SCHOLARLY PUBLISHING AND RESEARCH IMPACT: A tribute to James P Smith

RCN International Research Conference
Sheffield, UK
Outline

• Scholarly publishing and research impact: background and context
  • Alison J Tierney

• Measuring the impact of published research
  • Roger Watson

• Research outputs and impact in the REF: a quality relationship
  • Hugh P McKenna

• Postgraduate research students and early career researchers and the publication process
  • Parveen Azam Ali
Scholarly publishing and research impact: background and context
Alison J Tierney
‘the demonstrable contribution that excellent research makes to society and the economy’

Steps in the ‘pathway to research impact’

Research  Dissemination  Uptake  Implementation  Impact
For research to make an impact it first needs to be known about and publishing in scholarly journals is still the main medium for the dissemination of research.
Scholarly journals

First scholarly journal ‘Philosophical Transactions’
Henry Oldenburg - Royal Society of London - 1665

Four functions:-

- Registration
- Dissemination
- Peer review
- Archival record
Why aren’t practising nurses using research findings?

- they don’t know about them
- they don’t understand them
- they don’t believe them
- they don’t know how to apply them
- they’re not allowed to use them

1988 House of Lords select committee report looking at priorities in medical research criticised the NHS for ‘failing to articulate its research needs and attend to the problems of implementation’
1990s

- 1991 R&D Strategy for the NHS > Strategy for Nursing Research

- Adoption of ‘evidence-based’ approach in health care
  - Cochrane Collaboration > Systematic Reviews
  - Exposed weaknesses in research and in its reporting

- Increasing scrutiny of research quality and outputs
  - RAE
  - Funders
  - Journals
quality, relevance, impact

- Titles and keywords
- Structured abstracts
- Summary statements
  - What is already known and this topic
  - What this paper adds
- Method in detail
- Global perspective

JAN
JOURNAL OF ADVANCED NURSING
Transformation of journal publishing
Steps in the ‘pathway to research impact’

- Research
- Dissemination
- Uptake
- Implementation
- Impact
Measuring the impact of published research

Roger Watson
Measures of impact

• Clarivate journal impact factor
• Altmetrics
• Strategy
The impact factor

A journal's Impact Factor for a particular year

Total number of times its articles were cited during the two previous years

Total number of citable articles in the journal during those two years
How do we calculate the Impact Factor?

