



## Trashing bibliometry? In defence of a unique approach for disciplinary development

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The present letter is in response to the IJPH Editorial published on September 16, 2015, “Trashing epidemiology and public health with bibliometry? In defence of science in Germany (and elsewhere)” (Künzli 2015).

In this editorial, Dr. Künzli questioned the methodological validity of the bibliometric analysis of a recent report produced by the German Academy of Sciences regarding the state of German public health research. In essence, this report’s restrictive methodology excluded some of the highest ranking journals where public health research is often published. This restrictive inclusion criterion vastly underestimated the reality of German public health institutions’ research production. Although it is surprising that this report excluded such important journals, the report’s misrepresentation is also said to be in strong part due to the inherent multidisciplinary nature of public health (and in a lesser way, epidemiology) and to the large quantity of peer-review journals that this multidisciplinary entails. While this editorial strongly defends German public health institutions, its concluding argument questions the need for bibliometry: “Bibliometric methods must comply with basic standards just like any other science. Else, instead of ridiculing the output of public health research and epidemiology, one may need to dump bibliometry”.

We believe that the editorial was too quick to discredit bibliometry, an analytic approach that we argue is quite useful in providing a complementary perspective to review public health research produced. The editor claimed “it is a challenge to properly define the borders and bibliometric space” of a discipline such as public health yet, we believe

that bibliometry is uniquely placed to shed light on this question. Examples of such endeavours include projects that explored core topics and trends within disciplines such as medical sociology (Seale 2008) and epidemiology (Oakes 2005, Trinquart and Galea 2015) or within more specific concepts in the public health literature such as health inequalities (Bouchard et al. 2015).

We argue that one of the central traits grounding the validity of these bibliometric projects, contrary to the Leopoldina report (Leopoldina 2015), is that they were either: (a) produced by public health experts who had tacit knowledge of what data sources and analyses were needed to answer their research questions; and (b) designed so that experts who recognized limits to their knowledge could find out the most relevant data to examine. Our own work (in submission) is a suitable example: we used a bibliometric analysis of journal references and abstracts to describe the breadth and heterogeneity of disciplines among health promotion research. Knowing the multidisciplinary nature of health promotion and public health, our methodology was designed to ensure that no relevant health promotion journals were excluded. This methodology included (1) an international sample of health promotion scholars who were surveyed on the most relevant journals to their work (for publishing and consulting); and (2) the top 25 most frequently cited journals in one of the core journals in health promotion research, Health Promotion International. We were surprised to find that health promotion research included disciplines and journals that we had not considered. Thus, these results vastly changed our research questions and our interpretation of the current research space in health promotion.

In essence, we wholeheartedly agree that bibliometry, like any research, is not to be taken lightly and requires tacit knowledge of the research field of interest. We agree

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with Dr. Künzli that the German report left out important journals and for that reason, we argue that bibliometric approaches do need to be rigorous in their methodological design. We hope, however, to convince readers that public health experts should not throw the baby out with the bathwater: bibliometry is an exciting approach to further understand public health research. Recent advances in publication data access only make this discipline more accessible to future endeavours.

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