



Taylor & Francis Open Access Survey June 2014









The results presented in this report are based on research carried out on behalf of Taylor & Francis by Will Frass, Research Executive; Jo Cross, Head of Research & Business Intelligence and Victoria Gardner, Open Access Publisher.

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The authors would like to acknowledge the contributions of Chris Bennett and James Hardcastle.

Version 2.0 – Survey Methodology section updated to clarify the survey period.



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Population Surveyed

The 2014 Taylor & Francis Open Access Survey was sent throughout **March 2014** to authors published during the year 2012 (the subsequent year to the 2013 Taylor & Francis Open Access Survey, which was sent throughout December 2012 to mid-January 2013 to all authors published during 2011), who had not previously opted out of receiving surveys sent by the Research and Business Intelligence Department.

Any author who had published more than one article in 2012 had their subsequent articles removed from the list before mailing.



Response Rates

The survey was sent via Survey Monkey's email distribution interface throughout the month of March 2014.

The following methods were employed to try to maximize the response rates:

- The survey invites were sent in batches by region timed to hit close to optimal time for survey responses;
- The survey was incentivized with five prize draws, each for an Amazon Voucher to the value of 100 USD and the chance to win a 1000 USD travel grant to attend an academic conference;
- Two follow-up emails were sent to non-respondents as a reminder.

The following table gives a breakdown of the response rates for each region:

Region of Country Affiliation on Authors' Published Articles	Email sent	s	Time Sent (GMT)	Emails bounced	Emails received	Respoi to sur	nses vey	Response rate
Africa	2,605	3%	0900	94	2,511	284	4%	11%
Australasia	6,201	7%	0000	157	6,044	568	7%	9%
Central & South Asia	3,774	4%	0530	80	3,694	360	5%	10%
Central Europe	12,949	15%	1000	503	12,446	1,087	14%	9%
East & South-East Asia	12,166	14%	0300	357	11,809	499	6%	4%
Eastern Europe	2,083	2%	0900	79	2,004	205	3%	10%
Latin America	2,209	2%	1400	64	2,145	195	2%	9%
Middle East	3,893	4%	0730	102	3,791	314	4%	8%
Russian Federation	385	0.4%	0700	1	384	38	0.5%	10%
UK, Spain & Portugal	11,599	13%	1100	505	11,094	1,039	13%	9%
USA & Canada	23,061	26%	1600	729	22,332	2,498	31%	11%
Country unknown	8,256	9%	1600	256	8,000	849	11%	11%
Total	89,181			2,927	86,254	7,936		9%

Respondents from East and South-East Asia are under-represented in the survey, whilst respondents from the USA and Canada are slightly over-represented. Response profiles from all other regions match the profile of the underlying population (namely Taylor & Francis authors from 2012 – Emails sent) fairly closely.



Survey Methodology

Survey Design

In the 2014 Taylor & Francis Open Access Survey, some questions from 2013 have returned, namely the key questions surrounding Attitudes & Values, Licences, Article Submission Practices, Open Access Services and The Future. Where this is the case – this year's questions have been worded consistently with last year's questions to allow direct comparisons to be made. Other areas of the survey ask new questions about topics not previously investigated, including Repositories and Mandates.

Towards the end of the survey, authors were asked to select the country they are primarily based in. *Only* those authors selecting one of thirteen countries that have developed significant Open Access policies were directed to a page with a brief summary of *their* country's policies and some questions. Additionally, authors based in one of the 28 member states of the European Union were also directed to a page about Horizon 2020.

In order to ensure a sufficient number of responses to the questions around policies, a separate survey comprising *just* the Open Access Mandates questions for European countries was compiled and sent to a further 15,000 non-corresponding European authors.

Therefore, because the pool of respondents to each of the national Mandates questions comprises a different sub-set of the main survey sample, plus in European cases, a further sub-set of the sample obtained from the secondary population (15,000 non-corresponding European authors); this report covers *only* the aspects of the survey seen by all authors worldwide. Subsequent Annexes to this report will cover the responses to the questions about national Mandates from authors in each respective country surveyed in that capacity.