Impact Factor 2006 = \frac{\text{CITATIONS 2004-2005}}{\text{PUBS 2004-2005}}
<table>
<thead>
<tr>
<th>Title (for)</th>
<th>ISSN</th>
<th>JCR Data</th>
<th>Eigenfactor™ Metrics</th>
<th>Impact Factor</th>
<th>5-Year Impact Factor</th>
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<th>Articles</th>
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<td>1 HEPATOL</td>
<td>0016-5085</td>
<td>55276</td>
<td>12.899</td>
<td>12.432</td>
<td>2.528</td>
<td>405</td>
<td>7.1</td>
<td>0.15164</td>
<td>4.032</td>
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<tr>
<td>2 0270-9139</td>
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<td>10.840</td>
<td>10.912</td>
<td>1.920</td>
<td>402</td>
<td>6.6</td>
<td>0.10590</td>
<td>3.065</td>
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<tr>
<td>3 0017-5749</td>
<td>28455</td>
<td>9.357</td>
<td>9.663</td>
<td>2.528</td>
<td>180</td>
<td>7.2</td>
<td>0.07076</td>
<td>2.867</td>
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<tr>
<td>4 GASTROINTEST ENDOSC</td>
<td>0168-8278</td>
<td>17413</td>
<td>7.818</td>
<td>6.624</td>
<td>2.559</td>
<td>222</td>
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<td>0.04699</td>
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<tr>
<td>5 AM J GASTROENTEROL</td>
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<td>6.593</td>
<td>1.453</td>
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<tr>
<td>6 AM J GASTROENTEROL H</td>
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<td>26199</td>
<td>6.012</td>
<td>6.380</td>
<td>1.580</td>
<td>312</td>
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<td>0.06330</td>
<td>1.818</td>
<td></td>
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<tr>
<td>7 CLIN GASTROENTEROL</td>
<td>1542-2565</td>
<td>5503</td>
<td>5.642</td>
<td>0.939</td>
<td>179</td>
<td>3.3</td>
<td>0.03310</td>
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<tr>
<td>8 ENDOSCOPY</td>
<td>0013-726X</td>
<td>7323</td>
<td>5.545</td>
<td>4.791</td>
<td>0.729</td>
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<td>0.02233</td>
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<td>9 SEMIN LIVER DIS</td>
<td>0272-8087</td>
<td>3049</td>
<td>5.171</td>
<td>5.326</td>
<td>0.447</td>
<td>38</td>
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<td>0.00720</td>
<td>1.524</td>
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<tr>
<td>10 INFLAMM BOWEL DIS</td>
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<td>4.530</td>
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<td>11 NAT CLIN PRACT GASTR</td>
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<td>1.750</td>
<td>12</td>
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<tr>
<td>12 ALIMENT PHARM THER</td>
<td>0260-2813</td>
<td>11831</td>
<td>4.357</td>
<td>3.825</td>
<td>0.879</td>
<td>264</td>
<td>5.1</td>
<td>0.03715</td>
<td>0.989</td>
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<td>13 Curr Opin Gastroen</td>
<td>0267-1379</td>
<td>1547</td>
<td>4.331</td>
<td>3.088</td>
<td>0.535</td>
<td>71</td>
<td>3.0</td>
<td>0.00811</td>
<td>0.957</td>
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<tr>
<td>14 LIVER TRANSPLANT</td>
<td>1527-6465</td>
<td></td>
<td></td>
<td></td>
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<td></td>
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<tr>
<td>15 NEUROGASTROENT MOTIL</td>
<td>1350-1925</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
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<tr>
<td>16 J VIRAL HEPATITIS</td>
<td>1352-0504</td>
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<td></td>
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<td></td>
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<tr>
<td>17 AM J PHYSIOI GASTR L</td>
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<tr>
<td>18 LIVER INT</td>
<td>1478-3223</td>
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<tr>
<td>19 DIGEST LIVER DIS</td>
<td>1590-8658</td>
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<tr>
<td>20 J GASTROENTEROL</td>
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</tbody>
</table>
In scholarly and scientific publishing, **Altmetrics** are new metrics proposed as an alternative to the widely used journal impact factor and personal citation indices like the h-index.

*(Wikipedia)*
Editorial

How academic nursing is being enriched by ‘The Thriller Elite’

Philip Darbyshire PhD RN Professor of Nursing, Director¹,2,3 and David R. Thompson PhD RN Professor of Nursing⁴

Article first published online: 28 JAN 2014
DOI: 10.1111/jan.12350

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Altmetrics scoring system

<table>
<thead>
<tr>
<th>Source</th>
<th>Points</th>
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<tr>
<td>News</td>
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<tr>
<td>Blogs</td>
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</tr>
<tr>
<td>Twitter</td>
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<tr>
<td>Facebook</td>
<td>0.25</td>
</tr>
<tr>
<td>Sina Weibo</td>
<td>1</td>
</tr>
<tr>
<td>Wikipedia</td>
<td>3</td>
</tr>
<tr>
<td>Policy Documents (per source)</td>
<td>3</td>
</tr>
<tr>
<td>Q&amp;A</td>
<td>0.25</td>
</tr>
<tr>
<td>F1000/Publons/Pubpeer</td>
<td>1</td>
</tr>
<tr>
<td>YouTube</td>
<td>0.25</td>
</tr>
<tr>
<td>Reddit/Pinterest</td>
<td>0.25</td>
</tr>
<tr>
<td>LinkedIn</td>
<td>0.5</td>
</tr>
<tr>
<td>Open Syllabus</td>
<td>1</td>
</tr>
<tr>
<td>Google+</td>
<td>1</td>
</tr>
<tr>
<td>Patents</td>
<td>3</td>
</tr>
</tbody>
</table>
The altmetric donut visually represents the types (colors) and the frequency (thickness of the stripes) of mentions. The AAS is located in the centre of the wheel. In this figure, the 649 score represents the highest AAS among the study, which was achieved by Schulz and Sherwood's (2008) article [Colour figure can be viewed at wileyonlinelibrary.com].

