



HAL
open science

The significant difference in impact

Sofie Wennström, Gabor Schubert, Graham Stone, Jeroen Sondervan

► **To cite this version:**

Sofie Wennström, Gabor Schubert, Graham Stone, Jeroen Sondervan. The significant difference in impact. ELPUB 2019 23rd edition of the International Conference on Electronic Publishing, Jun 2019, Marseille, France. 10.4000/proceedings.elpub.2019.9 . hal-02141879

HAL Id: hal-02141879

<https://hal.science/hal-02141879v1>

Submitted on 28 May 2019

HAL is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers.

L'archive ouverte pluridisciplinaire **HAL**, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d'enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.

The significant difference in impact

An exploratory study about the meaning and value of metrics for open access monographs

Sofie Wennström, Gabor Schubert, Graham Stone and Jeroen Sondervan

Key Objectives

- Showcasing current practices for measuring the value and impact of open access monographs.
- Investigating and discussing the value of book metrics.
- Gathering information about authors' and editors' understanding of book metrics to be used when developing new bibliometric practices related to open access monographs.

Background

- 1 The ongoing transition to digital and open dissemination of research results shifts the emphasis to *what* is published rather than *how* it is distributed. This provides the opportunity to start a discussion about the value of different types of research output within and outside of academia. For example, thinking beyond the academic journal article as the predominant form of research output. It is time to also include the academic monograph in the mix, and allow it to be comparable with journal articles. A thorough analysis of the available metrics used for academic books would help us to understand how information travels from researcher to reader. This paper will describe a number of different metrics available for Open Access Books (OABs) that can be used to evaluate impact and readership, such as online usage, citations and social media interactions. It will also reveal some insights regarding how researchers understand what the metrics can be used for evaluating impact. We will provide some initial advice on best practice for future evaluation methods of OABs as a part of the scholarly publishing landscape. Considering how we collect and value metrics is essential for the development of a framework for evaluating OABs. It can be used to define and showcase impact in a

broader sense of research presented in book format concerning systems already in place to evaluate academic journals.

- 2 A study by Neylon et al. (2018) reveals that many publishers use a combination of traditional metrics and consumer behaviour patterns for analyzing their monograph publishing output. Whilst usage statistics and citation measures seem like reliable data for publishers to inform developments, and while librarians and other stakeholders have held journals, editors and authors accountable for the results of their publications, there has been few reports of practical uses of bibliometrics to evaluate OABs (or any electronic book publications for that matter). The launch of Altmetrics in 2010 (Priem et al. 2010) indicated a change in the perception of impact, including mentions in other types of media in addition to citations. However, most initiatives to create diversity within bibliometrics are focused on academic articles, as that is where a relevant data infrastructure is being used. There are some experimental examples of stakeholders developing new practices such as the Bookmetrix service (Bookmetrix n.d.), a collaboration between Springer Nature and Altmetric, which created a platform to measure impact, usage and reach of books. Nevertheless, this is still not a standardised practice amongst publishers of electronic and open books. This is highlighted in the HIRMEOS project (Hirmeos Project n.d.) as something that should be included in the discovery layer of books, and be standardised among publishers. The project aimed to develop a common infrastructure for OABs alongside tools for analysis of the output comparable to altmetrics. However, such comparable metrics have not yet been sufficiently analysed via independent studies. Some studies show that making books more available via open access (OA) may have a positive influence on citations over time, but that the citation rate is not related to mentions in social media (Ronald Snijder 2016). While studies show a correlation between OA and citations, this measure, as well as altmetrics figures should not be considered to be sole indicators of quality or success of a book (Eve 2019). It is clear that this area needs to be further explored. The Metric Tide report (Wilsdon et al. 2015) suggests that users of metrics should consider the five principles of robustness, humility, transparency, diversity and reflexivity to ensure that the results are responsibly used. Emery, Stone and McCracken (in press) suggest that while non-traditional metrics should be treated with caution, they should still be considered alongside other evaluation tools. This paper below suggests that the relevance of metrics should, furthermore, be related to whether or not the interpreters of the data find the information meaningful. The study is, therefore, designed to include not only an analysis of bibliometrics about books published by a library-led press, but also data about how users interpret the metrics.

Interpretation of metrics and user behaviour

- 3 Roemer and Borchardt (2015) describe impact firstly as an “*effect, in the sense of a perceptible shift, change, or influence; and second, force, in the sense of the strength or degree of this effect.*” Furthermore, they suggest that impact should be divided into levels: individual scholarly contributions, venues of production, individual authors, groups and institutions. The value of metrics could then differ between these groups, depending on the method and aim of the analysis. Altmetrics, for example, is a measure that relies heavily on the interaction patterns of book authors themselves, i.e. if they participate to promote the book themselves via social media, or the activities of the publisher releasing

