Appendices to "Who Publishes Open Access?"

Marijke Breuning, University of North Texas, USA Seyma Akyol, Mercyhurst University, USA

Appendix A. Additional Data and Analyses

Table 1. Research US Universities with Transformative (or Read & Publish) Agreements (data for 2022).

Institution Type	Cambridge	Oxford	Sage	Wiley-	Total
	_		_	Blackwell	
R1	78.8%	2.1%	19.2%	10.3%	146
R2	36.8%	0	15.8%	3.0%	133
Doctoral/Professional	11.2%	0	11.8%	0.5%	187
Total	185	3	71	20	466
Public	55.9%	1.3%	20.5%	7.9%	229
Private non-profit	25.3%	0	10.2%	0.9%	225
Private for profit	0	0	8.3%	0	12
Total	185	3	71	20	466

Sources: Compiled by the authors, relying on the Carnegie Classification, as well as publishers' online information about the institutions with which they have agreements (accessed June 2023).

Table 2. Article Processing Charges for the Journals in this Study

Journal	Article Processing Charge (in USD)
American Journal of Political Science (AJPS)	3750
American Political Science Review (APSR)	3255
British Journal of Political Science (BJPS)	3255
Comparative Politics (CP)	
Comparative Political Studies (CPS)	3500
European Journal of International Relations (EJIR)	3500
European Journal of Political Research (EJPR)	3600
International Organization (IO)	3255
International Studies Quarterly (ISQ)	3956
Journal of Conflict Resolution (JCR)	3250
Journal of Politics (JOP)	2500
World Politics (WP)	
Average	3382.1

Sources: Compiled by the authors from publisher's webpages (accessed August 2022).

Table 3. Explaining Open Access Publishing with the Broader Definition of Funding

Logistic regression models	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8	Model 9	
Dependent Variable: Open Access					OR					
(1=ves; 0=no)	(Robust SE)									
Gender authorship	1.177			1.140		Í	1.225			
(0=male single/team; 1=mixed team, 2=female	(180)			(.165)			(.193)			
single/team)	× ,			× ,						
Authorship		1.526**			1.739***			1.464*		
(single author; same-gender team; mixed		(.259)			(.286)			(.251)		
gender team)										
Number of authors			1.335**			1.551***			1.309*	
(1-9)			(.154)			(.181)			(.153)	
Funded1	2.957***	2.907***	2.849***	3.065***	2.934***	2.827***	2.738***	2.721***	2.690***	
(Internally and externally funded research;	(.768)	(.756)	(.746)	(.793)	(.760)	(.738)	(.712)	(.710)	(.705)	
1=yes; 0=no)										
Journal dummy	1.271	1.303	1.271	1.354	1.321	1.251	1.281	1.316	1.304	
(0=US-based; 1=European-based)	(.360)	(.366)	(.362)	(.404)	(.392)	(.385)	(.352)	(.359)	(.358)	
Highest ranking	.942	.866	.865	.983	.899	.893	.989	.913	.915	
(ordinal: 3=top third; 2=middle third; 1=lower	(.135)	(.132)	(.121)	(.134)	(.132)	(.130)	(.138)	(.136)	(.135)	
third; 0=not listed)										
Subfield	.931	.943	.968	.998	.991	1.023	.866	.886	.904	
(1=American; 2=Comparative; 3=International	(.221)	(.216)	(.221)	(.206)	(.201)	(.205)	(.215)	(.212)	(.217)	
Relations; 4. Normative Theory; 5=Methods)										
Methodology dummy	.915	.747	.738	.973	.734	.712	.938	.767	.762	
(1=quantitative; 0=other)	(.319)	(.260)	(.262)	(.336)	(.252)	(.250)	(.326)	(.267)	(.271)	
One author European	4.231***	3.854***	3.778***							
(1=yes; 0=no)	(1.205)	(1.073)	(1.059)							
All authors European				2.660***	2.856***	2.925***				
(1=yes; 0=no)				(.735)	(.789)	(.828)				
All authors US							.180***	.207***	.211***	
(1=yes; 0=no)							(.058)	(.064)	(.066)	
N	640	640	640	640	640	640	640	640	640	
Wald Chi-square	59.47***	64.51***	65.50***	45.71***	56.91***	56.35***	56.48***	59.53***	60.90***	
Pseudo R ²	.124	.135	.134	.090	.112	.114	.133	.140	.139	
Log Pseudolikelihood	-218.003	-215.255	-215.396	-226.437	-220.938	-220.358	-215.817	-214.013	-214.171	
VIF (mean)	1.09	1.12	1.13	1.11	1.14	1.14	1.10	1.13	1.14	