The source of altmetric scores for several reasons: (a) it contains more than other sources; (b) it exhibits a pattern. For example, each article's title, authors, year of publication; publisher, source, and doi, a unique identifier that allows the source to be located.
Highly tweeted articles were 11 times more likely to be highly cited than less-tweeted articles (9/12 or 75% of highly tweeted articles were highly cited, while only 3/43 or 7% of less-tweeted articles were highly cited; rate ratio 0.75/0.07 = 10.75, 95% confidence interval, 3.4–33.6). Top-cited articles can be predicted from top-tweeted articles with 93% specificity and 75% sensitivity.
Social media and online attention as an early measure of the impact of research in solid organ transplantation.

Knight SR.1

Abstract

INTRODUCTION: Traditional measures of the impact of published research, such as citation counts, are limited to measuring academic impact. The use of social media and other online tools as alternative measures of research impact is gaining popularity and used by leading medical journals.

METHODS: MEDLINE was searched for articles published with subject headings relating to solid organ transplantation between August 1, 2011 and December 31, 2011. Mentions in social media, social bookmarking sites, and online news outlets were retrieved from the data at www.almetric.com. Data regarding mentions was compared to data and citation rates.

RESULTS: The search retrieved 566 articles. Mentions in social media were found for 42 articles, and 58 articles had at least one citation. Mentions in social media were 19.3% higher for articles that had at least one citation. Mentions in social media were significantly associated with mention in social media, expert recommendation, social bookmarking, and for articles identified as meta-analyses, multicenter studies, randomized controlled trials, and reviews (all P<0.001). The odds of an article being highly cited were significantly increased by a mention in social media (odds ratio, 2.58; P<0.001). Qualitative analysis suggests that article topics discussed on social media are more likely to relate to the more controversial and emotive areas of transplantation.

DISCUSSION: Social media and online attention act as early predictors of the impact of transplant research as measured by later citation rate. Blogging and expert recommendation, in particular, are associated with higher citation rates.
The verdict: is blogging or tweeting about research papers worth it?

Eager to find out what impact blogging and social media could have on the dissemination of her work, Melissa Terras took all of her academic research, including papers that have been available online for years, to the web and found that her audience responded with a huge leap in interest in her work.
Measuring the social impact of nursing research: An insight into altmetrics

Latefa Ali Dardas¹ | Amanda Woodward² | Jewel Scott³ | Hanzhang Xu³,⁴ | Faleh A. Sawair⁵

¹School of Nursing, The University of Jordan, Amman, Jordan
²Duke University Medical Center Library and Archives, Durham, North Carolina
³School of Nursing, Duke University, Durham, North Carolina
⁴Department of Community and Family Medicine, Duke University School of Medicine, Durham, North Carolina
⁵The University of Jordan Accreditation and Quality Assurance Center, Amman, Jordan

Abstract

Aims: The objectives of this study were to (a) identify nursing journal articles that provoked the most online activity and discussion and (b) assess the association between these articles' altmetric scores and publication characteristics, citation counts; and publishing journals metrics.

Background: Altmetrics, or alternative metrics, have recently emerged as a complementary way of measuring the societal impact of research by assessing the public engagement with research output. To date, no studies have yet investigated the online attention about scientific papers published in the nursing field.

Design: Integration of quantitative and qualitative synthesized evidence.

Data sources and review methods: InCites Journal Citation Report was used to identify a list of nursing journals indexed in the Web of Science Core Collection. Altmetric Explorer was selected as an altmetrics harvesting tool. The search in Altmetric Explorer yielded 66,608 research outputs from 118 nursing journals. The articles with the top 100 altmetric attention score (AAS) were identified and a new
What are the key findings?

- Of the top 100 articles included in the study, the *Journal of Advanced Nursing* published the highest number of articles ($N = 26$; Median AAS = 179).
- The articles were mostly discussed on Twitter followed by news outlets and Mendeley.
- Articles indexed in the nursing journals attracted low online attention compared with articles published in other health journals.
- Most online attention came from the USA and UK.
- There was a significant relationship between articles' altmetric attention scores and their citation counts on Scopus and Web of Science.