the book. Altmetrics could, therefore, be seen as a measure of how a book is received within a specific community of practice (Lave and Wenger 1991) like a network of researchers in a particular field of research that happen to use certain social media to communicate new findings or publications. The rate of different types of interactions with a digital publication could then be used to describe how the community of practice receives a new book. The data collected could also be used as a testimony of a particular behaviour aiming to influence the community in one way or another. The individuals' actions as a part of a community could thus be measured with an indication about how the audience engage with the content. This creates possibilities to understand more about attitudes and knowledge structures leading to learning as something that goes on within a particular culture or social group of humans (Wertsch 1995). The importance of the group feeling is further emphasised in a forthcoming report from the Knowledge Exchange (Adema 2019), where it is suggested that the value of published books could include the value of the distribution of knowledge outside academia, such as citizen impact (Tanner 2018). The analysis of usage and interactions with publications could then also include the availability made possible by the new and open license options, opening up for impact in terms informing decisions about health, the environment, economics and social as well as educational contexts.

Design and Methodology

- 4 The first part of the data used in this paper showcases book metrics collected via the publishing platform of Stockholm University Press (SUP) which is delivered by the publisher Ubiquity Press. Their platform was chosen because it already follows many of the best practices for digital books (Neylon et al. 2018), such as providing DOIs and OAI-PMH-compatible metadata and altmetrics for published books. The usage data from the publishing platform were then enriched with additional metrics from the databases Altmetric.com, Web of Science, Scopus, Google Citation and Dimensions to create a fuller image of the usage and impact.
- 5 The second part of the paper analyses results from a survey sent to authors and editors publishing OABs with selected university presses during the spring of 2019 (see Appendix). Findings from earlier studies, such as Stone and Marques (2018) show mixed views on the best way to move forward for OABs, but that author awareness and engagement is needed for future developments. As scholarly publishing is a venture of a social nature (Nielsen 2013), it was important not only to show data about usage and interactions, but also to collect information about what the data means to the community - to the authors and editors who communicate their research results in OABs. Therefore, the survey was designed to collect information about current practices of academics choosing to publish OABs, as well as to gather data about how authors/editors perceive themselves as part of the shift to digital output and how it is valued. The aim was to explore their role in using online tools while evaluating content for, as well as participating in review committees, judging grant proposals or hiring new staff. The survey includes likert scale type questions as well as open-ended questions and gathered data using a mixed methods approach, allowing comparison of attitudes about metrics with the value we ascribe to the data collected about citations and other online interactions. The full dataset is available for download (Wennström et al. 2019).

Limitations

- 6 The survey was sent to a convenience sample and received a small number of responses mainly from the academic disciplines of Arts & Humanities and Social Sciences (AHSS). Therefore, we suggest that the findings presented here are purely indicative in describing the behaviour of most authors of OAB. Download statistics collected for this paper can only cover the known sources or databases distributing open access publications. It is likely that there are other possible download sources for SUP books. However, the research period was time limited meaning that only known sources could be reported upon. Therefore, it is not possible to guarantee that the numbers used in the examples below are absolute and correct, but they do serve as a minimum amount. Online usage is also cumulative, so the data in this report cannot be compared with the current data shown on each book page at the publisher's website.

Outcomes

- 7 The outcomes of the analysis of book metrics from SUP should be considered as preliminary data that needs further research. However, the findings show that the usage varies between monographs and anthologies/edited collections, and that the means of dissemination influence how the work finds its readership. Books presenting work from several authors, such as anthologies, appear to attract a larger audience than monographs from one or two authors concentrating on one single topic. The number of downloads indicate the reader interest for an electronic version of a book, but it should be noted that the number of downloads are not equal to the number of people reading it. Equally, sales and library usage data do not indicate that the book has been read, they simply provide a number indicating an intention to read. Download statistics are not only relative to the number of readers, but also to the format in which the book is offered and how easy it is to find the book in different databases or for readers to recommend it to peers for further reading (Snijder 2019).

Downloads

- 8 Usage figures may be higher for older books because they have had more time to be discovered by potential readers, or for anthologies where there are more authors involved in the project that can recommend the book to their network. For this study, we have combined downloads for the whole book and individual chapters in order to give a broad overview of the readership for each title. Since OABs can be distributed via more than one channel, it is relevant to look at more than one source database where books (or chapters of them) are available for download. One such database is the OAPEN library (OAPEN Library n.d.) where SUP books are aggregated on publication. Table 1 illustrates download statistics from the publication date of each book on the publisher's platform, and in the OAPEN database up to the end of 2018. Other sources of usage were found with the help of the Bielefeld Academic Search Engine (BASE n.d.), which indexes scientific publications deposited in institutional repositories, academic collection and other similar resources. The BASE service allows us to capture the reach of books or chapters uploaded by the authors themselves in institutional repositories, as long as they refer to the

original DOI. The possibility to parallel publish chapters or books in institutional repositories is specific advantage for OABs as this is seen as an additional opportunity to reach a wide audience. Therefore, to ensure that data about downloads and online views are as relevant as possible it is, important to locate as many sources as possible to capture a fuller image of the online usage of the published books.

