relevance’ – surely that is the responsibility of the academic community not the agency?

8. There are a few typographical errors and referencing issues to be edited. For example, in the abstract, last sentence first heading “the factors that affect research in specific…” I think you need to insert ‘use’ or ‘uptake’ after the word research. This occurs again in the last line of the method section of the abstract “predictors of research use over and above..”. Kothari, Edward et al 2009 is not in the reference list (page 4).

References:

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

**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.