Statistical Significance Tests for Year-on-Year Changes

For questions that the 2013 and 2014 Open Access Surveys have in common, the results for *both* years have been presented side-by-side in the data that follows, for ease of comparison. Additionally, for each question, a p-value is given. This is the result of a statistical significance test which has been conducted on the two data-sets to discover the likelihood that any difference between the 2013 data and the 2014 data is the result of a *change* in authors' attitudes or values, and not just random statistical variation between the two samples.

A p-value of less than 0.05 is deemed statistically significant: any pair of results with p < 0.05 do have a degree of variation between them greater than can be accounted for by random sampling alone. Conversely, data with p > 0.05 does not exhibit any variation over and above that which would be expected from taking two different random samples.

However, our very large sample sizes mean that some of the results have p-values less than 0.05, even when the distribution of results from 2013 to 2014 has not changed by more than 2%. Therefore this change might be *significant*, but not necessarily *meaningful*.

Depending on the type of question, either a Mann-Whitney U-test or a χ^2 -test was carried out: full details are given in Appendix B of this report.



Survey Methodology

Confidence Intervals

The confidence intervals for the questions vary with the actual number of respondents for each question and percentage of respondents giving an answer. For the survey results presented in this report (not including the responses to the questions about Mandates) the maximum confidence interval (at a 95% confidence level) for any one question is 1.16. So for all questions presented in this report we can be 95% confident that the true percentage of the entire population (Taylor & Francis 2012 authors) who would give that response would fall within $\pm 1.16\%$ of the percentage of the sample giving that response.

Extending the population to cover all 17 million academics worldwide^{*}, the confidence interval only rises to ±1.21%. However, this assumes the entire population of Taylor & Francis authors is representative of all authors worldwide. In fact, the Taylor & Francis list is stronger in Social Sciences and Humanities than Science and Technology and contains very few Medical journals. The sample will also under represent those who already choose to publish in Paid Open Access journals.

* http://www.richardprice.io/post/12855561694/the-number-of-academics-and-graduate-students-in-the



For ease of reference, to help respondents answering the survey, the descriptions below were provided in **Definition Boxes** at relevant points throughout the survey.

Green Open Access

Archiving of an article on a website or in a repository. This is often the accepted version of an article, not the final published article.

Repositories

An online database or site hosting research materials (articles, research data, presentations, and so on). This material is usually freely available online for anyone to read or download.

Gold Open Access

Publication of the final article (Version of Record). Article is made freely available online, often after payment of an article publishing charge (APC).

Alt Metrics

Provision of information such as social media engagement, news stories and Mendeley readers at the article level from sources such as Altmetric or ImpactStory.

Text- and Data-Mining (TDM)

Large amounts of information (e.g. published articles, metadata, research data, and so on) are aggregated and analyzed by machines. This approach can help to uncover commonalities across large sets of information, and can help to generate new ideas, knowledge and information.

Where a particular question referred the respondent to a near-by Definition Box – this is indicated in the question's header throughout this report.



 $(\mathbf{\hat{l}})$

QI



Please rate your agreement with each of the following statements from 1 – strongly disagree to 5 – strongly agree:



This question is about the possible *disadvantages* of Open Access.

Please rate your agreement with each of the following statements from 1 – strongly disagree to 5 – strongly agree:



Q3	This question is about searching repositories.	Definitions provided:
	Please rate from 1 – never to 5 – always:	Repositories

 $0\% \ \ 10\% \ \ 20\% \ \ 30\% \ \ 40\% \ \ 50\% \ \ 60\% \ \ 70\% \ \ 80\% \ \ 90\% \ \ 100\%$

How often do you specifically search for articles in repositories using a general search engine (e.g. Google or Google Scholar)? [n = 7,825] How often do you perform searches within article

repositories as part of your research? [n = 7,610]





