

Acceptance rates of scholarly peer-reviewed journals: A literature survey

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Abstract

The acceptance rate of scholarly journals is an important selection criterion for authors choosing where to submit their manuscripts. Unfortunately, information about the acceptance (or rejection rates) of individual journals is seldom available. This article surveys available systematic information and studies of acceptance rates. The overall global average is around 35-40%. There are significant differences between fields of science, with biomedicine having higher acceptance rates compared to for instance the social sciences. Open access journals usually have higher acceptance rates than subscription journals, and this is particularly true for so-called OA mega-journals, which have peer review criteria focusing on sound science only.

Keywords

Acceptance rates; Rejection rates; Scholarly journals; Peer-review; Literature survey; Quality; Impact factor; Subscription journals; Open access; Predatory journals; Scholarly communication.

1. Introduction

An important feature of scholarly journals is that they only accept manuscripts for publishing via a process called peer review. The purpose of involving anonymous experts is to filter out scientifically correct manuscripts of novelty value, as well as help improve manuscripts with potential for publishing (Ware, 2008). The acceptance rate of top journals in some fields can be as low as around 5%, meaning that the vast majority of submissions are rejected. It is because of the scarcity of publication "slots" in such journals, that getting accepted in them is so valuable to academics in promoting their careers.

Several studies have shown that the acceptance rate is an important factor influencing the choice of journal (Frank, 1994; Tenopir *et al.*, 2016). Most authors have at some stage in their careers experienced the frustration of getting a rejection decision, often after a delay of several months. Submitting an article to a journal offering a realistic publication chance is thus crucial, but few journals openly advertise their acceptance rate. It is very difficult to find such information systematically collected for alternative journals in the same field. In practice authors often have to rely on word of mouth from colleagues.

“ It is because of the scarcity of publication “slots” in top journals, that getting accepted in them is so valuable to academics in promoting their careers ”

In most journals a lot of manuscripts are rejected already in an early stage by the editor or the editorial office (“desk reject”), without even being sent out to peer reviewers for evaluation. Such manuscripts could be out of the subject scope for the journal, of substandard language and presentation, or of no scientific significance. Some highly selective journals even use pre-submission inquiries to filter out manuscripts not worth the effort of a full peer review.

Manuscripts can be rejected directly after the first round of peer review, but also after revisions and resubmission even in later stages, if the reviewers feel the revisions aren't sufficient. Not all processes end with a clear acceptance for publication or a rejection decision. In many cases author find that the required revisions are so big or difficult to carry out that they withdraw, and often submit to another journal.

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When we talk about the acceptance rate in this study, or it's counterpart the rejection rate, we mean the percentage share of formally submitted full manuscripts that end up being published in the journal in question. Most journals or editors tend to keep track of and monitor this for internal purposes, but the only way to get access to this information is if they voluntarily provide it. A simplified approximate way to calculate this, especially for larger-volume journals, is to divide the number of published articles in a given year with the number of submissions in that same year or the year before. Defining how to calculate the acceptance rate is somewhat ambiguous, and many journal editors don't specify how they have calculated it when they announce it (Khosravi, 2018).

The problem with any calculation method is that while it is easy to count the number of articles published in a given scholarly journal, information about the number of submissions is usually not available publicly and dependent on the publishers' willingness to provide such data.

This article reviews earlier studies and data sources about acceptance rates of scholarly journals. It also tries to group scholarly journals in meaningful categories for which acceptance rates differ. On the level of individual journals, information on acceptance rates can sometimes be found in editorials and some major society publishers have published submission and publication statistics for all their journals. Editors and publishers may also indicate the acceptance rates when answering surveys of different sorts. And some services like *Cabell's* directory ask this information from them. In principle the overall level of acceptance rates in some journals or overall could also deduced from surveys with academic authors, asking about their experience when submitting manuscripts.

The only way to get access to information about acceptance rates is if editors voluntarily provide it

Acceptance rates can be studied within a single discipline, usually revealing a clear hierarchy of journals, or as a comparison between different fields of science. If it would be possible to study the intradisciplinary variation in a systematic way in a large number of disciplines, the likely outcome would be of an emerging relatively constant pattern, where a few highly selective journals at the top of the prestige ladder would have low acceptance rates. Often such journals would be quite old and published by leading scholarly societies in their fields. At the other end we would find a large number of narrow-focus, regional or newly established journals with quite high acceptance rates.