Table 1. Download numbers from different sources

| Rank | Book Title | Publication date | Downloads from SUP website | % of SUP downloads of total | Downloads from OAPEN (up to the end of 2018) | % of OAPEN download of total | Downloads from other sources | % of other sources download of total | Total downloads (SUP+ OAPEN+ Other) |
|------|---|------------------|----------------------------|-----------------------------|--|------------------------------|------------------------------|--------------------------------------|-------------------------------------|
| 1 | Festival Romanistica | 2015-06-01 | 10927 | 97% | 116 | 1% | 208 | 2% | 11252 |
| 2 | From Clerks to Corpora | 2015-02-01 | 5586 | 78% | 751 | 10% | 828 | 12% | 7166 |
| 3 | Médiations interculturelles entre la France et la Suède | 2015-12-01 | 5779 | 90% | 55 | 1% | 594 | 9% | 6429 |
| 4 | Don't Be Quiet, Start a Riot! | 2016-05-27 | 3944 | 90% | 454 | 10% | 0 | 0% | 4399 |
| 5 | Ars Edendi Lecture Series, vol. IV | 2016-11-01 | 2994 | 96% | 113 | 4% | 0 | 0% | 3108 |
| 6 | Platonic Occasions | 2015-01-01 | 2693 | 90% | 315 | 10% | 0 | 0% | 3009 |
| 7 | Krig och fred i vendel- och vikingatida traditioner | 2016-11-01 | 2225 | 84% | 247 | 9% | 171 | 6% | 2644 |
| 8 | Essays in Anarchism and Religion, Vol I | 2017-04-24 | 388 | 15% | 262 | 10% | 1934 | 75% | 2584 |
| 9 | Horizons of Shamanism | 2016-10-24 | 1089 | 64% | 621 | 36% | 0 | 0% | 1711 |
| 10 | Kunskapens tider | 2016-11-01 | 1347 | 81% | 256 | 15% | 50 | 3% | 1654 |

| | | | | | | | | | |
|----|---|------------|------|------|-----|-----|-----|-----|------|
| 11 | Working-Class Literature(s) | 2017-12-01 | 1305 | 80% | 238 | 15% | 92 | 6% | 1636 |
| 12 | Essays in Anarchism and Religion, Vol II | 2018-09-26 | 493 | 33% | 467 | 32% | 516 | 35% | 1477 |
| 13 | Polemik in den Schriften Melchior Hoffmans | 2015-12-15 | 1015 | 87% | 115 | 10% | 36 | 3% | 1167 |
| 14 | De estetiska ämnenas didaktik | 2018-08-01 | 902 | 98% | 16 | 2% | 0 | 0% | 919 |
| 15 | World Literatures | 2018-11-22 | 641 | 73% | 0 | 0% | 237 | 27% | 879 |
| 16 | Mozart's 'La clemenza di Tito' | 2018-05-03 | 520 | 71% | 215 | 29% | 0 | 0% | 736 |
| 17 | The Power of the In-Between | 2018-09-01 | 484 | 98% | 11 | 2% | 0 | 0% | 496 |
| 18 | Performativitet | 2017-08-01 | 124 | 29% | 297 | 71% | 0 | 0% | 422 |
| 19 | Guiden till Spaniensverige | 2018-07-18 | 169 | 95% | 8 | 5% | 0 | 0% | 178 |
| 20 | Modernism as Institution | 2018-09-01 | 124 | 89% | 15 | 11% | 0 | 0% | 140 |
| 21 | Pour une généalogie critique de la Francophonie | 2018-11-26 | 128 | 100% | 0 | 0% | 0 | 0% | 129 |
| 22 | Born in 1953 | 2018-11-28 | 84 | 100% | 0 | 0% | 0 | 0% | 85 |

- 9 As Table 1 shows, the majority of books get the highest usage from the publisher's website, which is also where the DOI link leads to. However, there are three books (*Essays in Anarchism and Religion Vol I and II*, and *Performativitet*) that were downloaded more often from other sources. *Essays in Anarchism and Religion Vol I* was only the 17th most downloaded book according to the SUP website but it is the eighth most downloaded book if take other sources into account. The reason for this appears to be that multiple authors and editors upload their work in other databases, such as institutional repositories or personal online profiles. The authors can also choose which version they link to when referring to their work. This is especially relevant for edited collections, where authors will link back to their work in different ways depending on where the reference is added.

The practices of authors will thus influence where and how readers find the material. The search engine ranking of each database where the content is uploaded or linked will also influence which of the links are used to refer the full text version of a book or chapter as well as in which media this information is distributed. The number of downloads are cumulative, which also plays a role when benchmarking book downloads, as some projects will need more time to show comparable usage numbers.