Q2



It is acceptable for		withou	it my pr	rior knowl	edge or pe	ermission,	provided	l receive	credit as	the origina	al author
Commercial vs.	0%	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%
non-commercial	oon-commercial			my worl	k to be re-u	sed for no i	n-commer	cial gain		(p < 0.0005))
2014 [n = 7,831]		3	6%			35%	6		14%	8%	7%
2013 [n = 14,480]		34	1%			34%		14	1%	10% 8	8%
				other	rs to use m	y work for d	commercia	Il gain		(p < 0.0005))
2014 [n = 7,819]	7%	12%		16%		24%			41%		
2013 [n = 14,445]	8%	10%	1	4%	24	%			43%		
Specific types	0%	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%
of re-use				others	to use my	work in tex	t- or data-	mining		(p < 0.0005)
2014 [n = 7,795]		22%			31%		24	1%	13	<mark>%</mark> 10	%
2013 [n = 14,385]		19%		29	%		24%		15%	139	6
					others to	translate	my work			(p = 0.992)	
2014 [n = 7,822]		19%		25%		18%	0	18%		20%	
2013 [n = 14,437]		19%		26%		17%		19%		20%	
				othe	rs to includ	e my work	in an anth	ology		(p < 0.0005))
2014 [n = 7,813]		16%		23%		19%		19%		24%	
2013 [n = 14,418]		16%		24%		19%		19%		21%	
					others	to adapt m	ny work			(p = 0.766)	
2014 [n = 7,826]	1	2%	20%	6	18%		18%		33	1%	
2013 [n = 14,438]	1	2%	19%		18%		21%		2	9%	

Licenses

2

There are many different types of license which authors are asked to sign when publishing in Open Access publications. Below follows a brief outline of some of these licenses, including some taken from the Creative Commons website (<u>http://creativecommons.org/licenses</u>), and some used as standard for publication in subscription access journals.

Q6 and some used as standard for publication in subscription access journals.

Please choose your *most preferred*, your *second most preferred*, and *least preferred* of these licenses:

Q7 In the last 12 months, how many scholarly articles have you published...

	Total Articles Published	Number of Respondents	Articles per Author
where a subscription is required by the reader to access the article?	22,356 79%	7,108	3.1
as Gold Open Access, where the article is freely available to everyone?	5,863 21%	6,689	0.9

Q8

When publishing open access, I would find the following kinds of peer review suitable for my research:

Repositories

C? Thinking about the last article you published, did you make it Green Open Access by depositing it in any of the following types of repository, uploading to a website, or giving permission for someone to do this on your behalf? Please tick all that apply:

Definitions provided: Green Open Access Repositories

Percentages given over total number of respondents who answered this question [n = 6,888].

Thinking about the occasions when you *have* deposited an article in a repository, how important were the following factors in your decision to upload your article?

Repositories

Definitions provided: Green Open Access

Repositories

A personal responsibility to make my work freely			AC0/			200	0/		0/	
available [n = 5,271]			46%			26	70	Te	% E	0%5%
Requests for my article by researchers who cannot access it from their institution		4	1%			26%		17%	6%	9%
[n = 4,848]										
An institutional requirement to deposit my article [n = 4,483]	2	4%		23%		20%	5	11%	22	%
A publisher offer to deposit my article on my behalf	19	%	22	.%	2	1%	119	%	27%	
[11 – 4,210] -										
A funder requirement to deposit my article [n = 4,034]	21	.%	17	%	18%	5 1	.3%		31%	
- A colleague's encouragement to deposit my article [n = 4,507]	12%		22%		25%		17%	6	25%	6
۔ repository manager offer to deposit my article on my behalf [n = 4,085]	11%	18	8%	22	2%	15	%	3	33%	
■ 5 - very important ■ 4 ■	3		2		1 -	not v	ery ir	nporta	ant	

0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%

The lower response numbers here have arisen because authors were given the option of selecting "Not Applicable" for this question. These responses have not been included in the chart above – the percentages span only those selecting an option between 1 and 5. The numbers selecting "Not Applicable" are given in the table below:

	Personal responsibility	Requests from researchers	Institutional requirement	Publisher offer to deposit	Funder requirement	Colleague's encouragement	Repository manager offer
1-5	5,271	4,848	4,483	4,218	4,034	4,507	4,085
N/A	1,611	1,980	2,353	2,617	2,781	2,322	2,707
Total	6,882	6,828	6,836	6,835	6,815	6,829	6,792

 $\mathbf{Q}\mathbf{I}\mathbf{0}$

A

Repositories

4

Q		

Thinking about the occasions when you have *not* deposited an article in a repository, how important were the following factors in your decision not to upload your article?