The focus of this review of earlier studies is on the interdisciplinary variation as well as the global acceptance rate. The publishing culture, the availability of journals, and peer review practices in different fields of science have in the past resulted in significantly varying acceptance rate levels. The recent emergence of open access publishing adds a further interesting dimension. In earlier years there were many claims that OA journals had no or substandard peer review. Journals from so-called "predatory" publishers have indeed become notorious for rapidly publishing just about anything, as long as the author pays the requested article processing charges (Shen; Björk, 2015). OA megajournals, the primary example of which is *PLoS one*, publish all scientifically valid research, without trying to judge the significance of the study in question (Binfield, 2012; Wakeling *et al.*, 2016). Some of these megajournals have as a consequence become very popular with authors.

An interesting question is how to calculate the average acceptance rate, both globally and within fields. By far the easiest way is to just calculate the average across journals for which the rate is available. This might, however, distort the picture. If one asks the question, given a random manuscript in a particular field or globally, what is the probability that it will be accepted and published in the first journal where it is submitted, then the correct measure is to weight the acceptance rates with the published article numbers of the corresponding journals. Hence the acceptance rate of a subscription journal like *PNAS*, with around 3,000 articles published per annum, or an OA journal like *Scientific Reports* with over 20,000 articles, is much more important than the acceptance rate of a quarterly journal with 50 articles.

An even more complex issue is the overall acceptance rate of manuscripts in the long run, in any journal and not only the first one submitted to. There is circumstantial evidence that the majority of initially rejected manuscripts are eventually published in some other journal, albeit with a considerable delay. Grant and Cone (2015) found a resubmission acceptance rate of 66% for manuscripts rejected by the journal *Academic Emergency Me-*

OA megajournals, the primary example of which is *PLoS one*, publish all scientifically valid research, without trying to judge the significance of the study in question

dicine. And **Abby et al.** (1994) found that of manuscripts rejected by a leading medical journal, at least 38% were later published in some other journal. The only possibility to study this in a systematic way would be via a broad academic author survey asking them about the overall success rate of their manuscripts.

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2. Available information and studies

2.1. Information about individual journals, publishers or particular fields

Some journals have provided information about their acceptance and rejection rates and in some cases even more detailed data about the number of submissions and published articles (*PNAS*, 2017). Often such information can be found in editorials of the journal in question and usually not in a systematic fashion (**Smahel et al.**, 2014). The only efficient way to search for such information is to do search engine searches using the combination of the journal name + acceptance rate/rejection rate. Doing so for tens of thousands of journals would be extremely time-consuming. Also, the resulting hits would need to be analysed manually.

A few publishers have information about all the journals that they publish available (*APA*, 2017). Other publishers make the information available in a standardised format at the web sites for some of their journals (*Hindawi*, 2017). *Elsevier* is an interesting case. It provides a lot of data in a standardized format at the journal home pages, for instance SNIP values, review speed and download statistics, etc. But for many of the journals the acceptance rate is not provided. Inserting the title and abstract of this manuscript in their *Journal finder* tool (*Elsevier*, 2019) yields six of the publisher's journals as suggestions. The acceptance rates are provided for all the journals. *SpringerNature* offers the same kind of tool (*SpringerNature*, 2019).

Acceptance rates in particular fields have typically been studied by academics working in the discipline in question. The purpose has for instance been to inform colleagues, and/or to study if patterns emerge relating acceptance rate to factors like impact factors. Such studies have usually started by compiling a list of the journals of interest (for instance based on indexes like *WoS* or *Scopus*), followed by email enquiries or web questionnaires to the editors of the journals. The response rates have usually been quite high. Unfortunately, there are only few recent studies of this type and since there are as many 200-300 scholarly subdisciplines, the combined coverage of such studies is very low.

Schultz (2010) collected data about submissions and published articles from the editors of 51 journals in atmospheric science and calculated an overall average of 62%. One important thing to bear in mind is that his figures exclude manuscripts withdrawn by the authors or transferred to other journals. If those were included the acceptance rates would be lower.

Stephens (2012) proposes a new method for ranking journals in the field of communication studies, the so-called Prestige weight. He also compares the correlation of the P-weight with *ISI* impact factors and a data set of rejection rates for 60 journals. The average acceptance rate for the communication and journalism journals was 19%.

Lamb and Adams (2015) contacted the editors of the veterinary journals indexed in the *Web of Science* and received data for 30 journals. The average acceptance rate was 47%. The study also included a more detailed breakdown of the fate of manuscripts submitted; accepted without revision (3%), after revision (44%), withdrawn by authors (4%), pending (3%) and rejected (46%).