Altmetrics

- 10 Altmetrics capture the impact of scholarly publications outside of traditional scientific literature (for example Twitter, Facebook, news sites, etc.), and could indicate if readers find the book content useful at an earlier stage in the research process compared to citation counts that take time to materialise due to the time it takes to produce new material that refer back to the original. The Altmetric Attention Score shown in Table 2 has been collected via the Altmetric Explorer tool for institutions, provided by Altmetric.com. It shows summarised Altmetric Attention Scores of the 22 books published by SUP. This includes mentions of both single chapters or the entire book. Data about the number of downloads and the citations from Google Scholar have been added for comparison in order to give an idea about how promotion might work in non-scientific sources and whether it could have an influence on the more traditional measures. Even if Google Scholar data is not quality checked, it offers a source where we could find data for most book projects. However, the Altmetric Attention Score does not seem to be directly connected with any of the other indicators. The darker shades of each colour indicate the highest value in the respective data category.

Table 2. The Altmetric Attention Scores per title compared with downloads and citations.

| Book title | Altmetric Attention Score | Total downloads | Google Scholar citations |
|---|---------------------------|-----------------|--------------------------|
| Essays in Anarchism and Religion, Vol II | 24 | 1476 | 3 |
| Essays in Anarchism and Religion, Vol I | 22 | 2584 | 12 |
| Guiden till Spaniensverige | 19 | 177 | 0 |
| World Literatures | 15 | 878 | 0 |
| Working-Class Literature(s) | 11 | 1635 | 9 |
| Modernism as Institution | 10 | 139 | 0 |
| Born in 1953 | 10 | 84 | 1 |
| Krig och fred i vendel- och vikingatida traditioner | 9 | 2643 | 2 |
| Mozart's 'La clemenza di Tito' | 9 | 735 | 0 |

| | | | |
|---|---|-------|----|
| Horizons of Shamanism | 5 | 1710 | 7 |
| De estetiska ämnenas didaktik | 5 | 918 | 2 |
| Performativitet | 4 | 421 | 1 |
| Pour une généalogie critique de la Francophonie | 4 | 128 | 0 |
| Médiations interculturelles entre la France et la Suède | 3 | 6428 | 17 |
| Don't Be Quiet, Start a Riot! | 2 | 4398 | 8 |
| Kunskapens tider | 2 | 1653 | 2 |
| Ars Edendi Lecture Series, vol. IV | 1 | 3107 | 8 |
| Platonic Occasions | 1 | 3008 | 4 |
| Festival Romanistica | 0 | 11251 | 18 |
| Polemik in den Schriften Melchior Hoffmans | 0 | 1166 | 0 |
| The Power of the In-Between | 0 | 495 | 0 |
| From Clerks to Corpora | 0 | 7165 | 17 |

- 11 The altmetrics for books indicate how books are being mentioned in online forums and social media, sometimes as a part of the promotion about their publication, but the data does not suggest that the high altmetric scores can predict a high citation rate. However, the altmetrics data could still be significant to indicate an interest from the readership and to understand how information is shared within a community of practice.

Citations

- 12 The number of citations is often used as a proxy to quantify the impact and value of scholarly publications. References to previous material is used in different ways within the Arts & Humanities and Social Sciences (AHSS) disciplines compared to citation practices within science and some social sciences with high publication rates via academic journals. Works within AHSS often show lower citation rates per item. In addition, data about books are less reliable (compared to data about academic articles) due to lack of standards for metadata, permanent identifiers and digitalised reference lists. As citation databases are often based on a selection of sources, it was important for this study to look at a number of different sources to ensure we could capture as much data as possible. Web of Science and Scopus do not index books published by SUP, but it is still possible to find references to some of the books and chapters within these databases. Dimensions indexes and tracks data from OA sources, and therefore includes more sources than Web of Science and Scopus. Crossref tracks citations and references between

publications with DOIs, and all SUP books are registered here. Google Scholar tracks citations to all sources that they have classified as scholarly literature. Although the references might come from any kind of source (i.e. there are no guarantees that the citations come from references included in other scholarly work). Table 3 gives an overview of the distribution of citation counts across these different sources.

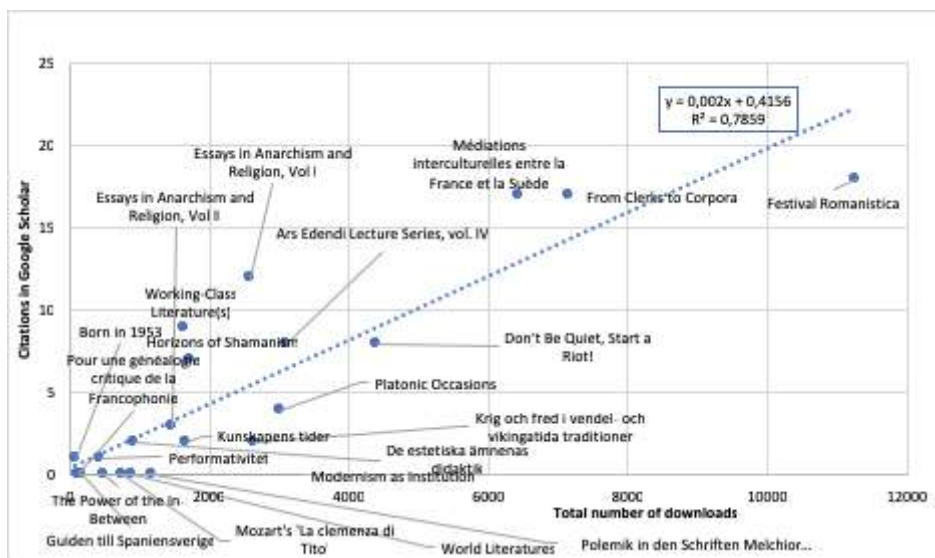
Table 3. Citation counts for SUP books according to four different publication databases

