PEER Behavioural Research:
Authors and Users vis-à-vis Journals and Repositories

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The published journal article is the predominant mode of scholarly communication
Levels of awareness of the concept of OA are growing
Readers are often unaware that they are accessing an OA version of an article
Association of OA with self-archiving generally not strong
Quality of stage-two manuscripts ‘good enough’ for most purposes
Public funder mandates likely to be enforced more stringently in the near future
Aim

- To develop an understanding of the perceptions, motivations and behaviours of authors and readers with respect to the deposit and use of authors’ final peer-reviewed and accepted manuscripts (stage-two manuscripts) in Open Access Repositories (OAR)
Methods: Phase 1

- **April 2009 – August 2009**
  - Electronic survey of European journal article authors - June and August 2009
    - 3,139 valid responses were received
  - Four focus groups (London, Berlin, Rome and Budapest) were conducted in parallel to the survey
  - Findings published in:
Methods: Phase 2

- November 2010 – August 2011
  - Electronic survey of European journal article authors - January and March 2011
    - 1,427 valid responses were received
  - A small-scale repository exit survey
    - 34 valid responses, which is disappointing
  - Participatory workshop
    - To develop a detailed understanding of author/user (reader) attitudes and behaviours towards open access repositories
    - Including validation and deeper exploration of specific findings from the Phase 1 and Phase 2 surveys
Demographics of Phase 2 survey respondents

<table>
<thead>
<tr>
<th>Broad disciplinary grouping</th>
<th>Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medical sciences</td>
<td>194 (258)*</td>
</tr>
<tr>
<td>Life sciences</td>
<td>311 (257)</td>
</tr>
<tr>
<td>Physical sciences &amp; mathematics</td>
<td>454 (424)</td>
</tr>
<tr>
<td>Social sciences, humanities &amp; arts</td>
<td>167 (172)</td>
</tr>
<tr>
<td>Interdisciplinary</td>
<td>300 (306)</td>
</tr>
<tr>
<td>*<em>Total</em></td>
<td><strong>1,426 (1,416)</strong></td>
</tr>
</tbody>
</table>

*weighted number of respondents shown in brackets
*one respondent did not provide discipline information
Self-archiving behaviour

- Yes - institutional
- Yes - subject-based
- Yes - other
- Yes - not sure where
- No

Phase 2 (1,416)
Phase 1 (2,624)
Motivations by repository type

- Voluntarily: 308
- Required by employer: 139
- Invited by publisher: 114
- Colleague(s) suggestion: 86
- Invited by the repository: 81
- Required by research funder: 62
- Co-author(s) asked you to: 49
- Invited by a librarian: 48

Legend:
- Institutional
- Both
- Subject-based
- Other
- Not sure
- Total
Motivations by discipline

- Voluntarily
- Invited by publisher
- Invited by the repository
- Co-author(s) asked you to

Legend:
- Medical Sciences (258)
- Life Sciences (257)
- Physical Sciences & Mathematics (424)
- Social Sciences, Humanities & Arts (172)
- Interdisciplinary (306)
Method of deposit

Placed themselves

- Physical sciences & mathematics
- Life sciences

Placed by somebody else

- Medical sciences
- Social sciences, humanities & arts

Type of repository has only a marginal influence on the deposit process
Version of article deposited

- Pre-print
- Stage-two manuscript
- Publisher's PDF
- Not sure

<table>
<thead>
<tr>
<th>Category</th>
<th>Pre-print</th>
<th>Stage-two manuscript</th>
<th>Publisher's PDF</th>
<th>Not sure</th>
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</thead>
<tbody>
<tr>
<td>Medical (142)</td>
<td>30%</td>
<td>70%</td>
<td>10%</td>
<td>10%</td>
</tr>
<tr>
<td>Life (138)</td>
<td>20%</td>
<td>50%</td>
<td>30%</td>
<td>20%</td>
</tr>
<tr>
<td>Physical (249)</td>
<td>40%</td>
<td>50%</td>
<td>10%</td>
<td>10%</td>
</tr>
<tr>
<td>SSHA (101)</td>
<td>50%</td>
<td>40%</td>
<td>10%</td>
<td>10%</td>
</tr>
<tr>
<td>Interdisc. (156)</td>
<td>30%</td>
<td>70%</td>
<td>10%</td>
<td>10%</td>
</tr>
<tr>
<td>All (786)</td>
<td>30%</td>
<td>70%</td>
<td>10%</td>
<td>10%</td>
</tr>
</tbody>
</table>
Version of article sought

![Bar chart showing the percentage of articles sought by version for different categories.](chart.png)

**Category** | **Percentage**
---|---
Pre-print | 10%
Stage-two manuscript | 30%
Publisher's PDF | 60%
Not important - any version | 10%

- **Medical** (167)
- **Life** (174)
- **Physical** (299)
- **SSHA** (123)
- **Interdisc.** (216)
Version of article found

- Don't know/can't remember
- Published final version
- Stage-two manuscript
- Pre-print

<table>
<thead>
<tr>
<th>Category</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medical</td>
<td>173</td>
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<tr>
<td>Life</td>
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<tr>
<td>Physical</td>
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<tr>
<td>Interdisc.</td>
<td>215</td>
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<tr>
<td>All</td>
<td>984</td>
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</table>
Purpose of repository visit

- Medical Sciences (170)
- Life Sciences (174)
- Physical Sciences & Mathematics (301)
- Social Sciences, Humanities & Arts (123)
- Interdisciplinary (217)

- Current awareness
- Exploring new topic
- Writing article
- Writing research report
Conclusions

- Identifiable patterns of similarity and difference at the course-grained level of broad disciplinary groupings
- Disciplinary patterns tend to vary depending on whether researchers are in ‘author’ or ‘reader’ mode
- The distinction between ‘author’ and ‘reader’ repository behaviours is most notable amongst Medical and Life sciences researchers; whereas,
- Physical sciences & mathematics researchers demonstrated a closer alignment between their behaviours as ‘authors’ or ‘readers’
- Further analysis at the finer-grained level of specific disciplines is expected to further contribute to our understanding of repository behaviours
Acknowledgements

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