Definitions provided: Repositories

Please rate from 1 – not at all important to 5 – very important:

The lower response numbers here have arisen because authors were given the option of selecting "Not Applicable" for this question. These responses have not been included in the chart above – the percentages span only those selecting an option between 1 and 5. The numbers selecting "Not Applicable" are given in the table below:

	Lack of understanding about publisher policies	Lack of time	Lack of technical understanding	Concerns around discoverability	Concerns around longevity
1 – 5	5,920	5,792	5,793	5,647	5,602
N/A	1,068	1,193	1,195	1,320	1,360
Total	6,988	6,985	6,988	6,967	6,962

Q 2 Please select the country you are primarily based in:

See Appendix A for full breakdown

If authors selected one of thirteen countries with significant Open Access Mandates in place, they were directed to a page specific to that country with questions around the Open Access Mandates. Additionally, authors primarily based in a European Union member state were also asked about Horizon 2020. All other authors went straight on to the next section about Open Access Services.

Since the responses for each set of Open Access Mandates questions only cover authors from the relevant country, and not the whole sample, yet also contain a sample of authors from a separate population who were only sent the questions about Open Access Mandates, the results of these questions are presented separately in a series of Annexes to this Report.

Open Access Services

Please rate the importance (from 1 – not important to 5 – very important) of the services Development you expect to receive when you pay to publish your paper as Open Access:

Definitions provided: <u>Alt Metr</u>ics

The Future of Open Access Publishing

What are your future intentions regarding Open Access and your own research?

Definitions provided:

Green Open Access

Gold Open Access

Q14

7

The Future of Open Access Publishing

Types of research output

Please tick the option that best describes what you think will happen over the next ten years in scholarly communication, regardless of what you would like to happen.

If you envisage a future alternative to academic papers, briefly describe this below:

Taylor & Francis Group an informa business

Q15

Types of publication outlet

Please tick the option that best describes what you think will happen over the next ten years.

If you envisage a **new kind of publication outlet** developing, briefly describe this below:

Q16

7

Open Access publication

Please tick the option that best describes what you think will happen over the next ten years.

Q18

7

017

Choice of publication outlet

Please tick the option that best describes what you think will happen over the next ten years.

The Future of Open Access Publishing

7

Metrics

Please tick the option that best describes what you think will happen over the next ten years.

(p < 0.0005)

Impact Factors will still be the primary metrics used to assess the value of research.

- Article-level metrics will become much more important than Impact Factors to assess the value of research.
- Impact Factors will be used alongside article-level metrics to assess the value of research.

Artic	le-l	level	metrics
	č .		

Q20

Definitions provided:

How important do you think each of the following types of article metric will become for assessing the value of research over the next ten years?

0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100% Citations 48% 33% 14% 3% [n = 6,723] Usage / download 27% 23% 37% 9% 3% figures [n = 6,669] Alt-metrics 38% 14% 5% 14% 30% [n = 6,611] 5 - very important 1 - not at all important 4 ∎ 3 2

Q2 Please indicate from the drop-down list below your broad subject area:

Cubicat Auro	201	.4	2013		
Subject Area	Respondents	Percentage	Respondents	Percentage	
Humanities	752	12%	1,022	9%	
Education	575	9%	976	9%	
Behavioural Sciences	567	9%	1020	9%	
Engineering & Technology	490	8%	976	9%	
Business & Economics	373	6%	899	8%	
Biological Science	321	5%	568	5%	
Sociology (Ethnicity, Race, Gender, Development) *	307	5%	-	_	
Environmental Science	297	5%	464	4%	
Politics & International Relations	294	5%	554	5%	
Mathematics	260	4%	511	4%	
Cultural Studies, Media & Communication *	230	4%	-	-	
Medicine (Dentistry, Nursing, Pharmacy, Allied Heath)	226	4%	506	4%	
Public Health & Social Care	225	4%	403	4%	
Geography	207	3%	249	2%	
Chemistry	205	3%	643	6%	
Agriculture & Food Science	199	3%	464	4%	
Arts	154	2%	182	2%	
Library & Information Science	147	2%	202	2%	
Tourism, Leisure & Sport Studies	94	1%	159	1%	
Physics	90	1%	285	2%	
Law & Criminology	86	1%	79	1%	
Materials Science	81	1%	199	2%	
Computer Science	66	1%	120	1%	
Area Studies	54	1%	72	1%	
Social / Cultural Studies *	_	_	869	8%	