| Title | Google Scholar | Cited works in Web of Science | Dimensions | Crossref |
|---|----------------|-------------------------------|------------|----------|
| Médiations interculturelles entre la France et la Suède | 17 | 20 | 3 | 4 |
| Festival Romanistica | 18 | 4 | 2 | 1 |
| From Clerks to Corpora | 17 | 2 | 4 | 3 |
| Essays in Anarchism and Religion, Vol I | 12 | 1 | 0 | 0 |
| Working-Class Literature(s) | 9 | 0 | 0 | 0 |
| Ars Edendi Lecture Series, vol. IV | 8 | 6 | 0 | 0 |
| Don't Be Quiet, Start a Riot! | 8 | 1 | 2 | 2 |
| Horizons of Shamanism | 7 | 3 | 0 | 0 |
| Platonic Occasions | 4 | 3 | 0 | 0 |
| Essays in Anarchism and Religion, Vol II | 3 | 0 | 0 | 0 |
| Krig och fred i vendel- och vikingatida traditioner | 2 | 1 | 0 | 0 |
| Kunskapens tider | 2 | 1 | 0 | 0 |
| De estetiska ämnenas didaktik | 2 | 0 | 0 | 0 |
| Polemik in den Schriften Melchior Hoffmans | 0 | 0 | 1 | 1 |
| Performativitet | 1 | 0 | 0 | 0 |
| Born in 1953 | 1 | 0 | 1 | 0 |
| Mozart's 'La clemenza di Tito' | 0 | 0 | 0 | 0 |
| Guiden till Spaniensverige | 0 | 0 | 0 | 0 |

| | | | | |
|---|------------|-----------|-----------|-----------|
| The Power of the In-Between | 0 | 0 | 0 | 0 |
| Modernism as Institution | 0 | 0 | 0 | 0 |
| World Literatures | 0 | 0 | 0 | 0 |
| Pour une généalogie critique de la Francophonie | 0 | 0 | 0 | 0 |
| Total number of citations | 111 | 42 | 13 | 11 |

- 13 Table 3 shows that most of the books have received at least one citation in at least one of the four databases measuring citations. The citation numbers include both book titles and individual chapters. However, six of the titles showed no data. This could be due to a number of factors. Newer titles would, for example, not have had sufficient time to collect citations. The lack of citation data could also be connected to the community of practice within each discipline and the discourse of research within the subject based on geography.
- 14 When comparing the datasets to understand if there is any connection between measures, there is no clear evidence about a relationship between high altmetric scores and high citation numbers. There was, however, a correlation between the number of downloads and citations in the studied material (Figure 1). This is supported in a study by Ottaviani (2016), which concludes that OA articles have a tendency to attract citations faster than paywall content. This study appears to support a similar pattern for OABs from Stockholm University Press.

Figure 1: Correlation between the number of Google Scholar citations and download numbers



Survey of authors' attitudes about metrics

- 15 The survey received 30 responses representing authors from nine countries, mainly in Europe and the United States. There was a skew towards Swedish authors (41% of the

respondents), most likely because authors from Stockholm University Press were specifically targeted to be able to collect relevant data to compare with the book metrics in this study. The responses from Swedish authors did not significantly vary from those originating from other countries apart from rating the importance of Twitter mentions rather low. Some of the respondents referred to national frameworks such as the Research Excellence Framework (REF), which is used in the UK to evaluate and benchmark research output. Most of the authors responding to the survey indicated that they worked in academia for ten years or more. The majority of the respondents (59%) have previously published five books or more. Almost all the authors (83%) work within Arts & Humanities. This is not surprising as the book format is more commonly used for scholarly communication within such disciplines.

- 16 As expected, most authors had chosen to publish their book on OA to reach a larger audience and maximise dissemination of their work online. It appears that many authors do not know what to use as a benchmark for what could be considered to be high impact. More than half of respondents indicated that they do not know what is considered to be a highly cited book within their field, and in many cases they have little access or understanding about the data collected about their own book. Several authors noted that other drivers of using metrics are related to evaluation systems used on a national or local level.

Awareness and availability of metrics

- 17 The free text responses are inconclusive due to the small sample size. They can, however, give some indication of attitudes towards available measures of book impact, as well as some indications about how they see their work as a part of their particular community of practice. One of the most important factors for authors to understand and interpret the data they get from authors is whether or not they have access to any type of metrics. 24 of the 29 respondents answered the question: “*Think about the last book you published with Open Access. What do you know about its reach? What kind of data can you get from your publisher?*” These responses are illustrated in Table 4, which has been anonymised (i.e. references to names of publishers and geographic origin has been removed).

