

CIMR RIDAP Briefing Paper Number 1

Research and Policy on Research Impact

1. Background

The question of research impact has become increasingly to the fore as both a research and policy topic in the United Kingdom (U.K.) and internationally. For the UK it is intimately bound up with the issue of the Research Excellence Framework (REF) administered by the Higher Education Funding Council for England (HEFCE) with the Impact element being first introduced and assessed in the 2014 Assessment Round, where it amounted to 20% of the overall research assessment. Whether this should remain the same or be increased for the next round is a further concern. For a wider global audience, the impact of research carries increasing significance in terms of how to assess the value of academic but also public and private funding of research. Although research for its own sake in terms of excellence and scholarship remains an important principle, the outcomes and impacts of research in economic and social terms has always been an element, if not formally stated, of research prioritisation and funding.

The workshop held at Birkbeck, University of London on 2 December 2016 entitled 'Measuring the Impact of Academic Research: Best Practices and Open Questions', sought to provide an up to date assessment of recent research in the field of impact research, specifically but not exclusively on academic research, to unpack some of the issues and concepts around impact and to have an informed policy debate around such issues.

2. Aims and Key Issues

The workshop of invited participants from academia, business and the public and social enterprise sector had a number of key aims. The first was to take an overview of recent impact research and to provide evidence, examples and conclusions from such research. The second, was to question more fundamentally the aims and purpose of measuring impact and how it should be done. Lastly, the workshop sought to discuss some of the policy implications of such research.

The papers presented and the discussion surrounding them (Appendix 1 for the list and programme) focused on four main themes:

- 1) the wider context of research on impact
- 2) the use (and misuse) of indicators and metrics
- 3) evidence and examples of research outcomes and impacts
- 4) policy implications

Each of these will now be considered in turn (under the above headings).

3. Analysis and Discussion

3.1 Impact of What and Why?

Loet Leydesdorff (University of Amsterdam) started the workshop by providing the long view of impact research and the dangers of using impact just to gain short run equilibrium optimum gains rather than dynamic longer-term benefits and resilience in a system. This was followed by Jonathan Adams (Digital Science) and Anne Wil Harzing (Middlesex University) who both presented in-depth analysis of citation analysis, the significant differences between the sciences, the social sciences, and humanities in their citation patterns and forms, and the biases in how we

interpret them. The rise of inter-disciplinary research teams and its positive link to impact was also raised. Again the long view was seen as important with a frequent pattern of long periods of relatively low citation counts before a key work is picked up and recognised as being of value ('sleeping beauty' phenomenon) (Harzing). The measurement of impact on users was also seen as an important long term goal in impact research (Adams). Some of these issues were also covered in the 'Tide' Report by HEFCE and published in 2015.¹

3.2 *The Use and Evaluation of Impact Indicators and Metrics*

A number of presentations reviewed the recent use of indicators and metrics in impact research. A summary and synthesis of the Organisation for Economic Cooperation and Development (OECD) 'Blue Sky Forum, 2016' Conference was provided by Fernando Galindo-Rueda (OECD). The 'unit of observation' and hierarchy of observation (individual, institution, sector and country) at which impact was assessed was stressed as being critically important as well as the rise of the use of meta-data tools in analysing and extracting information to help determine and track impact. Within the U.K. context of the REF and the Business and Management Unit of Assessment (UoA), the work of Martyna Śliwa (University of Essex) revealed how impact case study scores had highlighted out-performers amongst the younger universities in terms of the relevance and reach of their research against some more established universities. Gender biases again were evident in who were part of, and who led, case studies in impact case studies (Śliwa; also confirmed by Adams; Harzing).

3.3 *Evidence, Results and Examples*

Closely aligned to the discussion and analysis of recent metrics and indicators of academic research was new ways to analyse of research impact. Rick Delbridge and Tim Edwards highlighted the opportunities of inter-disciplinary research teams within social sciences and with science, engineering, medicine and humanities in Cardiff and the role of Social Science Parks. They raised some of the constraints and opportunities of leading such an initiative within the UK higher education system. Nola Dundas-Hewitt (Queens University, Belfast) and Steve Roper (University of Warwick) highlighted the nature and profile of collaborations involving the most innovative, 'new to market', innovations and how this was influenced by the size and age profile of the firms involved. The issue of transaction barriers was raised, as was how support might be given to small and medium sized enterprises in collaborations leading to meaningful innovation impacts. Federica Rossi (Birkbeck) and Muthu de Silva (University of Kent) outlined their new research on the role of Knowledge Transfer Partnerships (KTPs) in fostering knowledge exchange and research impact in the UK.

3.4 *Policy Implications*

The policy implications of the discussion were led by Steven Hill (HEFCE). The qualitative and narrative aspects of impact case studies was raised; their value in the 2014 REF exercise was valued and recognised (this included some of the earlier observations arising from the Rand Europe review of the research impact element of the 2014 REF commissioned by HEFCE²). In

¹ Wilsdon, J. Allen, L. Belfiore, E. Campbell, P. Curry, S. Hill, S. Jones, R. Kain, R. Kerridge, S. Thelwall, M. Tinkler, J. Viney, I. Wouters, P. Hill, J. and Johnson, B. (2015) *The Metric Tide: Report of the Independent Review of the Role of Metrics in Research Assessment and Management*. HEFCE, Cheltenham. ISBN: 1902369273

² Manville, C. Morgan Jones, M., Frearson, M. Castle-Clarke, S. Henham, M-L. Gunashekar, S. and Grant, J. (2014) *Preparing Impact Submissions for REF 2014: An Evaluation - Findings and Observations* RAND Europe, London.

turn, Gino Martini (Roche) stressed the importance of taking the long view, especially in areas in pharmaceuticals and life sciences, where knowing the outcome of whether a research project was successful could take 15-20 years. The ability of being able to track impact of research over the long term was stressed, as were the problems and issues surrounding this. Lastly, Suma Athreye (University of Essex) raised the key issues and juxtaposition of scholarship, excellence and serendipity in the whole process of impact.

4. Conclusion and Implications

The workshop highlighted the increasing importance of the research field around impact and research impact more specifically. The development and testing of new indicators and metrics is on the rise, as well as the process of undertaking research impact assessment over the long term together with the challenges involved in moving away from merely narrative statements.

5. Next Steps

The workshop concluded by announcing the creation of a new Impact research and policy network ('Research Impact: Developing Analytics and Policy' (RIDAP)) the running of a quarterly workshop series and the establishment of a newsletter and social media feed for the network on this topic. There followed a short discussion on the next steps. It was felt that the workshop was beneficial to all types of participant and user. A key issue was trying to keep the intimacy of the high level of debate but also to incorporate a wider audience (a large number of participants had to be turned away). Another workshop is being planned on this theme and will be organised and facilitated by Birkbeck, building on RIDAP and its own leading research on research Impact, as part of its leading quarterly workshop series (see below) but trying to remain as inclusive as possible and to widen the range of venue and core partner basis.

Note: All the participants were speaking in a personal capacity and their views do not necessarily represent those of their institution or organisation.

c. Birkbeck, University of London.