Salinas & Munch (2015) propose a mathematical model for how authors could optimize the choice of journal, taking into account both dissemination efficiency and minimizing the time delay to acceptance. As part of the study they collected acceptance rates from the editors for 61 ecology journals with *JCR* impact factors. The average was 35%.

2.2. Broader studies

Weller (2001) in a comprehensive review of literature on peer review practices also surveyed a large number of discipline-specific studies of journal acceptance rates. Her metastudy is already quite dated since the studies had been published between 1961 and 1998, but clearly demonstrated rather large systemic differences between fields. The acceptance rates in the hard sciences were generally much higher than in the social sciences. The average rates in Sociology, Psychology and Economics were in the different referenced studies mostly in the range 20-40%, and in Medicine, Life Sciences around 50%. Chemistry and Physics had even higher rates of 65-70%.

In a study commissioned by the *Association of Learned Scholarly Publishers (ALPSP)* data about acceptance rates was obtained for 495 journals (*Kaufman-Wills*, 2005). The journals represented a convenience sample of very different types of journals, hence providing the overall average is not meaningful. The average for the 126 subscription-based journals published by member organisations of *ALPSP* was 42%. The association has more than 300 members, mainly from non-profit institutions such as scholarly societies, university presses, etc.

The study by **Sugimoto et al.** (2013) is to date the most systematic, using data from several different sources in order

to statistically study the influence of factors like discipline, journal age, impact factor, etc., on the acceptance rate. The authors clearly demonstrate that average acceptance rates vary between the studied five disciplines. Despite the large number of journals included, the reliance only on the journals in *Cabell's* directory for the primary data restricts the generalizability of the acceptance rate numbers to a global measure for all sciences. Four of the five disciplines (business studies and economics, psychology, education, nursing & health administration) are within the social sciences.

The study by *Thomson Reuters* (2012) leveraged the massive amounts of data collected in their *ScholarOne* submission and publishing system. This system is used by over 4,000 journals from over 300 different publishers, including both commercial publishers, scholarly societies, and university presses. The study is the only one which provides global averages across manuscripts, and it included data about over three million manuscripts submitted in 2005-2010. From 2005 to 2010 the overall acceptance rates decreased slightly from 40,6% to 37,1%. The major reason is probably the increased share of submissions from countries like China and India, which typically have a lower chance of acceptance. The calculations of the acceptance rates for corresponding authors from different countries is in fact particularly interesting. The 2010 rates for the best performing countries (USA, UK, Canada, Australia, Germany, Switzerland and Sweden) were in the narrow range 46,8–51,9%, whereas the worst performers (China, Taiwan, India, Brazil and Turkey) in the range 18,7–26,8%.

Da-Silva (2015) has in an interesting blog with calculations of the correlation between acceptance rates and impact factors. Contrary to the **Sugimoto et al.** study, which found some degree of correlation, he finds no correlation. He uses data for 570 journals, which are included in the *Journal Citation Reports* and for which acceptance rates were available. One of the drawbacks of the study is that the sample is a convenience sample, for instance including a lot of journals from OA publishers like *Frontiers*, *Hindawi* and *MPDI*, due to easy availability of data on the net. Although the rejection rates and impact factors are posted on his blog (**Da-Silva**, 2016a), the journal and publisher names are not provided. It was, however from his data possible to calculate a mean acceptance rate of 38%, as well as a median of 35%.

A major problem with using crude impact factors for such an analysis, is that the absolute level of impact factors differs a lot between fields of science with certain disciplines like biomedicine on average having high levels, while other fields (i.e. mathematics) have low ones. In an attempt to deal with this critique Da-Silva has published a second blog (**Da-Silva**, 2016b) where the correlation analysis was done by assigning each journal a relative number of 100-0 based on its position in the *JCR* ranking order for journals in its discipline. Also using this method no significant correlation emerged. A more reliable method would be to use SNIP values (based on *Scopus*) for such an analysis.

In a much earlier study comparing the acceptance rates and impact values of 60 journals in ecology, **Aarssen et al.** (2008) came to the opposite conclusion, and found a strong negative correlation.

The acceptance rates found in studies reviewed above are shown in table 1. The results from the **Sugimoto et al.** studies five areas have been given separately, rather than as the combined rate.