Table 4: Responses relating to what kind of metrics authors know they have access to.

| |
|--|
| Very little, aside from occasional Google citations, Twitter mentions and updates from the publisher. The book was published in 2018, so it probably requires a bit more time to register in terms of impact, though the flurry of tweets came, unsurprisingly, shortly after its publication. |
| Number of downloads, number of views |
| It was published in November 2016 so too early to tell. All I know is that there have been more than 600 downloads. |
| I know the number of downloads from the publisher’s website. |
| I can easily see the number of views and downloads on the editor’s website. |
| information via academia.edu |

| |
|--|
| I can see the number of downloads all in all, but not a chapter-by-chapter breakdown. Twitter mentions are also included. |
| I've been looking on a fairly regular basis at the various metrics (downloads of pdf etc) on the publisher website. It looks like 1,372 downloads - which is quite high given the specialist market for the book. I'm pleased with this. |
| Downloads and sales |
| On the homepage I can see views, downloads and tweets |
| I have only looked at Google Scholar, where it doesn't seem to have been cited. this is a pity because there are some good articles. |
| The download (but sometimes people get the PDF file) |
| WordPress analytics |
| I haven't seen publisher data on reach, but it would probably share it with me. However, this book has about a dozen different OA editions (same text, different file formats), which to me is desirable. Not all are hosted by the publisher. Hence (1) the publisher couldn't give me good data on each of them, and (2) getting good data on all of them together would be very hard. |
| almost none |
| None |
| I sold a bit over 100 copies before. I am not tracking the number of "reads" of the OA version. I'm self-publishing via GitHub and they do not provide any metrics. |
| downloads, views, twitter |
| Number of downloads/hard copies. |
| No of downloads, and where, but only at country level, by month |
| I get Altmetric.com data that shows geographical spread of Twitter traffic among other things. I also get Google Analytics data on request and a report on countries the book is downloaded from based on platform data gathered via the KU Open Analytics tool. |
| Just the metrics that the publisher display on the web page |
| It is still in process so do not have a full idea of reach just yet. |
| Download count |

- 18 Several respondents indicated that they don't have access to any information about the readership of their book. Most authors in the survey, however, seem to have access to some kind of data about the number of downloads. Three respondents indicate that they look for citation data in Google Scholar.

- 19 Respondents who indicated that they are aware of the metrics available seem to rank several of the examples in the following question, *If a book has been downloaded 200 times, what does that mean to you?* highly. This question asked the respondents to rank six different types of metrics in order of importance from most valuable to least valuable for the measure of impact for their own work. Most respondents ranked downloads the most important. However, the measure of citations received the highest total score by two points, indicating that the practice of referring to previous work as a reference in a new publication is seen as the most important measure of impact. Mentions of books on Twitter received the lowest score compared, as did the number of sold print copies.
- 20 The results of the survey do not seem to indicate that authors are particularly aware of what type of metrics are available to them, how to use them, or how they can be interpreted within a specific context. Some respondents indicate that they would like to see metrics about how their books has been reviewed in other publications, like academic journals or magazines, to understand how the material can have an impact in each respective field. Data about reviews is not something that is included in any of the databases we looked at in this study, unless the review is registered as a citation in its own merit. Only one respondent wanted to see information about how their book had been used in course material and/or curriculum design. Further details from the survey is available in the full dataset (Wennström et. al. 2019).

Conclusions

- 21 The results from the survey show that book or chapter usage in the form of downloads are the top rated measure for authors. However, we also know that downloads can be the least accurate measure of success for OABs, as the book could be available for download anywhere and we cannot guarantee the number of unique users.
- 22 The metrics data show a correlation for OABs with high usage to attract more citations, which follows patterns from other studies looking at OA articles in journals. Collecting metrics and citations for books is not a well established practice for OABs, and authors do not yet see the link between their personal practice and metric scores. Even a small sample like our study show that author engagement is required in order for them to figure out the benefits for them while participating in online activities related to the books that they publish. There is still a lot of work to be done to encourage more sharing in various digital channels and for authors to find the activity meaningful. Publishers of OABs should consider focusing on strategies to support and encourage authors in this endeavour.
- 23 Evidence from the author survey suggests that it is not entirely clear what the indicators of high impact or success for an OAB are, in turn seem to lead to disengagement by the authors and their audience that might undermine the relevance of publishing open access. The authors in the survey should, furthermore still be considered as 'early adopters', meaning that they believe in the open access idea and are willing to go against the norm in a community that is slow to change. However, the data also indicate that they are not working towards a culture aiming to change the perceived value or success of a project. The authors are rather leaning towards using established bibliometrics such as citations, possibly number of downloads but remain sceptical about other measures of impact or attempts to understand the readership.