^= p < .10; *= p < .05; **= p < .01: ***= p < .001

Logistic regression models	Model 1	Model 2	Model 3		
Dependent Variable: Open Access		OR			
(1=yes; 0=no)		(Robust SE)	-		
Gender authorship2	1.123	1.108	1.148		
(single male=0; male team=1; mixed team=2; female team=3;	(.104)	(.095)	(.110)		
single female=4)					
Funded2	2.985***	3.269***	2.772***		
(Externally funded research; 1=yes; 0=no)	(.763)	(.834)	(.719)		
Journal dummy	1.179	1.239	1.178		
(0=US-based; 1=European-based)	(.329)	(.365)	(.323)		
Highest ranking	.955	.984	.994		
(ordinal: 3=top third; 2=middle third; 1=lower third; 0=not listed)	(.137)	(.138)	(.140)		
Subfield	.944	.997	.881		
(1=American; 2=Comparative; 3=International Relations; 4.	(.220)	(.207)	(.215)		
Normative Theory; 5=Methods)					
Methodology dummy	.947	.987	.968		
(1=quantitative; 0=other)	(.330)	(.342)	(.339)		
One author European	3.784***				
(1=yes; 0=no)	(1.088)				
All authors European		2.391**			
(1=yes; 0=no)		(.677)			
All authors US			.200***		
(1=yes; 0=no)			(.065)		
Ν	640	640	640		
Wald Chi-square	57.58***	49.39***	59.53***		
Pseudo R ²	.126	.096	.134		
Log Pseudolikelihood	-217.577	-224.907	-215.376		
VIF (mean)	1.10	1.12	1.10		

Table 4. Explaining Open Access Publishing, Using Five Categories for Gender Authorship

^= p < .10; *= p < .05; **= p < .01: ***= p < .001

Appendix B. Growth in Percent Gold Open Access, 2020-2023





*Two journals use more than four issues with fewer articles per issue. In each case, we chose several issues to constitute an "issue three equivalent." CPS has 14 smaller issues per year; we used issues 8, 9, 10. JCR has 10 issues per year; we used issue 6 and 7.

	2020	2021	2022	2023			
	Percent Gold Open Access						
	(N)						
AJPS	11.11	21.43	18.75	21.05			
	(18)	(14)	(16)	(19)			
APSR	22.22	47.62	56.52	60.00			
	(18)	(21)	(23)	(20)			
BJPS	13.33	30.00	38.10	91.67			
	(15)	(20)	(21)	(12)			
CPS	15.79	37.50	18.75	33.33			
	(19)	(16)	(16)	(15)			
EJIR	8.33	58.33	55.56	81.82			
	(12)	(12)	(9)	(11)			
EJPR	36.36	70.00	60.00	76.92			
	(11)	(10)	(10)	(13)			
IO	14.29	0.00	0.00	100.00			
	(7)	(5)	(5)	(5)			
ISQ	13.64	30.43	37.93	66.67			
	(22)	(23)	(29)	(18)			
JCR	10.00	28.57	21.05	47.37			
	(20)	(14)	(19)	(19)			
JOP	4.55	8.70	0.00	0.00			
	(22)	(23)	(36)	(22)			
Average	14.02	32.91	28.80	50.00			
	(164)	(158)	(184)	(154)			

Table 1. Percent Gold Open Access by Year and Journal (based on 3rd issue of each year)

*Two journals use more than four issues with fewer articles per issue. In each case, we chose several issues to constitute an "issue three equivalent." CPS has 14 smaller issues per year; we used issues 8, 9, 10. JCR has 10 issues per year; we used issue 6 and 7.