How should the findings be used to influence policy/practice/research/education?

- Findings can help nursing researchers identify which outlets have the most impact on disseminating information and their potential to influence research in the field.
- Policymakers can consider the findings when developing policies that promote the dissemination of high-impact research, ensuring that the research is accessible to relevant stakeholders.
- Educators can integrate findings into their teaching to highlight the importance of altmetrics in understanding the broader impact of research.
- Researchers can use the findings to strategize about how to approach future research to maximize its influence.
Link your social networking sites - TRANSMIT

[Diagram showing connections between various social media platforms and a central audience].

Website
Research outputs and impact in the REF: a quality relationship

Hugh P McKenna
Presentation Outline

• Brief overview of Research Impact in REF.
• Structure of an Impact Case Study.
• Evidence of impact through 2* outputs.
• Relationship between Quality and Impact.
• Making your research more impactful.
• Differentiate weak from Strong Case Studies.
Brief Overview of Research Impact In REF

- Increasing importance of Research Impact internationally.
- Reflects universities' societal and economic role.
- Publicly funded research to be more accountability to the taxpayer.
- REF introduced in 2014 to replace the previous Research Assessment Exercise (RAE), on-going since 1986.
- REF evaluates three elements with different weightings:
  1. Originality, significance and rigour of research outputs (60%);
  2. Reach and significance of impact (25%);
  3. Vitality and sustainability of research environment (15%).
- Evidence of impact is provided in the form of impact case studies.
- Case studies evaluated by expert sub-panels.
Structure of a REF Impact Case Study

<table>
<thead>
<tr>
<th>Institution:</th>
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<tbody>
<tr>
<td>Unit of Assessment:</td>
</tr>
<tr>
<td>Title of case study:</td>
</tr>
<tr>
<td>1. Summary of the impact</td>
</tr>
<tr>
<td><em>indicative maximum 100 words</em></td>
</tr>
<tr>
<td>2. Underpinning research</td>
</tr>
<tr>
<td><em>indicative maximum 500 words</em></td>
</tr>
<tr>
<td>3. References to the research</td>
</tr>
<tr>
<td><em>indicative maximum of six references</em></td>
</tr>
<tr>
<td>4. Details of the impact</td>
</tr>
<tr>
<td><em>indicative maximum 750 words</em></td>
</tr>
<tr>
<td>5. Sources to corroborate the impact</td>
</tr>
<tr>
<td><em>indicative maximum of 10 references</em></td>
</tr>
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</table>
### Percentage types of Outputs submitted across the 4 Main REF Panels

<table>
<thead>
<tr>
<th></th>
<th>MPA Science</th>
<th>MPB Engineering</th>
<th>MPC Social sciences</th>
<th>MPD Humanities and arts</th>
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<tbody>
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<td>REF2014</td>
<td>O utputs</td>
<td>O utputs</td>
<td>O utputs</td>
<td>O utputs</td>
</tr>
<tr>
<td>Books and chapters</td>
<td>228 0.3</td>
<td>197 0.8</td>
<td>8,307 15.9</td>
<td>18,168 46.3</td>
</tr>
<tr>
<td>Conference proceedings</td>
<td>81 0.1</td>
<td>2,056 7.9</td>
<td>233 0.4</td>
<td>380 1.0</td>
</tr>
<tr>
<td><strong>Journal articles</strong></td>
<td><strong>73,039 99.1</strong></td>
<td><strong>23,521 90.9</strong></td>
<td><strong>42,545 81.5</strong></td>
<td><strong>15,749 40.2</strong></td>
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<tr>
<td>Other</td>
<td>331 0.4</td>
<td>108 0.4</td>
<td>1,105 2.1</td>
<td>4,914 12.5</td>
</tr>
<tr>
<td>REF case studies</td>
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<tr>
<td>Books and chapters</td>
<td>274 2.1</td>
<td>282 6.3</td>
<td>1,819 16.9</td>
<td>3,409 40.0</td>
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<tr>
<td>Conference proceedings</td>
<td>150 1.2</td>
<td>686 15.4</td>
<td>195 1.8</td>
<td>334 3.9</td>
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<tr>
<td><strong>Journal articles</strong></td>
<td><strong>11,752 91.7</strong></td>
<td><strong>3,263 73.4</strong></td>
<td><strong>7,102 65.9</strong></td>
<td><strong>3,251 38.1</strong></td>
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<tr>
<td>Other</td>
<td>631 4.9</td>
<td>213 4.8</td>
<td>1,649 15.3</td>
<td>1,523 17.9</td>
</tr>
</tbody>
</table>