Table 1. Average acceptance rates in some earlier crossdisciplinary or discipline-specific studies

Study	Number of journals	Acceptance rate	Coverage
General			
<i>Kaufman-Wills</i> , 2005	126	42%	Crossdisciplinary: subscription journals
<i>Thomson Reuters</i> , 2012	> 4000	37%	Crossdisciplinary
Da-Silva , 2015	570	38%	Crossdisciplinary
STM			
Schultz , 2010	51	62%	Atmospheric Science
Sugimoto et al. , 2013	734	32%	Computer Science
Sugimoto et al. , 2013	337	56%	Health Sciences
Lamb & Adams , 2014	30	47%	Veterinary Science
Salinas & Munch , 2015	61	35%	Ecology
Social Sciences			
Sugimoto et al. , 2013	2,916	31%	Business studies
Sugimoto et al. , 2013	1,156	34%	Education
Sugimoto et al. , 2013	725	35%	Psychology
Stephens , 2012	65	19%	Communication and Journalism

3. Acceptance rates in open access journals

In recent years the number of open access journals where reading articles is free for anybody with Internet access, has constantly increased. There are currently around 13,500 such journals indexed in the *Directory of Open Access Journals*

(DOAJ). Their share of the total volume of peer reviewed journal articles has constantly increased by around 1% per year, and is currently around 18% (Björk, 2017).

Ever since the emergence of the first OA journals in the 1990's there has been a debate about the scientific quality of the articles published by such journals, with many sceptics doubting the quality (Agrawal, 2014). During the last five years the rapid emergence of OA journals from the so-called predatory publishers, has also unduly tainted the reputation of OA journals as a whole (Bohannon, 2013).

“ Sugimoto *et al.* found that acceptance rates are significantly higher in OA journals ”

The only published study which includes a comparison of the acceptance rates of OA and non-OA journals is the Sugimoto *et al.* study, which finds that acceptance rates are significantly higher in OA journals. They report differences of 4-16% for the five different fields. If the number of journals in the fields they cover is used to weight the acceptance rate, the overall rate for the OA journals would be 41% and for the non-OA journals 33%. It is problematic to compare the overall rates of all traditional and all OA-journals. This is because OA journals are on average much younger. Also, OA-journals have spread more rapidly in biomedicine, where the acceptance rates are generally higher, than in the social sciences.

From the viewpoint of review and acceptance policies OA journals are far from a homogeneous lot. In fact, they can be subdivided into distinct categories. The first consists of converted *old established journals*, which made the electronic version free in parallel to the printed subscription one. Typically, such journals are published by scientific societies or universities, and they are very common in certain geographical regions like Latin America. For such journals the acceptance practices and rates would not differ from the practices of subscription journals of comparable quality levels and profiles, since the journals have usually continued making paper versions available to subscribers and there have been no changes in peer review. In the before mentioned ALPSP study (Kaufman-Wills Group, 2005) the average acceptance rate for 248 DOAJ registered OA journals was 55%, and most of these would belong to the above category. Another study which provides acceptance rates for 845 mainly converted or independent newly founded OA journals, is a study by Edgar and Willinsky (2009) of journals using the *Open Journal System (OJS)* platform. From table 6 in their article, which provides the number of journals in different acceptance rate ranges, an approximate average of 53% can be calculated, by setting the acceptance rates at the middle of the ranges.

The financial incentive structure of *OA publishers* or *mainstream publishers starting new OA journals* funded by author-side publication charges, is different. Since such journals only publish an electronic version, and thus have extremely low marginal production costs, they benefit financially from publishing as many manuscripts as possible. Hence there could be a temptation to increase acceptance rates and hence profits. Such journals and publishers can in a meaningful way from the viewpoint of peer review practices and the ensuing acceptance rates further be grouped into four further categories:

Journals which aim at very high quality. There are just a few such OA journals (*PLoS Medicine* and *Biology*, *eLife*, *Nature Communications*) usually publishing over a very broad spectrum in biomedicine. Acceptance rates are low around 15-20% (Butcher, 2013; Callaway, 2016) and two-year impact factors around 10.

Standard OA Journals. These are journals with a narrow scope, regional profile etc. The journals use traditional peer review practices. Often OA leading specialised OA publishers like *BMC*, *Hindawi*, *MPDI* have created big portfolios of narrow scope journals that combined cover most areas of science.

Megajournals are OA journals with a peer review process, where only the methodological accuracy and scientific soundness of a manuscript is evaluated. The basic philosophy is to not restrict the publication due to lack of publishing space, and to leave the judgement of the scholarly contribution or significance to readers, who “vote” with downloads and citations. Megajournals are typically very broad in scope and mostly published by well-reputed publishers. Often, they accept articles rejected by the more selective journals of the same publisher, even inheriting the same reviewer reports, a practice which has been labelled cascading or portable reviews. In a study of 12 megajournals Björk (2018) found acceptance rates of between 50-55%. Megajournals have increasingly become popular with authors from countries like China, that find it difficult getting accepted in more selective journals (Wakeling *et al.*, 2016).