- 24 The findings from this paper could be used to inform further work with to projects such as HIRMEOS, and new initiatives such as the OA Book Watch. The results could be used to create more possibilities for smaller presses to collaborate and benchmark their services to compete with the traditional publishers in terms of attracting engaged authors and influencing policies on how we measure the value of different types of research output. However, the figures in this paper do not give us the entire picture. These results should, however, be considered as preliminary and we would like to encourage other OAB publishers to share their data. We have, therefore, published the dataset and the survey questionnaire to open up for others to run the survey, which could hopefully lead to more opportunities for benchmarking and further development of best practices on how to create awareness of the impact of publishing open access. The results should, nevertheless, still be used with caution and not serve as the sole base for comparing projects and the effectiveness of publishing models in general as well as for specific book projects or the performance of researchers. We are looking forward to see more developments in line with projects such as the “citation graph” and analysis that Martin Paul Eve is working on, with funding from the Jisc Open Metrics Lab (Eve 2019). The suggested outcome of this shows promise in terms of changing how we create value across more disciplines than just the traditional high-output organisations.
-

BIBLIOGRAPHY

References

- Wennström, Sofie, Gabor Schubert, Jeroen Sondervan, and Graham Stone. 2019. “Book metrics and results from author survey about metrics for OA monographs - for a paper presented at the 2019 Elpub conference, Jun 4, 2019.” Dataset. Stockholm University. <https://doi.org/10.17045/sthlmuni.8051717>
- Adema, Janneke. 2019. *Towards a Roadmap for Open Access Monographs: A Knowledge Exchange Report*. Bristol: Knowledge Exchange.
- BASE (Bielefeld Academic Search Engine). Accessed 28 April 2019. <https://www.base-search.net/about/en/>.
- Bookmetrix. Accessed 28 April 2019. <http://www.bookmetrix.com/#about>.
- Eve, Martin Paul. 2019. “Open-Access Monographs and Metrics: More than Counting Beans.” *Open Metrics* (blog). 15 May. <https://openmetrics.jiscinvolve.org/wp/2019/05/open-access-monographs-and-metrics-more-than-counting-beans/>.
- “Hirmeos Project – High Integration of Research Monographs in the European Open Science Infrastructure.” Accessed 28 April 2019. <https://www.hirmeos.eu/>.
- Lave, Jean, and Etienne Wenger. 1991. *Situated Learning: Legitimate Peripheral Participation*. Learning in Doing, 99-1331144-6. Cambridge: Cambridge Univ. Press.

- Neylon, Cameron, Lucy Montgomery, Alkim Ozaygen, Neil Saunders, and Frances Pinter. 2018. "The Visibility of Open Access Monographs in a European Context: Full Report." Zenodo. <https://doi.org/10.5281/zenodo.1230342>.
- Nielsen, Kristian H. 2013. "Scientific Communication and the Nature of Science." *Science & Education* 22 (9): 2067–86. <https://doi.org/10.1007/s11191-012-9475-3>.
- OAPEN Library. Accessed 21 March 2019. <http://oapen.org/home>.
- Ottaviani, Jim. 2016. "The Post-Embargo Open Access Citation Advantage: It Exists (Probably), It's Modest (Usually), and the Rich Get Richer (of Course)." *PLOS ONE* 11 (8): e0159614. <https://doi.org/10.1371/journal.pone.0159614>.
- Priem, Jason, Dario Taraborelli, Paul Groth, and Cameron Neylon. 2010. "Altmetrics: A Manifesto." Altmetrics.org. 26 October. <http://altmetrics.org/manifesto/>.
- Roemer, Robin Chin, and Rachel Borchardt. 2015. *Meaningful Metrics: A 21st-Century Librarian's Guide to Bibliometrics, Altmetrics, and Research Impact*. Chicago, IL: The Association of College & Research Libraries. http://www.ala.org/acrl/sites/ala.org.acrl/files/content/publications/booksanddigitalresources/digital/9780838987568_metrics_OA.pdf.
- Snijder, R. 2019. "The Deliverance of Open Access Books : Examining Usage and Dissemination." Doctoral Thesis, Leiden University. <https://openaccess.leidenuniv.nl/handle/1887/68465>.
- Snijder, Ronald. 2016. "Revisiting an Open Access Monograph Experiment: Measuring Citations and Tweets 5 Years Later." *Scientometrics* 109 (3): 1855–75. <https://doi.org/10.1007/s11192-016-2160-6>.
- Stone, Graham, and Mafalda Marques. 2018. "Knowledge Exchange Survey on Open Access Monographs." Report. <http://repository.jisc.ac.uk/7101/>.
- Tanner, Simon. 2018. "Focusing on European Citizens and the Impact of Open Access Monograph..." Keynote presented at the Knowledge Exchange Workshop on Open Access and Monographs, Brussels, Belgium, November 7. <https://www.slideshare.net/KDCS/focusing-on-european-citizens-and-the-impact-of-open-access-monographs-for-them>.
- Wertsch, James V. 1995. "The Need for Action in Sociocultural Research." In *Sociocultural Studies of Mind*, edited by James V. Wertsch, Pablo Del Río, and Amelia Alvarez, 56–74. Learning in Doing, 99-1331144-6. Cambridge: Cambridge University Press.
- Wilsdon, James, Liz Allen, Eleonora Belfiore, Philip Campbell, Stephen Curry, Steven Hill, Richard Jones, et al. 2015. "The Metric Tide: Report of the Independent Review of the Role of Metrics in Research Assessment and Management." <https://doi.org/10.13140/rg.2.1.4929.1363>.

