

Advancing to the next level: the quantified self and the gamification of academic research through social networks

LSE blogs.lse.ac.uk/impactofsocialsciences/2017/05/15/advancing-to-the-next-level-the-quantified-self-and-the-gamification-of-academic-research-through-social-networks/

5/15/2017

*Measurement of performance using digital tools is now commonplace, even in institutional activities such as academic research. The phenomenon of the “quantified self” is particularly evident in academic social networks. **Björn Hammarfelt, Sarah de Rijcke, Alex Rushforth, Iris Wallenburg and Roland Bal** argue that ResearchGate and similar services represent a “gamification” of research, drawing on features usually associated with online games, like rewards, rankings and levels. This carries obvious dangers, potentially promoting an understanding of the professional self as a product in competition with others. But quantification of the self in this way can also be seen as a way of taking control of one’s own (self)-evaluation. A similar pattern may be observed in healthcare and the rise of platforms carrying patient “experience” ratings and direct feedback on clinical performance.*



This is a new post in the [Accelerated Academy](#) series.

To measure one’s performance using digital tools is an evident trend in contemporary life. The concept of the “[quantified self](#)” was first put forward in 2007 by Gary Wolf and Kevin Kelly, and this label now represents a whole movement, with individuals trying to measure seemingly every aspect of life. Today, being put into numbers and self-quantification is not limited to exercise and recreational activities but has also permeated institutional activities, such as academic research and medical care.

In the scientific sphere, we see how measures of scholarly impact based on online activity are increasingly used to study and assess the impact of research. For more than ten years Google Scholar has offered opportunities for researchers to showcase their research and monitor citation impact. What’s new with the advent of academic social networks is that gamification has become an integral and highly visible feature in popular services such as [ResearchGate](#) or [Academia.edu](#). Similarly, websites like [Patient Opinion](#) in England and [ZorgKaartNederland](#) in the Netherlands – which offers ratings of healthcare organisations as well as individual professionals – have become a platform for quantified patient “experience” ratings and “giving feedback” on clinical performance. These platforms draw on features such as rewards, rankings and levels which are usually associated with online games and, in many respects, these services have much in common with digital devices used for self-monitoring of health, work performance, and leisure.



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ResearchGate is perhaps the most well-known academic platform and, according to its website, today has [more than 12 million users](#). The site invites users to create a profile – similar to an online CV – with researchers also able to follow colleagues and receive updates on their progress in the “game”. The information on ResearchGate is concentrated on publications and it’s mainly through these that users are able to upgrade their “[ResearchGate score](#)”. The ResearchGate score is based on a rather complicated summation of number of publications, impact factor and user activity. The largely opaque calculation of the score has led to it being suggested as a [good example of a “bad metric”](#). The ResearchGate score is then compared with other researchers’ achievements and the user is informed of their relative position (e.g. “better than 50% of all registered researchers”). In addition to calculating their standings, ResearchGate sends constant reminders to its users regarding their latest achievements: “you have 20 new readers” or “your publications have now been cited 100 times”, for example.

We argue that ResearchGate and similar services enact research as a game with the goal of collecting as many points as possible; a game where “[quantified academic selves](#)” are in fierce competition. Users are constantly encouraged to update their profiles with new achievements in order to advance to higher levels. For example, a member of the academic research platform [Impactstory](#) can reach bronze, silver or gold levels depending on the global spread of people that have viewed their publications. Illustrated on a world map this overview resembles a strategy game in which each territory is seen as a milestone on the path to world domination. ResearchGate’s standing invitation to “update your profile” and “upload publications” relates in a similar way to the constant upgrades of characters in computer games. This, we argue, is a type of “gamification” – the use of game mechanics in non-game contexts – of research.

ZorgKaartNederland (literally: Care map Netherlands) and patient-rating sites in other countries are likewise part of the “gamification” of healthcare. Patient-rating sites typically contain (moderated) stories of patients’ or next of kins’ “experience” of care, including grades for different aspects of received care. Like researchers being cited, patient-rating is partly outside the control of healthcare workers, but hospitals as well as individual professionals have become increasingly active in “inviting” patients to score their experiences and meticulously follow – and react to – patient stories, especially the critical ones. Patient-rating sites have thus – as with ResearchGate in relation to knowledge production – become a site for the gamification of displayed healthcare quality.

The quantification and gamification of professional selves can be linked to a neoliberal discourse in which the researcher is a commodity in the “marketplace of ideas” and the healthcare worker the same in a “market of health”. With the support of Philip Mirowski and his analysis of social media use as embodying “everyday neoliberalism”, we suggest that ResearchGate, Zorgkaart Nederland and similar sites attempt to configure an entrepreneurial self-understanding; a [Facebookisation of professional reputation](#).

Analogies of scientists as entrepreneurs are not new, and competition has long been an integral part of science and (increasingly) medicine, but these platforms make visible and amplify such tendencies. One of the points we wish to stress is the ambivalence to quantification of the professional self. Whilst “everyday neoliberalism” is a useful concept for making sense of much of the online reconfiguration of professional reputation and legitimacy, we also recognise that the desire for continuous (measurable) improvement, or what Peter Sloterdijk terms “the doctrine of aspiring”, has deep origins and this quest may also carry liberating aspects. Self-tracking can, in some respects, be a means of taking control, a strategy for empowerment by making contributions visible, or to contest auditing done by others. For instance, registering a Google Scholar profile may promise some scholars in the social sciences and humanities a more representative image of the impact of their work than databases like Web of Science, in which coverage of their outputs is relatively poor. In relation to the performance indicator industry in healthcare, having your patients tell stories about their experiences with your care might be liberating for healthcare organisations.

In conclusion the quantification and gamification of science and healthcare carries obvious dangers. Quantification reduces the complexity of research and healthcare quality to a few indicators, privileging influence over other value registers like relevance and ways of doing “good care”, and can promote an understanding of the professional self as a product in competition with others. Overreliance on algorithms may also hamper collegial quality control and intra-disciplinary conversations. Furthermore, there are consequences of gamification – such as goal displacement and cheating – which hardly benefit research or care. Having said this, it should be noted that services like ResearchGate or Zorgkaart Nederland also have social and communicative functions, and alternative measures provided by these platforms can be used to challenge prevailing indicators and standards. Quantification of the self in this way cannot only be seen as self-imposed monitoring but also as a way to take control of one’s own (self)-evaluation.

Regardless of our views on self-quantification in the professional sphere, it is necessary to dispel the notion these platforms are simply innocent versions of “Facebook for academics/professionals”, and to carefully monitor how they develop in the future. Research on the effects on quantification, for example on the use of bibliometrics in evaluating research, or management systems in healthcare, has mainly focused on the impact of institutionalised evaluation, but the self-imposed and playful measurement facilitated by online platforms may also have considerable influence on professional practices.

*This blog post is based on the authors’ article, “[Quantified academic selves: the gamification of research through social networking services](#)”, published in *Information Research*, vol.21 (2).*

Note: This article gives the views of the authors, and not the position of the LSE Impact Blog, nor of the London School of Economics. Please review our [comments policy](#) if you have any concerns on posting a comment below.

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