Predatory publisher's OA journals are journals or big portfolios of journals set up by obscure companies often operating from the developing world. Their only purpose is to collect revenue from paying authors and the marketing of them as peer reviewed scholarly journals can be highly misleading. It is difficult to find acceptance rates for such journals, as they tend rather to publicize extremely short time lags from submission to publication. Experiments by journalists with highly flawed manuscript which have nevertheless been accepted suggest very acceptance rates. The journalist John Bohannon in an experiment sent a very clearly flawed manuscript to over a three hundred OA journals (Bohannon, 2013). Among those journals listed in the now disappeared Beall's list of predatory publishers (Beall, 2010), the acceptance rate for this manuscript (after a pro forma peer review) was 82%. In another experiment a student submitted a computer generated fake manuscript to a predatory journal and it was accepted for publishing (Gilbert, 2009). Based on such circumstantial evidence, one could expect acceptance rates of 80-100% for predatory journals.

The average acceptance rates for the different categories of OA journals discussed above are shown in table 2 below. The rates are just crude indicative approximations, and not based on systematic research.

Table 2. Average acceptance rates for the different categories of OA journals

Category	Number of journals	Type of publisher	Examples	Average acceptance rate
Striving to be world class	4	Commercial and non-profit publishers, usually extremely well funded journals	<i>eLife, Nature communications, PLoS biology, PLoS medicine</i>	~15%
Ordinary OA journals	~10,000	OA-publishers, major traditional publishers, Societies, Universities	<i>Malaria journal, Revista brasileira de psiquiatria</i>	~50%
Mega journals	~20	Complementing the journal portfolios of big publishers	<i>PLoS one, Nature research reports, Sage open</i>	~50-55%
Predatory publisher journals	~10,000	Entrepreneurial individuals usually located in third world countries	<i>American journal of applied sciences, Open information science journal</i>	>80%

The results of **Sugimoto et al.**, as well as **Aarssen et al. (2008)** would indicate some degree of correlation between acceptance rates and impact factors. If thus OA journals on average would have much higher acceptance rates than traditional journals, one could assume that this would translate into lower scientific quality and in the longer run into lower levels of citations and impact factors. **Björk and Solomon (2012)** compared two-year impact factors of OA and non-OA journals and found that they were about 30% higher for subscription journals. However, after controlling for discipline (medicine and health versus other), age of the journal and the location of the publisher the differences largely disappeared in most subcategories. In particular, in medicine and health, OA journals founded in the last 10 years were receiving about as many citations as subscription journals launched during the same period. This would indicate that such journals were about as selective as comparable subscription journals.

4. Factors affecting the acceptance rate

There are several factors which are likely to affect the acceptance rate, both on the level of disciplines and individual journals. Due to the lack of systematic data, it would, however, be extremely difficult to study the effect of these using quantitative methods. For this reason, the following discussion is limited to only naming some of these main factors.

There are several types of peer review possible. In principle increasing the number of peer reviewers as well as using multiple rounds of review, would be likely to decrease the acceptance rate. The expected length of the time period from submission to acceptance is an indicator of how demanding the peer review is. A recent study has demonstrated that the review times vary strongly from discipline to discipline (**Björk; Solomon, 2013**). The hard STM sciences tend to have shorter times, for instance biomedicine and chemistry 4,7 months, whereas the social sciences are considerably longer, in particular business and economics with 10,7 months. It is not far-fetched to assume that longer and more complex review processes, could lower the average acceptance rate.

The specific criteria used, for instance regarding how comprehensive a review of previous research is required, is also of importance. And the evaluation of what constitutes a significant contribution to science is highly context and discipline dependent. One particular type of studies, which traditionally has had difficulties getting recognition, is the reporting of negative results (**Dickersin, 1990**), for instance that tests with treatment with x for illness y has no effect.

Even within the framework of a particular peer review process and criteria, the editors still have some flexibility in making acceptance/rejection decision. This concerns both early phase desk rejects as well as late stage decisions where reviewer reports are contradictory. In fields where journals are scarce and space limited there may be so many border-case manuscripts seeking publication, that the editors may be tempted to be rather strict in applying the criteria. For a given journal the length of the review and publication backlog is a good indicator of the balance of supply and demand. In many cases accepted articles may have to wait for over a year before publication in print and an issue. As a remedy to this problematic situation, most major publishers nowadays publish accepted manuscripts as so-called "early views" or eprint before publication. At the other end of the spectrum for journals which have problems even filling the next issue, editors may be tempted to relax criteria.