Appendix C. Summary Statistics and Analyses for Twelve Journals (including *Comparative* **Politics and World Politics**)

Variable name	Variable definition	Ν	Mean	St Dev	Min	Max
	(codebook name)					
Open Access	Article published open access	687	.122	.328	0	1
	(openaccess)					
Gender authorship	Male single author or team; mixed team,	687	.680	.799	0	2
	female single author or team					
	(teamgender2t)					
Authorship	Single author; same-gender team; mixed	687	.854	.804	0	2
	gender team					
	(teamgender3)					
Number of authors	Count of the number of authors	687	1.908	.986	1	9
	(aunumber)					
Funded2	Externally funded research	687	.309	.462	0	1
	(funded2)					
Funded1	Internally and externally funded research	687	.434	.496	0	1
	(funded1)					
Journal dummy	US-based vs European-based journals	687	.231	.422	0	1
	(eurdummy)					
Highest Ranking	Ordinalized global ranking of universities,	687	2.066	.931	0	3
	based on highest ranking university affiliation					
	of co-authors					
	(highrankord)					
Subfield	American; comparative; international relations;	687	2.306	.771	1	5
	normative theory; methods; other					
	(field)					
Methodology	Quantitative analysis; other	687	.767	.423	0	1
	(method 2)					
One author	One author affiliated with European institution	687	.397	.490	0	1
European	(oneeurauthor)					
All authors	All authors affiliated with European institution	687	.277	.448	0	1
European	(alleurauthor)					
All authors US	All authors affiliated with US institution	687	.507	.500	0	1
	(allusauthor)					

Table 1. Summary Statistics

Table 2. Which Articles Are Published Open Access?

Logistic regression models	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8	Model 9
Dependent Variable: Open Access					OR				
(1=yes; 0=no)					(Robust SE)			
Gender authorship	1.175			1.134			1.210		
(0=male single/team; 1=mixed team, 2=female	(.176)			(.162)			(.186)		
single/team)									
Authorship		1.575**			1.771***			1.516*	
(0=single author; 1=same-gender team;		(.272)			(.297)			(.264)	
2=mixed gender team)									
Number of authors			1.343**			1.522***			1.302*
(1-9)			(.154)			(.178)			(.152)
Funded2	3.020***	2.938***	2.810***	3.320***	3.076***	2.871***	2.815***	2.775***	2.682***
(Externally funded research; 1=yes; 0=no)	(.770)	(.750)	(.731)	(.847)	(.790)	(.750)	(.728)	(.718)	(.702)
Journal dummy	1.310	1.329	1.313	1.374	1.323	1.284	1.316	1.339	1.339
(0=US-based; 1=European-based)	(.362)	(.365)	(.366)	(.402)	(.386)	(.388)	(.357)	(.362)	(.364)
Highest Ranking	.953	.874	.879	.992	.912	.909	1.005	0.923	0.930
(ordinal: 3=top third; 2=middle third; 1=lower	(.133)	(.129)	(.128)	(.135)	(.132)	(.129)	(.136)	(.133)	(.133)
third; 0=not listed)									
Subfield	.973	0.987	1.009	1.028	1.023	1.053	.923	.942	.957
(1=American; 2=Comparative; 3=International	(.233)	(.230)	(.234)	(.219)	(.215)	(.219)	(.228)	(.224)	(.229)
Relations; 4. Normative Theory; 5=Methods)									
Methodology	1.051	.840	.843	1.102	.822	.812	1.072	.852	.861
(1=quantitative; 0=other)	(.364)	(.287)	(.295)	(.379)	(.279)	(.282)	(.374)	(.294)	(.305)
One author European	3.787***	3.476***	3.411***						
(1=yes; 0=no)	(1.094)	(.978)	(.969)						
All authors European				2.405**	2.640***	2.673***			
(1=yes; 0=no)				(.681)	(.743)	(.771)			
All authors US							.202***	.230***	.233***
(1=yes; 0=no)							(.065)	(.073)	(.074)
N	687	687	687	687	687	687	687	687	687
Wald Chi-square	61.54***	65.53***	67.77***	53.85***	64.43***	63.65***	63.72***	65.31***	67.46***
Pseudo R ²	.129	.140	.138	0.100	.122	.121	.137	.146	.143
Log Pseudolikelihood	-222.372	-219.558	-220.004	-229.683	-223.947	-224.256	-220.342	-218.012	-218.743
VIF (mean)	1.09	1.12	1.13	1.11	1.14	1.15	1.10	1.13	1.15

^= $p \le .10; = p \le .05; **= p \le .01: ***= p \le .001$

Table 3. Explaining Open Access Publishing with the Broader Definition of Funding