Evidence of impact through 2* outputs

The impact must have been underpinned by ‘EXCELLENT’ research (=/>2*) produced in 20 year period 1 Jan 2000 to 31 Dec 2020. Must show that the underpinning research was ‘the difference that made the difference’.

The submitting unit can provide up to 6 references for the outputs.

All forms of output cited as underpinning research will be considered on an equal basis.

May include, but are not limited to: publications, new materials, devices, images, artefacts, products and buildings; confidential or technical reports; intellectual property in patents; performances, exhibits or events; non-print media.
Evidence of impact through 2* outputs

Panels will consider the evidence of research quality, and may review outputs referenced in a case study.

The sub-panels will not expect each referenced output to meet the 2* quality threshold, but will wish to be satisfied that the research as a whole was of at least two-star quality.

A panel will grade a case study as unclassified if it judges that the underpinning outputs was not of at least two-star quality.

11% of audit queries related to the underpinning research. 25% of these were subsequently unclassified (Rand Europe, 2017).

Provided the sub-panel is satisfied that the 2* quality threshold has been met, the quality of the underpinning research will not be taken into consideration as part of the assessment of the reach and significance of the claimed impact. (a 2 stage process).
Evidence of impact through 2* outputs

Research outputs underpinning a case study may also be included in a submission as an output. The assessment of the impact case study will have no bearing on the assessment of the quality of the output. However, the assessment of the quality of the output may inform the assessment of the case study, in terms of assuring 2* threshold.

The research outputs may, but need not, have been submitted to a previous RAE or REF 2014.

Include the following details for each cited output:

- author(s)
- title
- year of publication
- type of output and other relevant details required to identify the output
References to the research
(best three references starred)


Grants supporting underpinning research

1. PI Shadbolt EPSRC Funded Advanced Knowledge Technologies (AKT) IRC £7.5m (2000-07 GR/N15764/01) AKT — rated outstanding scoring 35 out 36 at final review

2. PI Shadbolt EPSRC Funding large Grant EnAKTInG the unbounded Web of Data £1.94m (2009-2012 EP/G008493/1)

3. PI Shadbolt EPSRC/DTI Market Blended Insight £0.8m (2006-2010 DT/E007104/1)

4. PI Shadbolt EPSRC Programme Grant for SOCIAM — the theory and practice of Social Machines £6.15m (2012-2017 EP/J017728/1)
Evidence of impact through 2* outputs

If researchers move to a different institution before outputs were produced, the submitting HEI must make clear that the research was undertaken when the researcher was at that institution and it made a distinct and material contribution to the impact claimed.

The end of the period for the 2* outputs (31 December 2020) extends beyond the end of the period for the impact (31 July 2020). This recognises that research may have had impact prior to the publication of the outputs.

2* Outputs equates with quality that is recognised internationally for the criteria: **ORIGINALITY, SIGNIFICANCE AND RIGOUR**.
Underpinning outputs must meet all the criteria

“Your manuscript is both good and original; but the part that is good is not original and the part that is original is not good.”  (Dr Samuel Johnson 1709-1984).
Evidence of impact through 2* outputs

Underpinning Research at HEI(s)

Distinct and material contribution

Social, economic or cultural effect, change or benefit

- Evidenced by output(s) between 1 Jan 2000 – 31 Dec 2020.
- Quality that is equivalent to at least two star.
- Up to 6 key references (not every output referenced has to be 2*)
- Can include proxy indicators of quality
Views of HEI’s on Research Impact

The requirement of gathering of evidence to support impact claims
The definition and concept of reach as a criterion
The definition and concept of significance as a criterion
5-year timeframe for claiming impact
The concept of institutional ownership of impact
Engaging with research users
The clarity of REF’s definition of impact
2* threshold for quality of research
20-year timeframe for underpinning research

~30% VC/SC

Approximately 25% (n=555) of sub-panel members and impact assessors found it difficult to rate the criterion of the quality of underpinning research.

