Reviewer's report

Title: From intervention to interventional system: Towards greater theorization in population health intervention research

Version: 0 Date: 30 Jul 2018

Reviewer: Ray Pawson

Reviewer's report:

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BMC Public Health Referee's Report.

PUBH -18-000621

The paper raises fundamental methodological questions about population health research. It proposes some radical changes - decentring the intervention, a focus on intervention systems, a better understanding of complexity, the study of mechanisms rather than components and variables, the systematic incorporation of theory, discipline hybridisation and the increased utilisation of practitioner wisdom.

I happen to agree with much of this manifesto - though many, perhaps most, public health researchers would defend more orthodox positions. Much of the argument as presented is already gaining ground in allied areas, most notably in the evaluation of social programmes and public policy. These strategic fundamentals deserve a strong representation in public health inquiry. Publication should thus be seriously considered.

There are presentational problems. It is a very tough read:

It is overambitious. Far too many challenges are taken up for a single paper (partly a matter of the ridiculously tight strictures on word length in health/medical journal, I know).

Basically, I was able to follow the argument because I am already familiar with much of the material (and I have contributed a soupçon). But a reader on the periphery of the arguments will struggle because of the high level of abstraction.

Some of the grammatical constructions are somewhat 'French'. A few French words are left in the text - e.g. 'et' instead of 'and'. I hate to be pernickety about this, since I could write in French to save my life. But the English text can be a bit of a struggle.
The main issue is the lack of substantive examples. All the text is high meta-theory. To actually win these arguments requires concrete, practical examples of research that incorporate these principles. This approach glimmers very briefly on page 7 - but by page 8 public health gives way to redundant and incomplete examples on tidal movement and climate change.

My overall recommendation would be to encourage the authors to continue in their important quest. In respect of this paper, I think it can be revised by reducing the sheer number of claims in the manifesto (as above) and by supporting them with references to and example of innovative substantive research that exemplify the new orientation. The editors and other referees with a proper background in public health may be able to add specificity to this recommendation.

RAY PAWSON

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If not, please specify what is required in your comments to the authors.

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