On Bridges and Stacks

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Appl Clin Inform 2016; 7: 707–710

http://dx.doi.org/10.4338/ACI-2016-07-IE-0110 received: July 12, 2016 accepted: July 20, 2016 published: July 20, 2016 **Citation:** Sabine Koch, Christoph U. Lehmann, Reinhold Haux. On Bridges and Stacks. Appl Clin Inform 2016; 7: 707–710 http://dx.doi.org/10.4338/ACI-2016-07-IE-0110 Biomedical and Health Informatics have become important disciplines for medicine and the health sciences. To remain relevant, the focus of Biomedical and Health Informatics on research and practice as well as translational matters has to be continuously discussed, analyzed, and adapted [1]. Scientific journals play an important role in this matter.

About ten years ago, the International Medical Informatics Association (IMIA) recognized that there existed a sufficient number of internationally recognized scientific journals focused on methodological and theoretical aspects of health and biomedical informatics. However, at the same time an international, peer-reviewed journal focused on translational aspects covering the application of informatics principals was considered to be missing. The opinion at the time was "that such an applied informatics journal may appeal to practicing physicians, healthcare administrators and CIOs as well as medical informaticians and that in a globalizing world with eHealth initiatives spanning across borders, such a journal should be an international effort." [2]

On Bridges

In response to the need for the applied journal and thanks to the efforts of many individuals, in 2009 the journal Applied Clinical Informatics (ACI) was first published by Schattauer with the intention to build bridges from theory to practice and vice versa.

Schattauer published now two 'companion journals', Methods of Information in Medicine (MIM) – founded in 1962 – as a more theory and methodology oriented journal and the practice oriented journal ACI, launched in 2009. Both journals are official journals of IMIA but with different albeit congruent missions. The scope of MIM includes, as mentioned, methodology and scientific fundamentals, and is focused on theory. As biomedicine and health care are the journal's application areas, it is expected that at least in the long term, theory will have an impact on the quality and efficiency of health care, and so on practice. This should be reflected in publications of ACI ('practice') and MIM ('theory').

In 2014, congruencies and interdependencies in publications of ACI and MIM had therefore been explored by Haux and Lehmann*. While congruencies could be found in themes, we found different focus in contents. Interdependencies from practice to theory as well as from theory to practice were, however, very limited. We finally had to acknowledge that our bridging goals remained disappointingly far from being achieved and would require additional efforts. Further we determined a need to continue these analyses, probably with future consequences for the journals' editorial policies. It became apparent that there was a need to continue to explore this matter and to find ways to improve bridging resulting in further research with respective publications in 2015, which did not find any improvements in achieving the bridging goals from theory to practice and vice versa. We believed these finding to be significant to both journals' readers and contributors and published two papers*.

On Stacks

On June 7, 2016, Thomson Reuters informed Schattauer that the 2015 Impact Factors of Methods of Information in Medicine and Applied Clinical Informatics would be suppressed for one year due to 'Citation Stacking', i.e. referencing between two journals of the same publisher. We immediately looked into this matter and identified this as an unintentional consequence of the above discussed efforts to analyze the effects of bridging between theory and practice.

Neither MIM nor ACI were accused creating self-citations and only one of the two papers was suspected to create citation stacking. However, we regret that implications of 'journal stacking' (a term, we had not been familiar with) resulted from our research efforts to better understand interde-

^{*} We choose to not include any references to ACI and MIM publications. The respective 'Bridging' publications can easily be found on the journals' websites.

pendencies of the companion journals. The fact that only one paper was identified as creating citation stacking makes us suspect that the threshold put in place by Thompson Reuters discriminates against journals with smaller impact factors as the 'stacking' is most likely measured as a percentage of total citations.

Given these accusations, we explained the unintended background to Thomson Reuters and offered that both papers be excluded from the impact factor calculations. Thomson Reuters stated that they could not revise their decision to suppress the journals from this year's Journal Citation Report (JCR), regardless of our well-documented explanation as well as supporting letters sent to Thomson Reuters by leading informatics associations like IMIA, EFMI, and GMDS. On July 5, 2016, Thomson Reuters informed us that both journals will remain absent from the Journal Citation Report (JCR) 2015 data, but that the journals will be re-listed in next year's JCR. Coverage of the articles published in ACI and MIM in Web of Science Core Collection (WoS CC) indexes, however, remains fortunately unchanged.

The Consequences

Even with the absence of the journals' impact factors for one year, citations of articles published in MIM or ACI in 2015 will be counted for calculation of the journals' impact factors for 2016 and 2017. As both journals continue to be indexed in WoS CC, the citations of all 2015 articles will continue to be counted to calculate each author's h-index. The articles including their citations also continue to be available in other databases such as Scopus.

The Mending

To compensate readers and authors for this unfortunate situation, Schattauer has made all articles published in both journals in the year 2015 openly available. This Open Access will enable readers worldwide to read the articles in full-text without any restrictions. We hope that this decision actually will increase the likelihood of these articles to be cited and thereby raise the authors' h-indices. Furthermore, it will enable scientists to make up their own mind when reading the criticized articles themselves.

In addition, corresponding authors of publications in the year 2015 in MIM or ACI are eligible for one free Open Access option in either MIM or ACI for a peer-reviewed accepted paper until December 31, 2016.

The Way Forward

With respect to our authors and readers, it is of utmost importance to us, to regain our impact factors as quickly as possible. We will continue to be selective in the choice of articles to be accepted to meet our high quality requirements and will continue to provide fast review and editorial processes to our authors.

On exploring the bridging activities and on identifying ways to improve translational work in health informatics, we will continue to do research in this area, as announced, as we regard this as important for the progress of our field and medicine and health care. We will of course be very careful to avoid any actions that could lead to further accusations of citation stacking. We will discuss with Thomson Reuters ways to exclude these 'bridging papers' from the JCR calculations or will publish citations as appendices.

We will also look into alternative measures and ways for journals to have better control of their citation patterns and provide better transparency. Emerging initiatives where journals generate and publish the citation distributions that underlie JIFs [3] will serve this purpose better than the reliance on a single measure and on opaque algorithms.

We sincerely apologize to our authors, readers and reviewers for this inconvenience. We greatly appreciate the good communication with Schattauer and the support we received by EFMI, GMDS,

and IMIA as well as many colleagues in the field. We are very optimistic that we will overcome this setback quickly and continue to provide excellent content for our readers.

Note

This Editorial is being jointly published in Methods of Information in Medicine and Applied Clinical Informatics.

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