UoA3 Research Outputs and Impact (n=94)
(GPA I.5=4.0) (GPA O=2.03-3.43)

Pearson 0.58
UoA3 Overall Quality and Research Impact: (n=94)
(GPA I.5=4.0) (GPA O=1.96-3.89)

Pearson= 0.83
## Impactful Researchers

<table>
<thead>
<tr>
<th>RESEARCHER</th>
<th>IMPACT</th>
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</thead>
<tbody>
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<td>Isaac Newton</td>
<td>laws of universal <strong>Gravitation</strong></td>
</tr>
<tr>
<td>Michael Faraday</td>
<td>The ‘Father of **Electricity’’</td>
</tr>
<tr>
<td>Charles Darwin</td>
<td>Science of <strong>Evolution</strong></td>
</tr>
<tr>
<td>Gregor Mendel</td>
<td>Science of <strong>Genetics</strong></td>
</tr>
<tr>
<td>Max Planck (NL)</td>
<td>Discovery of <strong>Energy Quanta</strong></td>
</tr>
<tr>
<td>Albert Einstein (NL)</td>
<td>Theory of <strong>Relativity</strong></td>
</tr>
<tr>
<td>Niels Bohr (NL)</td>
<td>Science of <strong>Atomic Structure</strong></td>
</tr>
<tr>
<td>Francis Crick (NL)</td>
<td>The makeup of <strong>DNA</strong></td>
</tr>
<tr>
<td>Peter Higgs (NL)</td>
<td>The <strong>Higgs Boson</strong></td>
</tr>
</tbody>
</table>

(NL= Nobel Laureate)
**Publications Vs Impact**  
**Bibliometrics for Impactful Scientists**

<table>
<thead>
<tr>
<th>RESEARCHER</th>
<th>NO OF PUBS</th>
<th>CITATIONS</th>
<th>CITATIONS PER PUB</th>
<th>H-INDEX</th>
</tr>
</thead>
<tbody>
<tr>
<td>Isaac Newton</td>
<td>4</td>
<td>7,468</td>
<td>1,867</td>
<td>4</td>
</tr>
<tr>
<td>Michael Faraday</td>
<td>23</td>
<td>6,288</td>
<td>273</td>
<td>18</td>
</tr>
<tr>
<td>Charles Darwin</td>
<td>29</td>
<td>84,575</td>
<td>2,916</td>
<td>27</td>
</tr>
<tr>
<td>Gregor Mendel</td>
<td>1</td>
<td>2,442</td>
<td>2,442</td>
<td>1</td>
</tr>
<tr>
<td>Max Planck</td>
<td>32</td>
<td>6,787</td>
<td>212</td>
<td>27</td>
</tr>
<tr>
<td>Albert Einstein</td>
<td>130</td>
<td>72,286</td>
<td>556</td>
<td>74</td>
</tr>
<tr>
<td>Niels Bohr</td>
<td>52</td>
<td>21,069</td>
<td>405</td>
<td>38</td>
</tr>
<tr>
<td>Francis Crick</td>
<td>65</td>
<td>43,758</td>
<td>673</td>
<td>54</td>
</tr>
<tr>
<td>Peter Higgs</td>
<td>5</td>
<td>11,903</td>
<td>2,381</td>
<td>5</td>
</tr>
<tr>
<td>Mean</td>
<td>41</td>
<td>26,306</td>
<td>1,182</td>
<td>29</td>
</tr>
</tbody>
</table>

Higgs Boson
Ensuring that your work is impactful

• Who are the audiences for my outputs, and what are the potential/actual impacts on them?
• When should I engaged with stakeholders?
• How will I communicate and engage with stakeholders (not just disseminate)?
• How do I need to translate materials to meaningfully engage my stakeholders?
• What pathways do I need to follow to achieve impact?
• How can I best describe and evidence the pathway to impact?
Ensuring that your work is impactful