Logistic regression models	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8	Model 9
Dependent Variable: Open Access					OR				
(1=yes; 0=no)					(Robust SE))			
Gender authorship	1.139			1.099			1.180		
(0=male single/team; 1=mixed team, 2=female	(.171)			(.157)			(.182)		
single/team)									
Authorship		1.587**			1.815***			1.521*	
(0=single author; 1=same-gender team; 2=mixed		(.272)			(.301)			(.263)	
gender team)									
Number of authors			1.382**			1.591***			1.334*
(1-9)			(.159)			(.187)			(.157)
Funded1	2.874***	2.832***	2.758***	2.994***	2.864***	2.745***	2.698***	2.686***	2.640***
(Internally and externally funded research; 1=yes;	(.743)	(.729)	(.713)	(.774)	(.736)	(.709)	(.696)	(.691)	(.682)
0=no)									
Journal dummy	1.428	1.452	1.420	1.514	1.452	1.381	1.444	1.468	1.458
(0=US-based; 1=European-based)	(.401)	(.405)	(.401)	(.449)	(.429)	(.424)	(.392)	(.397)	(.396)
Highest Ranking	.948	.865	.866	1.000	.908	.902	1.006	.919	.923
(ordinal: 3=top third; 2=middle third; 1=lower	(.132)	(.128)	(.127)	(.132)	(.130)	(.127)	(.135)	(.132)	(.131)
third; 0=not listed)									
Subfield	.981	.985	1.014	1.047	1.028	1.065	.920	.933	.954
(1=American; 2=Comparative; 3=International	(.237)	(.229)	(.235)	(.220)	(.211)	(.217)	(.231)	(.224)	(.229)
Relations; 4. Normative Theory; 5=Methods)									
Methodology	1.062	.833	.826	1.134	.812	.793	1.067	.839	.837
(1=quantitative; 0=other)	(.364)	(.285)	(.288)	(.384)	(.275)	(.275)	(.366)	(.289)	(.294)
One author European	4.246***	3.835***	3.753***						
(1=yes; 0=no)	(1.217)	(1.065)	(1.053)	0.515444		2 00 4 4 4 4			
All authors European				2.717***	2.926***	2.984***			
(1=yes; 0=no)				(.753)	(.805)	(.841)	100***		0.1.0.4.4.4.4
All authors US							.180***	.209***	.212***
(1=yes; 0=no)							(.057)	(.064)	(.066)
NT.	(07	(07	(07	(07	(07	(07	(07	(07	(07
N Wald Chi annon	08/	08/	08/	08/	08/	08/	08/ 50.00***	08/	08/
wald Uni-square	01.09***	120	08.38***	48.42***	00.70***	39.93***	30.09***	02.12***	142
	.123	.139	.137	.092	.118	.119	.133	.144	.142
	-225.569	-219.82/	-220.204	-251./1/	-223.134	-224.//9	-221.141	-218.339	-218.910
VIF (mean)	1.08	1.11	1.12	1.10	1.13	1.13	1.09	1.12	1.15

^= $p \le .10$; *= $p \le .05$; **= $p \le .01$: ***= $p \le .001$

Logistic regression models	Model 1	Model 2	Model 3	
Dependent Variable: Open Access	OR			
(1=yes; 0=no)		(Robust SE)		
Gender authorship2	1.105	1.089	1.123	
(single male=0; male team=1; mixed team=2; female team=3;	(.100)	(.091)	(.105	
single female=4)				
Funded2	3.021***	3.324***	2.811***	
(Externally funded research; 1=yes; 0=no)	(.772)	(.848)	(.730)	
Journal dummy	1.309	1.357	1.322	
(0=US-based; 1=European-based)	(.362)	(.400)	(.359)	
Highest Ranking	.953	.942	1.034	
(ordinal: 3=top third; 2=middle third; 1=lower third; 0=not listed)	(.133)	(.117)	(.131)	
Subfield	.976	1.026	.926	
(1=American; 2=Comparative; 3=International Relations; 4.	(.233)	(.218)	(.227)	
Normative Theory; 5=Methods)				
Methodology dummy	1.039	1.077	1.065	
(1=quantitative; 0=other)	(.359)	(.374)	(.377)	
One author European	3.770***			
(1=yes; 0=no)	(1.085)			
All authors European		2.373**		
(1=yes; 0=no)		(.675)		
All authors US			.200***	
(1=yes; 0=no)			(.064)	
Ν	687	687	687	
Wald Chi-square	61.53***	53.46***	63.90***	
Pseudo R ²	.129	.101	.137	
Log Pseudolikelihood	-222.375	-229.494	-220.346	
VIF (mean)	1.09	1.11	1.09	

Table 4. Explaining Open Access Publishing, Using Five Categories for Gender Authorship

^= p < .10; *= p < .05; **= p < .01: ***= p < .001

Appendix D. Codebook

The following table provides details on the coding of the variables in the analyses, as well as the base indicators employed to code some of the variables.

