Reviewer's report

Title: An Output Evaluation of a Health Research Foundation's Enhanced Grant Review Process for New Investigators

Version: 0 Date: 06 Mar 2017

Reviewer: Timothy C Guetterman

Reviewer's report:

Overall, I think this paper makes a terrific contribution. It is very close to my own work, and we clearly need more literature on this topic. It provides evidence of the value of the MMSF competition for funding. My overall suggestion is to shift the focus from predictive validity of the selection to those awarded vs. not awarded MMSF funds. The manuscript is an excellent contribution, and I provide suggestions below that I believe will strengthen it.

Introduction:

I am not sure I understand the purpose. It purports to look at the predictive validity of receiving selection into the program. If that is the case, we need substantially more information about the selection and criteria, aspects of interrater reliability, construct validity evidence of scores. For example, if budget determines the cutoff (p. 9, ln 36), then the criteria seems to be changing from year to year. Please clarify. However, I wonder if it might be more effective to just focus the paper as an evaluation of the program to provide funding. Your "control" is then those who were not selected. In brief, I am not sure what you gain by invoking a validity argument.

The reader needs more information about Tri-Council, what the three agencies are, what they fund, how much they fund, etc.

Are research and academic productivity two different concepts (p. 7, ln 31)? Most of the manuscript refers to "academic productivity". I suggest being very consistent.
Method:

How large are MMSF grants?

We need to better understand the groups. Who are they? How do they differ? What types of institutions are they at? Describe demographics, time in academia, degrees, etc. What about prior grants and papers?

Results:

The section on ROI (also in the discussion) is about "MMSF investment in operating grant program research", which seems more appropriate than focusing on the selection process and validity argument.

Discussion:

I like how the discussion reads. However, it starts off by writing it sought to "evaluate the Program of competitive start-up operating grant funding." I think that better represents what this study and manuscript are about than the predictive validity.

Some figures are not helpful or at least need more detail for the reader. Figures 1-4 might be more effective with each column labeled on the horizontal axis rather than color coding and a legend. Is Figure 5 supposed to be a histogram? Is Figure 7 any role in Tri-Council funding and Figure 8 only as a PI?

Use a consistent term throughout for the two groups. It vacillates between successful/unsuccesful, funded/not funded
Minor Issues:

Grammatical issues throughout. For example, "PIs" is not possessive and should not take an apostrophe.

On p. 10, ln 48, do the pound signs represent the n?

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

An exceptional article

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

Needs some language corrections before being published

Declaration of competing interests
Please complete a declaration of competing interests, considering the following questions:

1. Have you in the past five years received reimbursements, fees, funding, or salary from an organisation that may in any way gain or lose financially from the publication of this manuscript, either now or in the future?

2. Do you hold any stocks or shares in an organisation that may in any way gain or lose financially from the publication of this manuscript, either now or in the future?

3. Do you hold or are you currently applying for any patents relating to the content of the manuscript?

4. Have you received reimbursements, fees, funding, or salary from an organization that holds or has applied for patents relating to the content of the manuscript?

5. Do you have any other financial competing interests?

6. Do you have any non-financial competing interests in relation to this paper?

If you can answer no to all of the above, write 'I declare that I have no competing interests' below. If your reply is yes to any, please give details below.
I declare that I have no competing interests.

I agree to the open peer review policy of the journal. I understand that my name will be included on my report to the authors and, if the manuscript is accepted for publication, my named report including any attachments I upload will be posted on the website along with the authors' responses. I agree for my report to be made available under an Open Access Creative Commons CC-BY license (http://creativecommons.org/licenses/by/4.0/). I understand that any comments which I do not wish to be included in my named report can be included as confidential comments to the editors, which will not be published.

I agree to the open peer review policy of the journal.