Publishers incentives for launching new journals to meet increased author demand may vary quite a lot between disciplines. The institutions employing scientists in many of the hard STM sciences have in the past had much better financial possibilities for paying institutional subscription fees for journals in those fields, and the print runs of such journals have typically been bigger than in the social sciences and humanities. Since

“ For a given journal the length of the review and publication backlog is a good indicator of the balance of supply and demand. In many cases accepted articles may have to wait for over a year before publication in print and an issue ”

the cost of operating journals varies less between fields the STM market has been more lucrative, in particular for commercial publishers.

For OA journals which only publish in electronic form and which charge the authors for publishing (so-called APCs) the microeconomic cost and revenue curves look quite different from traditional print, or print-and-electronic journals. For such journals, particularly if they are issueless, the marginal cost of each extra article is very low, whereas the revenue scales linearly with the number of articles published. Hence there is a strong financial incentive to increase the acceptance rate, since this directly in the short run increases the profitability of the journal.

An important difference between fields of science is also the existence of alternative outlets for reporting research results. For instance, in fields like engineering, regularly reoccurring conferences are an almost equally important outlet, and usually much faster in publishing than journals. In a few fields like high energy physics and economics subject specific preprint repositories are an important outlet (Kling; McKim, 2000). And in some of the social sciences and in particular in the humanities the printed monograph is very important. But in biomedicine and chemistry the scholarly journal is the totally dominant channel for publishing new research.

5. Conclusions

The overall average acceptance rate across manuscripts is, based primarily on the *Thomson Reuters* study's figure of 37%, likely to be in the range of 35-40%, at least in reputable journals published by established publishers and typically indexed by *ISI* and or *Scopus*. From an article centric viewpoint, a much higher percentage of manuscripts eventually get published, because rejected manuscripts are usually resubmitted, mostly to less selective journals.

There are significant differences between fields, with Biomedicine on average having higher acceptance rates than the social sciences. OA journals seem to have higher acceptance rates, in particular the so-called megajournals, which have a less selective type of peer review.

The evidence concerning the correlation between acceptance rates and how often articles on average are cited (impact factors) is contradictory, and more systematic research would be needed on this issue.

Since the available studies and data to date are very patchy, there is a clear need for systematic studies. The best way to go about would be to make a comprehensive study of all journals indexed in a service like *Scopus* or journals labelled as scholarly/peer reviewed in *Ulrich's*. If the collection of the email addresses of all the editors of these journals could somehow be automated, nothing would prevent sending out the survey to all these. It might be useful to embed the question about the acceptance rate with some other questions about the peer review process used by the journal. The second option would be to use a sample of index journals, perhaps stratifying by journal size and discipline. That way it would be feasible to extract the editor email addresses by hand.

There are significant differences between fields, with Biomedicine on average having higher acceptance rates than the social sciences

A different approach would be to make automated *Google* searches for all the journals in the index using the terms: "journal name, ISSN-number, acceptance rate, rejection rate", in order to find any publicly available electronic sources with that info. But that would require hand checking all the hits.

Once acceptance rates have been found for a statistically representative set of journals, it would be possible to study the influence of other factors on the average acceptance rates. That could be done using data available in *Scopus* as well as other sources for instance concerning discipline, citation levels, journal volumes, age and OA status.

6. References

- Aarssen, Lonnie W.; Tregenza, Tom; Budden, Amber; Lortie, Christopher J.; Koricheva, Julia; Leimu, Roosa (2008). "Bang for your buck: Rejection rates and impact factors in ecological journals". *The open ecology journal*, n. 1, pp. 14-19. <https://doi.org/10.2174/1874213000801010014>
- Abby, Margaret; Massey, Michael D.; Galandiuk, Susan; Polk, Hiram C. (1994). "Peer review is an effective screening process to evaluate medical manuscripts". *JAMA*, v. 272, n. 2, pp. 105-107. <https://doi.org/10.1001/jama.1994.03520020031008>
- Agrawal, Anurag A. (2014). "Four more reasons to be skeptical of open-access publishing". *Cell press*, v. 19, n. 3, P133. <https://doi.org/10.1016/j.tplants.2014.01.005>
- APA (2017). "Summary report of journal operations, 2016". *American psychologist*, v. 72, n. 5, pp. 499-500. <https://www.apa.org/pubs/journals/features/2016-statistics.pdf>
- Beall, Jeffrey (2010). "'Predatory' open-access publishers". *The Charleston Advisor*, April 2010. <https://core.ac.uk/download/pdf/11886760.pdf>