• How will I track impact and demonstrate its achievement?
• What will the reach and significance of the impact be?
• What resources do I need in to realise impacts?
• How will I transfer knowledge into the domains it needs to be in for impact to occur?
• What impact is realistic within the project and what is expected longer term for a later REF?
## Outstanding Vs Weak Impact

<table>
<thead>
<tr>
<th>Outstanding</th>
<th>Weak</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gave clear indication of the underpinning research and explanation for its 2* (or above) quality.</td>
<td>Failed to set out the thread of evidence linking the research to the impact and to establish the 2* quality of the research.</td>
</tr>
<tr>
<td><strong>Gave clear explanation of how the research results had brought about the change, effect or benefit.</strong></td>
<td><strong>Focused on the reputation/esteem of the researcher and unit rather than the impact.</strong></td>
</tr>
<tr>
<td>Understood the distinction between dissemination and impact.</td>
<td><strong>Presented dissemination as impact.</strong></td>
</tr>
<tr>
<td><strong>Provided clear (and not overstated) account of the Reach and Significance of the impact.</strong></td>
<td><strong>Made unconvincing or overstated claims of the Reach and Significance of the impact.</strong></td>
</tr>
<tr>
<td>When corroborating sources were followed up, they justified the claims made.</td>
<td>When corroborating sources were followed up, they did not back up the claims made or did not respond.</td>
</tr>
<tr>
<td>Outstanding</td>
<td>Weak</td>
</tr>
<tr>
<td>-------------</td>
<td>------</td>
</tr>
<tr>
<td>Evidence based statements.</td>
<td>Excessive publication lists or URL links, some inaccessible.</td>
</tr>
<tr>
<td><strong>Within the word limit and guidelines.</strong> <em>(New mandatory fields for REF2021)</em></td>
<td>Did not adhere to guidelines. <em>(e.g. research was not undertaken at the submitting institution)</em></td>
</tr>
<tr>
<td>A articulate, well written and interesting story.</td>
<td>Lack of coherence and dense narrative, journalistic.</td>
</tr>
<tr>
<td>The underpinning sciences was strong.</td>
<td>Has unnecessarily ‘drummed up’ or ‘dumbed down’ the narrative</td>
</tr>
<tr>
<td><strong>Impact of CPD Programmes - Knowledge Transfer.</strong></td>
<td>2* threshold not met so Case study not assessed</td>
</tr>
</tbody>
</table>
Research Impact: Further Information


- http://impact.ref.ac.uk/CaseStudies/


Postgraduate research students and early career researchers and the publication process
Parveen Azam Ali
Academic Publishing: Changes over time

- 1665: Scientific information was exchanged with encrypted letters between small group and conversation was private.
- 1900: Typewriter invented; rigid formats were prescribed by publishers to make publication process consistent and efficient.
- 1970: Invent of electronic technology and word processors—manuscript preparation and revisions changed drastically; mailing of the manuscript become electronic too.
- 2012: Video publication; interactive image embedding became possible.
- Open Access
Some Questions ECRs have?

• Writing techniques
• Submission process
• Peer review process
• Dealing with rejections/ resubmissions?
• Where do publish?
• Quantity/ quality?
Some Questions ECRs may have?

- Types of articles and intended purpose
  - Letters, short communications
  - Review articles (types of reviews)
  - Scholarly / opinion pieces
  - Research articles
  - Methodological papers?

- How to choose right journals

- Understanding journal matrix

- What is impact factor and does it matter

- Paper ranking for REF (3* or 4*) and how to achieve it

- Distinction between journals (predatory/ non-predatory) and does it matter?
Other Challenges

- Conflicting Advice
- Lack of Mentorship
- Too many demands on time (for example: Peer reviewing)
- Help available but not available
- Can’t ask question if you don’t know what to ask
- Lack of technical skills
- Understanding impact and its various forms
Some questions about future

• Will publishing in journals be so important in future?

• What are other ways of sharing information?

• Are results only relevant for researchers and scientific community?

• What is impact and how it should be measured?
James Patrick Smith OBE FRCN
4 May 1934 to 15 June 2018