

2010 to 2016 comparison: attrition rate

In brief: our evidence suggests an average attrition rate of APC-charging journals of approximately 1.5% - 2% per year, depending on whether one includes or excludes the anomaly of a particular business model of a new publisher (Bentham Open) starting off with a very large number of journals and retaining only successful titles.

Abstract

Solomon and Björk (2012) conducted a survey in 2010 of APCs based on a *sample* of 1,090 APC-charging journals that were listed in DOAJ at that time. Not all APC-charging journals in DOAJ as of 2010 were included; no journals listed in DOAJ as of 2010 that did not charge APCs were included. We compared this data with our 2016 APC survey (Morrison et al, 2017).

Of the 1,090 titles, 32 titles were published by publishers that have never been included in our longitudinal APC survey. Our survey is not limited to DOAJ, but is limited to fully OA journals that either have been listed in DOAJ in 2014, 2015, or 2016, or whose publishers have been listed in DOAJ in 2014, 2015, or 2016. Excluding the 32 titles, of the 1,058 titles studied, 849 are confirmed active in 2016, and 209 are discontinued or presumed discontinued for an attrition rate of 20% from 2010 - 2016. However it is important to note that Bentham Open is a significant anomaly, accounting for 123 of the discontinued titles from 2010 - 2016 and 4 of the discontinued titles from 2015 - 2016. Excluding these journals, the attrition rate is 82 / 935 journals or 9% over the 6 year period.

The attrition rate for 2015 - 2016 for journals studied in 2010 is 2%, or 19 of the 868 journals studied in 2015 found to be inactive in 2016. Note that 4 of these journals (25% of the total) are Bentham Open journals.

The Bentham Open anomaly reflects a particular business practice. This fairly new publisher has taken the approach of creating a large number of journals at once and appears to be retaining titles that are successful. That is, Bentham Open's high numbers of discontinued journals need to be assessed in light of the total number of journals. In 2010, Bentham Open accounted for 211 of the 1,090 journals studied. Of these, 84 journals were active in 2016. In other words, the number of discontinued journals does not necessarily reflect an unsuccessful publisher.

In conclusion, the evidence appears to suggest an average attrition rate of about 1.5% - 2% of APC charging journals sampled, depending on whether we include or exclude the anomaly of a publisher model of starting with a large number of journals on speculation and retaining only successful titles.

Details

Comparison of titles from Solomon and Björk's 2010 data and 2016 OA APC longitudinal survey

Category	# titles	Comments
S & B journals included in 2016 survey	868	Limited to journals confirmed active and open access as of 2015 Publisher is included in 2016 survey but title not included as of 2015. Note disproportionate # of titles from Bentham Open (123).
Titles presumed discontinued	190	Publisher not included in DOAJ as of 2014 or 2016, therefore not included in 2016 sample.
Publisher never included in longitudinal survey	32	
Total	1090	
Journals studied for attrition rate (1,090 - 32)	1058	
Titles confirmed active in 2016	849	
Titles presumed discontinued 2010 - 2016	209	
% of journals from 2010 survey presumed discontinued as of 2016	20%	
Attrition rate 2010 - 2016 excluding 123 Bentham discontinued titles		
1058 titles 2010 - 127 Bentham actual or presumed discontinued to 2017 (4 2015 - 2016)	935	
209 titles no longer active - 127 Bentham actual or presumed discontinued	82	
% of journals from 2010 survey presumed discontinued without Bentham	9%	
	# title	
Attrition rate 2015 - 2016	not found	%
Of the 868 S & B journals included in 2016 survey	19	2%
Titles confirmed active in 2016 (868 - 19)	849	
Note: may reflect finding error e.g. website connection error, title not found due to publisher transfer, etc.		

2010 - 2015 Attrition calculation by publisher	# titles	Notes
Included in OA Main .1	868	
Title presumed discontinued prior to 2016		
Academy Publisher	1	
Advanced Research Journals	1	
AstonJournals	4	
Bentham Open	123	
BioMedCentral	19	
Co-Action Publishing	1	
Copernicus Publications	1	
Dove Medical Press	2	
FORREX Forest Research Extension Society	1	
Friends Science Publishers	1	
Hindawi Publishing Corporation	10	
Internet Scientific Publications, LLC	3	
Libertas Academica	11	
Lithuanian Medical Association, Kaunas University of Medicine, Vilnius University	1	Pub not in DOAJ 2014
Maxwell Science Publication	1	
PAGEPress Publications	4	
Pelagia Research Library	1	
Scientific Research Publishing	1	
Sepuluh Nopember Institute of Technology (ITS)	1	Pub in DOAJ 2014 but not this title
Southern Cross Publisher	1	
Sphinx Knowledge House	1	
The Pharmaceutical Society of Japan	1	
Publisher never included in longitudinal survey (must have been dropped from DOAJ prior to 2014 APC survey)		
Ashdin Publishing	3	Confirmed not in DOAJ 2014
OMICS Publishing Group	20	Confirmed not in DOAJ 2014
European Journal, Inc.	3	Confirmed not in DOAJ 2014
Science & Education Foundation	2	Confirmed not in DOAJ 2014

Atlas Publishing, LP	1	Pub in DOAJ 2014 but not this title
Master Publishing Group	1	Pub not in DOAJ 2014
The Ribeirão Preto foundation for Scientific Research (FUNPEC)	1	Pub not in DOAJ 2014
www publications (P) India	1	Pub not in DOAJ 2014
Total	109 0	

Title not found 2016 (included in survey 2015 not found 2016)

Academy & Industry Research Collaboration Center (AIRCC)	Advanced Computing : an International Journal Health SA Gesundheit : Journal of Interdisciplinary Health Sciences	http://airccse.org/journal/acij/current2011.html
AOSIS OpenJournals		http://www.hsag.co.za
Bentham open	Journal of Epithelial Biology & Pharmacology	
Bentham open	Open Endocrinology Journal	
Bentham open	Open Ocean Engineering Journal	
Bentham open	Open Thermodynamics Journal	
BioMed Central	Geochemical Transactions	http://www.geochemicaltransactions.com/
BioMed Central	Molecular Pain	http://www.molecularpain.com/home/
BioMed Central	Chemistry Central Journal	http://journal.chemistrycentral.com/home/
BioMed Central	Journal of Cheminformatics	http://www.jcheminf.com/
Dove Medical Press	Breast Cancer : Targets and Therapy	http://www.dovepress.com/breast-cancer---targets-and-therapy-journal
Dove Medical Press	International Journal of COPD	http://www.dovepress.com/international-journal-of-copd-journal
Friends Science Publishers	Journal of Agriculture and Social Sciences	
Hindawi Publishing Corporation	Clinical and Developmental Immunology	http://www.hindawi.com/journals/cdi/

Ilirias Corporation Libertas Academica	Journal of Inequalities and Special Functions Autism Insights	http://91.187.98.171/ilirias/jiasf/
Libertas Academica	Clinical Medicine Insights : Dermatology	
Libertas Academica	Clinical Medicine: Pediatrics	http://la-press.com/journal.php?journal_id=78&issue_id=79
PAGEPress Publications	Italian Journal of Animal Science	http://www.aspajournal.it/index.php/ijas

References

Morrison, Heather; Brutus, Widlyne; Dumais-Desrosier, Myriam; Laprade, Katherine; Merhi, Salah; Ouerghi, Arbia; Salhab, Jihane; Volkanova, Victoria; Wheatley, Sara, 2017, "Open access article processing charges 2016", [doi:10.5683/SP/KC2NBV](https://doi.org/10.5683/SP/KC2NBV), Scholars Portal Dataverse, V2

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