- Binfield, Peter** (2012). "Open access megajournals – have they changed everything?". Blog post, *Creative Commons Aotearoa New Zealand*.
<http://creativecommons.org/nz/2013/10/open-access-megajournals-have-they-changed-everything>
- Björk, Bo-Christer** (2015). "Have the 'mega-journals' reached the limits to growth?". *PeerJ*, n. 3, e981.
<https://doi.org/10.7717/peerj.981>
- Björk, Bo-Christer** (2017). "Growth of hybrid open access, 2009-2016". *PeerJ*, n. 5, e3878.
<https://doi.org/10.7717/peerj.3878>
- Björk, Bo-Christer** (2018). "Publishing speed and acceptance rates of open access megajournals". *Online information review*. Early cite.
<https://doi.org/10.1108/OIR-04-2018-0151>
- Björk, Bo-Christer; Solomon, David** (2012). "Open access versus subscription journals: a comparison of scientific impact". *BMC Medicine*, v. 10, n. 73.
<https://doi.org/10.1186/1741-7015-10-73>
- Björk, Bo-Christer; Solomon, David** (2013). "The publishing delay in scholarly peer-reviewed journals". *Journal of informetrics*, v. 7, n. 4, pp. 914-923.
<https://doi.org/10.1016/j.joi.2013.09.001>
- Bohannon, John** (2013). "Who's afraid of peer review". *Science*, v. 342, n. 6154, pp. 60-65.
<https://doi.org/10.1126/science.342.6154.60>
- Butcher, James** (2013). "Hybrid journals at Nature Publishing Group". *Coasp conference*, Riga, Latvia, 19.9.2013.
<https://oaspa.org/wp-content/uploads/2012/11/James-Butcher-NPG.pptx>
- Callaway, Ewen** (2016). "Open-access journal eLife gets £25-million boost". *Nature news*, 1.6.2016.
<http://www.nature.com/news/open-access-journal-elife-gets-25-million-boost-1.20005>
- Da-Silva, Pascal-Rocha** (2015). "Selecting for impact: new data debunks old beliefs". *Frontiers blog*, 21.12.2015.
<https://blog.frontiersin.org/2015/12/21/4782>
- Da-Silva, Pascal-Rocha** (2016a). *Selecting for impact data_20160106*, data set.
https://figshare.com/articles/Selecting_for_impact_data_20160106_xlsx/2060589/1
- Da-Silva, Pascal-Rocha** (2016b). New data debunks old beliefs: Part 2, Selecting for impact: new data debunks old beliefs, *Frontiers blog*, 4.3.2016.
<https://blog.frontiersin.org/2016/03/04/initial-findings-confirmed-no-significant-link-between-rejection-rate-and-journal-impact>
- Dickersin, Kay** (1990). "The existence of publication bias and risk factors for its occurrence". *Journal of the American Medical Association*, v. 263, n. 10, pp. 1385-1389.
<https://doi.org/10.1001/jama.1990.03440100097014>
- Edgar, Brian D.; Willinsky, John** (2010). "A survey of scholarly journals using open journal system". *Scholarly and research communication*, v. 1, n. 2.
<http://src-online.ca/index.php/src/article/view/24>
- Elsevier* (2019). *Elsevier journal finder*.
<http://journalfinder.elsevier.com>
- Frank, Erica** (1994). "Authors' criteria for selecting journals". *Journal of the American Medical Association*, v. 272, n. 2, pp. 163-164.
<http://dx.doi.org/10.1001/jama.272.2.163>
- Gilbert, Natasha** (2009). "Editor will quit over hoax paper. Computer-generated manuscript accepted for publication in open-access journal". *Nature news*, 15.6.2009.
<https://doi.org/10.1038/news.2009.571>
- Grant, William D.; Cone, David C.** (2015). "If at first you don't succeed: The fate of manuscripts rejected by Academic Emergency Medicine". *Academic emergency medicine*, v. 22, n. 10, pp. 1213-1217.
<https://doi.org/10.1111/acem.12763>
- Hindawi* (2017). *Case reports in pathology*, home pages.
<https://www.hindawi.com/journals/crpa>
- Kaufman-Wills Group* (2005). *The facts about open access*. Study commissioned by the ALPSP, AAAS and High-Wire Press, The Association of Learned and Professional Society Publishers.
<http://www.alpsp.org/publications/FAOAccomplete.pdf>