APPENDIXES

Open Access Book Metrics Survey for Authors and Editors

With the introduction of books in a digital format, a number of opportunities to analyse usage and impact arise allowing us to learn more about how books are used than ever before. But, what does it all mean? Is the online reader as valuable as someone who bought the book in a bookstore? What does it mean if someone recommended reading the

work to their friends on Facebook? How can we see if the book makes an impact outside academia?

This survey aims to collect information on how authors and editors of Open Access books (monographs, anthologies, edited collections, book chapters) make meaning of measures (or metrics) regarding usage and interactions with published books.

Examples of metrics collected about published books in digital format are usage (downloads/views), citations and mentions in social media (altmetrics). The print version of books is measured in the number of sold copies.

The survey should take no more than 20 minutes to complete. Please respond to the following questions to the best of your knowledge. If you are unable to complete it in one go, you can quit at any time. Your answers will be saved, and you can return to the survey later using the link. You will then re-enter the survey where you left off.

Your unique responses will be held on a secure database and will not be shared outside the project team. Aggregated and anonymised data from the survey results will be presented at an international conference in 2019 about academic publishing and will also be shared in several online channels. It will not be possible to identify you from any data analysis shared publicly.

We value your perspective.

Q1

For how long have you been working in academia?

[choose one of the following options]

1-5 years | 5-10 years | 10 years or more

Q2

In which country are you currently working?

[List of countries in drop-down]

Q3

Which of these research areas does your work belong to?

[choose one of the following]

Arts & Humanities | Social Science | Science | Technology & Engineering | Medicine

Q4

How many books have you published or contributed to during your career (all formats)?

[choose one of the following options]

1-2 | 2-5 | 5-8 | 8-11 | more than 11

Q5

Thinking about the last book you published with Open Access. Why did you decide to publish it openly?

[free text entry]

Q6

Think about the last book you published with Open Access. What do you know about its reach? What kind of data can you get from your publisher?

[free text entry]

Q7

As a book author or editor trying to figure out what kind of impact or reach your book has, what of the following would be of most value to you?

[rank the following options from most 5 valuable to 1 least valuable]

- a. the number of downloads
- b. Twitter mentions
- c. citations
- d. mentions in news articles
- e. being used in policy briefs
- f. number of sold print books

Are there any other types of impact not listed above that you would find valuable?

Q8

If a book has been downloaded 200 times, what does that mean to you?

[rank the following options from most 5 valuable to 1 least valuable]

- a. It's a really interesting book, I should also read it
- b. It is just another measure that provides some insight about
- c. Nothing, since I'm not sure if people who download books also read them
- d. Great to see some usage, but is anyone citing it?

Q9

In your subject area, do you know what is considered to be a highly cited book?

[choose one of the following options]

Yes | No

Q9 A

If yes, how many citations would be required for you to count something as 'highly cited'?

[choose one of the following options]

5 citations | 10 citations | 30 citations | 50 citations

Q9 B

If no, what would you estimate to be highly cited, based on what you know now?

[choose one of the following options]

5 citations | 10 citations | 30 citations | 50 citations

Q10

Considering altmetric indicators (Ways to account for impact of scholarly content outside of historic practices, e.g. Twitter mentions etc.), what would 'high impact' look like to you?

[free text entry]

Q11

When thinking about your next book publishing project, what would be your expectations about the impact of your work?

[free text entry]

Q12

Are there any other experiences or thoughts about how we can discuss the impact or metrics about open books that you would like to share with the investigators?

[free text entry]

ABSTRACT

This paper analyses usage statistics, citation data and altmetrics from a university press publishing open access monographs. The bibliometric data is then contrasted to the outcome of a survey of attitudes and behaviour among authors and editors who have published open access books. The metrics indicate that downloads and citations depend on the community of practice of the intended audience within each specific academic discipline, as well as the content itself. There is, for example, a clear difference in usage patterns between monographs and anthologies. The altmetric data used in the study indicate how users interact with the published books online. The data suggests, despite the small sample, that authors can to a greater extent influence how their book is discovered by the readership. It would, therefore, be relevant for authors to become more aware of the type of metrics available and how they can be interpreted and used for better understanding of how the book can reach its intended audience. Further studies are needed, and publishers of open access books are encouraged to share data for benchmarking and development of best practices.

INDEX

Keywords: metrics, altmetrics, mixed method, impact, open access, monographs, books

AUTHORS

SOFIE WENNSTRÖM

Analyst, Stockholm University Library, Sweden
sofie.wennstrom@su.se
(corresponding author)

GABOR SCHUBERT

Analyst, Stockholm University Library, Sweden

GRAHAM STONE

Senior research manager, Jisc Collections, UK

JEROEN SONDERVAN

Publishing Consultant, Utrecht University Library, The Netherlands