Variable name	Codebook	Variable definition and measurement
Journal title	title	AJPS = American Journal of Political Science APSR = American Political Science Review BJPS = British Journal of Political Science CP = Comparative Politics CPS = Comparative Political Studies EJIR = European Journal of International Relations EJPR = European Journal of Political Research IO = International Organization ISQ = International Studies Quarterly JCR = Journal of Conflict Resolution JOP = Journal of Politics WP = World Politics
ID	id	Identification number for the journal. We used the last four digits of the journal's ISSN as the identifier
Volume	volume	Volume number for the journal for 2020
Issue	issue	Issue number in which the article if located
Authors	authors	Listing of all authors by family name in the order listed on the article
Author gender	au1gender thru au9gender	Each author's gender is recorded in a separate column, in the order it is listed on the article. We found no instances of authors identifying as "they" or another non-binary designation. This was used to code "gender authorship2," "gender authorship," and "authorship." 1=female 0=male
Author institution	au1inst thru au9inst	Each author's institutional affiliation is recorded in a separate column, in the order the authors are listed on the article. This was used to code the variable "ranking" on the basis of the first author.
Author country	aulcountry	Each author's country of residence (based on institutional affiliation) is recorded in a separate column, in the order the authors are listed on the article. This was used to code the variables "one author European," "all authors European," and "all authors US."

Open Access	openaccess	Article published open access or not.
		1=ves
		0=no
Gender authorship2	teamgender2	Measures the gender composition of each article's
-	-	authorship in five categories. Coded on the basis of the
		content in the columns for "Author gender."
		0=Single male author
		1=All male team
		2=Mixed-gender team
		3=All female team
		4=Single female author
Gender authorship	teamgender2t	Gender of the author(s) of the article, recoded from
		"gender authorship2."
		0=male single/team
		1=mixed team
		2=female single/team
Authorship	teamgender3	Author team's gender characteristics, recoded from
1	6	"gender authorship2."
		0=single author (female or male)
		1=same-gender team (female or male)
		2=mixed gender team (including both female and male
Namel on of castle one		authors)
Number of authors	aunumber	Count of the number of authors for the article.
		1-9
Funded2	funded2	Externally funded research, as indicated by the authors of
		the article.
		1
		1=yes
Funded1	funded1	U-110
Tunucui	Tunacai	the authors of the article
		1=yes
		0=no
Journal dummy	eurdummy	US-based vs European-based journals. This variable is
		coded on the basis of the journal being founded and/or
		sponsored by a professional society in the US or Europe.
		0=US-based (AIPS APSR CP CPS IO ISO ICR IOP
		WP)
		1=Europe-based (BJPS, EJIR, EJPR)

Highest ranking	highrankord	Ordinalized global ranking of universities, based on the highest ranked university of the institutional affiliations of the authors of the article. This is a recoded version of the institution's rank in US News & World Report. The institutions listed in the ranking were divided into thirds, with small adjustments to ensure that all entries associated with a specific ranking (i.e. tied institutions) are in the same category. The numbers used for the categorization are those of the ranking and do not reflect the N included in that category, which is approximately 1/3 of the ranked institutions in each category. Institutions not listed in the ranking are all classified as 0.
		2=middle third (ranking 1-36) 1=lower third (ranking 169-1423) 0=not listed
Subfield	field	American; comparative; international relations; normative theory; methods; other.
		(1=American; 2=Comparative; 3=International Relations;4. Normative Theory; 5=Methods)
Methodology	method	Methodology employed in the article's research, coded on the basis of author's description of their work. If more than one method was used, then the first method mentioned was coded.
		1=Formal2=Experimental (including field experiments)3=Survey research
		4=Quantitative/ Large-N comparison 5=Qualitative/ Small-N comparison 6=Interpretive and/or Conceptual (Normative theory classified here)
Methodology	method2	Binary version of the methodology variable, recoded from the more fine-grained methodology variable immediately preceding this one.
		1=quantitative (categories 2, 3, 4 above) 0=other (categories 1, 5, 6, 7 above)
One author European	oneeurauthor	One author affiliated with European institution.
All authors	allourouthor	(1-yes; U=n0)
European	ancuraumor	An autions annialed with European institution.

		(1=yes; 0=no)
All authors US	allusauthor	All authors affiliated with US institution.
		(1=yes; 0=no)