Reading for Research: Scholarly Publications in the Worklife of Researchers

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A bit about me...

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Overarching Research Question
How do researchers access, read, use, and value scholarly publications in their work?
In the information context economist Machlup described 2 types of value:

1. purchase or exchange value: what one is willing to pay for information in money and/or time, and

2. use value: the favorable consequences derived from reading and using the information.
4 types of questions

1. Demographic
2. Recollection
3. Critical Incident
4. Comments

Therefore, insights into both READERS and READINGS
Critical incident of last reading

“The following questions in this section refer to the SCHOLARLY ARTICLE YOU READ MOST RECENTLY, even if you had read the article previously. Note that this last reading may not be typical, but will help us establish the range of patterns in reading.”
Finland Reading Study

• Online survey sent to Finnish scholars
• 527 total respondents (although the number for any one question may vary)
• Follow-up interviews
• Replicates and expands on a 2007 survey in Finland

A few preliminary findings...

1. Scholarly articles are still important for academic work
2. Many, but not all, readings come from the library
3. Not every reader is the same
4. What has changed?
5. What should change in the future?
1. Scholarly article reading is important for academic work
Researchers read a lot …article readings per month

20 readings per month on average by Finnish researchers

\[ \times \]

12 months per year = 240 article readings/year

2016, Finland
And they spend time reading

42 minutes per article reading
x 20 readings per month = 14 hours/month
X 12 months/year = 168 hours/year
OR 21 8-hour work days

2016, Finland
Outcomes of article readings

#1 Inspire new thinking or ideas (54%)
#2 Helped justify my work (47%)
#3 Improved the results (21%)
#4 Narrowed/broadened/changed focus (17%)
#5 Saved time or other resources (10%)

....

#10 Wasted my time (1%)
They read articles for many different purposes…

- Research & Writing: 68.1%
- Teaching: 8.8%
- Current Awareness / Continuing Education: 13.2%
- Consulting: 2.2%
- Presentations: 0.9%
- Checking Facts: 1.8%
- Other: 2%
- Interest / Inspiration: 0.9%

n=454, 2016, Finland
# Reading of other publications

(M=69/month)

<table>
<thead>
<tr>
<th>Type of Publication</th>
<th>M</th>
</tr>
</thead>
<tbody>
<tr>
<td>News articles</td>
<td>48.6</td>
</tr>
<tr>
<td>Magazine or trade journal</td>
<td>8.6</td>
</tr>
<tr>
<td>Blogs</td>
<td>4.3</td>
</tr>
<tr>
<td>Scholarly books / book chapters</td>
<td>2.9</td>
</tr>
<tr>
<td>Govt. documents / technical or research reports</td>
<td>2.5</td>
</tr>
<tr>
<td>Conference proceeding articles</td>
<td>2.4</td>
</tr>
<tr>
<td>Fiction</td>
<td>1.1</td>
</tr>
<tr>
<td>Other</td>
<td>1.1</td>
</tr>
<tr>
<td>Other Non-fiction</td>
<td>0.8</td>
</tr>
</tbody>
</table>

n=454, 2016, Finland
2. Many readings come from the library (but not all)
Source of article readings (for all purposes)

- Personal subscriptions: 2.4%
- Library subscriptions: 26.8%
- School / dept subscriptions: 17.7%
- Institutional repository: 15%
- Websites: 13.7%
- Research social networks: 9.5%
- Copy from a colleague: 9.3%
- Other: 5.5%
Library provided articles are...

...most often for research or writing
...more important to principal purpose
...more likely to be read in e-format
...more likely to be cited (already or in the future)
Who relies on the library more for articles?

• Research intensive scholars
• Scholars who have won an award in the last 2 years and publish in the top quartile
• Scholars focusing on basic research
Book readings come from the library...

![Pie chart showing sources of scholarly books and book chapters]

- Personal purchase: 45.6%
- Library: 15.8%
- School / dept: 10.5%
- Institutional repository: 10.5%
- Copy from a colleague: 8.8%
- Free advanced copy: 5.3%
- Website: 1.8%
- Other: 1.8%

n=451, 2016, Finland
Some readings do not...

n=451, 2016, Finland
3. Not every reader is the same
Article Readings differ by discipline
(average per month)

n=439, Finland, 2016

Sciences: 23
Medical Sciences: 22
Engineering: 22
Social Sciences: 17
Humanities: 8

n=439, Finland, 2016
Book or chapter readings differ by discipline (average per month)

- Sciences: 1.5
- Medical Sciences: 1.7
- Engineering: 2.7
- Social Sciences: 3.3
- Humanities: 6.7

n=450, Finland, 2016
Medical sciences readers are more likely to...

...rate journal article readings as essential

...spend the least amount of time per article reading (34 minutes/reading on average)

...find articles by searching

...read articles with “great care”
Does age of reader matter?

There is no age difference in use of social media based on age.
Age sometimes matters…

• 30 and under compared to others:
  • Read more often at the office
  • Spend more time per article reading
  • More often get readings from colleagues

• 61+ compared to others:
  • Read more books/book chapters
  • Read more from print
  • Read more in Finnish or Swedish
Reading characteristics of a ‘successful’ academic:

• Reads a greater variety of materials.

• Spends more time per reading.

• Uses the library for articles, but not as much for other types of publications.

• Considers listservs, cloud services, research social networks, and collaborative authoring platforms to be important to work.
4. Some things have changed
Estimated e-article reading

2007 15 electronic articles/month average
➢ 180 e-articles per year

2017 17 electronic articles/month average
➢ 204 e-articles per year (83% of total readings)
Where were you when reading the last e-article?

2007
- Office or lab: 72.4%
- Library: 2.1%
- Home: 20.3%
- Elsewhere: 5.1%

2016
- Office or lab: 66.3%
- Library: 10.9%
- Home: 22.3%
- Elsewhere: 0.5%
How did you become aware of the last e-article you read?

2007
- Browsing: 64%
- Searching: 13.1%
- Cited in another publication: 10.5%
- From another person: 5.4%
- Other: 6.7%

2016
- Browsing: 47.3%
- Searching: 7.9%
- Cited in another publication: 19.2%
- From another person: 12.5%
- Other: [VALUE], 1%
Finding articles has changed:

“I find many more papers as a result of being on Twitter.”

“I read more working papers and early versions that are freely available on the web.”

“The search services available in the Web are completely sufficient for finding materials so there is no need for special search services provided by the library.”
Reading has changed for most:

“I’ve mainly moved onto electronic publications, because they are easy to **save and share.**”

“I read more because I can read on the phone and other smart devices.”

“Because of haste and time pressures, it’s necessary to only browse through articles and pick up the necessary things. There’s no time to read the full article in peace.”
5. Some things need to change (and some shouldn’t)
Desired Future?

Ability to make my own notes easily

Links to cited works and links to research data

The content is more important to me than...fancy features

Open peer review with public comment functionality

E-reader (i.e., Kindle) compatibility

Open access for all

The content is more important to me than...fancy features

Open peer review with public comment functionality

E-reader (i.e., Kindle) compatibility

Open access for all
Any changes must...

...Fit with work patterns

...Be easier than current ways

...Recognize need for quality

...Fit a range of behaviors and devices
Thank you!

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