- Khosravi, Mohammad R.** (2018). "Reliability of scholarly journal acceptance rates". *Library hi tech news*, v. 35, n. 10, pp. 7-8.
<https://doi.org/10.1108/LHTN-07-2018-0044>
- Kling, Rob; McKim, Geoffrey** (2000). "Not just a matter of time: Field differences and the shaping of electronic media in supporting scientific communication". *Journal of the American Society for Information Science*, v. 51, n. 14, pp. 1306-1320.
[https://doi.org/10.1002/1097-4571\(2000\)9999:9999%3C::AID-ASI1047%3E3.0.CO;2-T](https://doi.org/10.1002/1097-4571(2000)9999:9999%3C::AID-ASI1047%3E3.0.CO;2-T)
- Lamb, Christopher R.; Adams, Clifford A.** (2014). "Acceptance rates for manuscripts submitted to veterinary peer-reviewed journals in 2012". *Equine veterinary journal*, v. 47, n. 6, pp. 736-740.
<https://doi.org/10.1111/evj.12376>
- PNAS (2017). "Author frequently asked questions". *Proceedings of the National Academy of Sciences of the United States of America (PNAS)*, website.
<http://www.pnas.org/site/authors/authorfaq.xhtml>
- Salinas, Santiago; Munch, Stephan B.** (2015). "Where should I send it? Optimizing the submission decision process". *PLoS one*, v. 10, n. 1, e0115451.
<https://doi.org/10.1371/journal.pone.0115451>
- Schultz, David M.** (2010). "Rejection rates for journals publishing in the atmospheric sciences". *Bulletin of the American Meteorological Society*, v. 91, n. 2, pp. 231-243.
<https://doi.org/10.1175/2009BAMS2908.1>
- Shen, Cenyu; Björk, Bo-Christer** (2015). "'Predatory' open access: a longitudinal study of article volumes and market characteristics". *BMC Medicine*, v. 13, n. 230.
<https://doi.org/10.1186/s12916-015-0469-2>
- Smahel, David; Daneback, Kristian; Dedkova, Lenka** (2014). "Editorial: How to increase probability of manuscript acceptance". *Cyberpsychology: Journal of Psychosocial Research on Cyberspace*, v. 8, n. 2, p. 1.
<https://doi.org/10.5817/CP2014-2-1>
- SpringerNature (2019). *Journal suggester*.
<https://journalsuggester.springer.com>
- Stephen, Timothy D.** (2012). "Helping communication programs represent their strength". *The electronic journal of communication*, v. 22, n. 1-2, pp. 1-6.
<http://www.cios.org/EJCPUBLIC/022/1/022121.html>
- Sugimoto, Cassidy; Larivière, Vincent; Ni, Chaoqun; Cronin, Blaise** (2013). "Journal acceptance rates: a cross-disciplinary analysis of variability and relationships with journal measures". *Journal of informetrics*, v. 7, n. 4, pp. 897-906.
<https://doi.org/10.1016/j.joi.2013.08.007>
- Tenopir, Carol; Dalton, Elizabeth; Fish, Allison; Christian, Lisa; Jones, Misty; Smith, MacKenzie** (2016). "What motivates authors of scholarly articles? The importance of journal attributes and potential audience on publication choice". *Publications*, n. 4, e22.
<https://doi.org/10.3390/publications4030022>
- Thomson Reuters (2012). *Global publishing: Changes in submission trends and the impact on scholarly publishers*. White paper, Thomson Reuters.
http://scholarone.com/media/pdf/GlobalPublishing_WP.pdf
- Wakeling, Simon; Willett, Peter; Creaser, Claire; Fry, Jenny; Pinfield, Stephen; Spezi, Valérie** (2016). "Open-access mega-journals: a bibliometric profile". *PLoS one*, n. 11, e0165359.
<https://doi.org/10.1371/journal.pone.0165359>
- Ware, Mark** (2008). "Peer review: benefits, perceptions and alternatives". *PRC Summary papers 4*, Public Research Consortium, London, UK.
<http://publishingresearchconsortium.com/index.php/prc-documents/prc-research-projects/35-prc-summary-4-ware-final-1/file>
- Weller, Ann** (2001). "Editorial peer review, its strengths and weaknesses". *ASIST Monograph series*. Information Today, Inc., Medford, New Jersey. ISBN: 1 57387 100 1