Increased Impact for Open Publishing

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Munin conference
Background

We know that

- About 20% of all Norwegian articles are gold OA
- According to GS link resolver
  - Our case study on climate* showed that 74% of articles are open
  - Similar studies recently report an open share of 60-70%
- Open publications are more often cited than paywalled publications

Research questions

1. What is the open-share of all Norwegian articles according to GS link resolver and according to oaDOI?

2. Can the citation advantage for open articles been proved for the total article output of Norway?

3. Are open articles more frequently mentioned on social media platforms?

4. Is there a citation advantage for articles mentioned on social medias?
Study design

• Article output as of Cristin (the Norwegian System), 2011-2015

• Search GS by DOI or title (January 2017)
  – Using automated queries and web scraping
  – Analyze by full text provider and citation counts
  – Determine recall (96%)

• Search oaDOI (for articles with DOI), analyze by type of OA

• Search altmetric.com by DOI, analyze mentions
We find
• About 70% openness across the research sector, with UiT and UiB at the top.
• The share is about the same as reported in our earlier study on climate and society.
• However, openness depend strongly on discipline (Typically, Health and Natural sciences at the top).
The average citation rate for all articles is equal to 1. Open articles are cited more than 10% above average. Closed articles are cited almost 30% less than average.

Our study finds a clear citation advantage for open articles.
Top providers according to GS link resolver

- Results biased by GS link priority, probably favoring RG and academia before IR and publisher sites.
- Whether articles are legally deposited in particular RG or academia is not clear.

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<tr>
<th>Top providers</th>
<th>Number of articles</th>
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<tr>
<td>researchgate.net</td>
<td>8644</td>
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<tr>
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<tr>
<td>biomedcentral.com</td>
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<td>wiley.com</td>
<td>1987</td>
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<td>sciencedirect.com</td>
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<td>arxiv.org</td>
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<td>springer.com</td>
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<td>711</td>
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<td>uit.no</td>
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<th>Norwegian domains/archives</th>
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<td>163</td>
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<tr>
<td>hit.no</td>
<td>108</td>
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Open availability by publisher

Number of articles

Elsevier
Springer
Routledge
Blackwell Publishing
Sage Publications
Universitetsforlaget
Taylor & Francis
Oxford University Press
Wiley-Blackwell Publishing Inc.
John Wiley & Sons
Academic Press
Wiley-Blackwell
Pergamon Press
Emerald Group Publishing Limited
American Institute of Physics (AIP)
Surprisingly high open availability by Elsevier and Springer, the largest publishers.

Is that due to:
- Self-archiving
- Hybrid publishing
- Publishers’ considerations to open up (articles have no cc-license, may at any time be closed)
GS-link resolver versus oaDOI

About 70% open articles in GS

Black here indicates open without permission.

Less than 30% open articles in oaDOI

oaDoi does not identify all oa articles (77% recall)

oaDoi distinguishes between oa categories Blue, Gold, Green

- Categories are exclusive (example: Blue takes priority over Green, Gold over Green)
- Indeed, Blue is the largest category, confirming that publishers open up for own interests.
Green articles are cited most frequently

Findings in agreement with
First results of our study on social media

About 18% of all articles had an altmetric.com entry (Blog, Twitter, News, FB, Policy document)

Open articles were more likely mentioned on social media platforms
Selected services tracked by altmetric.com. Percentage of all Norwegian articles

Open articles were more likely mentioned on social media platforms.
Open and mentioned articles receive the most citations.

Citation data from GS, accounted for year and field.
Conclusions

We find

- 70% of Norwegian articles open (GS)
- 18% are mentioned on at least one social media service (Altmetric.com)
- Citation advantage for
  - Open articles
  - Articles with social media mentions
- Our findings indicate that the readers/citers follow the open trail
- Publishers open up articles for readers (no licence involved)
- However, we are uncertain about the authors and their move towards open publishing. Gold publishing still seems less attractive (lesser cited).