Totals	6,300	11,422
* The subject <i>Social / Cultural Studies</i> fro	m the 2013 Survey has been sup	erseded by two new subjects:

Sociology (Ethnicity, Race, Gender, Development) and Cultural Studies, Media & Communication

8

Q22 Please select an age bracket below:

Age 2014		4	2013		
Bracket	Respondents	Percentage	Respondents	Percentage	
Under 20	7	0%	8	0%	
20 - 29	490	7%	679	6%	
30 - 39	2,279	33%	3,407	28%	
40 - 49	1,826	27%	3,254	27%	
50 - 59	1,350	20%	2,668	22%	
60 - 69	682	10%	1,561	13%	
70 or over	184	3%	390	3%	

Total	6,818	11,967
Median Age	43	46

2013 2014

Q23 Please indicate your gender:

2		14	201	13
Gender	Respondents	Percentage	Respondents	Percentage
Female	2,170	39%	3,980	35%
Male	3,394	61%	7,272	65%
Total	5,564		11,252	

Q24 Please select the sector you work in:

Sector	2014		2013	
Sector	Respondents	Percentage	Respondents	Percentage
Academic	5,999	87.8%	10,389	86.5%
Government	325	4.8%	660	5.5%
Health / Medical	210	3.1%	398	3.3%
Not-for-Profit / Charity	151	2.2%	297	2.5%
Corporate	149	2.2%	265	2.2%

Totals	6,834	12,009

Q25 Please tell us your current professional status:

Dele	2014		2013	
које	Respondents	Percentage	Respondents	Percentage
Professor	1,388	20.3%	3,152	26.2%
Associate Professor	1,282	18.7%	2,277	18.9%
Assistant Professor	1,066	15.6%	1,588	13.2%
Post-doctoral researcher	598	8.7%	799	6.6%
Doctoral student	579	8.5%	750	6.2%
Lecturer	561	8.2%	886	7.4%
Research Scientist	533	7.8%	1046	8.7%
Professional	289	4.2%	523	4.3%
Retired	158	2.3%	360	3.0%
Practitioner	114	1.7%	229	1.9%
Other (please specify)	55	0.8%	97	0.8%
Master's student	50	0.7%	96	0.8%
Senior Lecturer	39	0.6%	47	0.4%
Researcher	32	0.5%	78	0.6%
Research Fellow	27	0.4%	32	0.3%
Librarian *	20	0.3%	-	-
Independent Researcher *	19	0.3%	-	_
Adjunct Professor	13	0.2%	24	0.2%
Undergraduate	8	0.1%	23	0.2%
Reader	5	0.1%	19	0.2%
Dean	4	0.1%	6	0.0%

Totals

6,840

12,032

Respondents typing a popular Role into Other (please specify) were categorised into the extra Roles denoted *

Q26 How many years of experience do you have since completing your first degree?

Years of Experience	Respondents	Percentage
Undergraduate	11	0.2%
< 5 years	518	7.7%
5 – 9 years	1,220	18.1%
10 – 14 years	1,352	20.1%
15 – 19 years	975	14.5%
20 + years	2,659	39.5%

|--|

Appendix A

Breakdown of Countries where Authors are Primarily Based

This appendix provides a full listing of all the countries and the frequency of their selection by our respondents, which was summarised by Global Region in Question 12, Section 5 of this report.

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Α

Full breakdown of Countries where Authors are Primarily Based

Country	Responses
United States	2493
United Kingdom	791
Australia	429
Canada	304
India	297
Italy	242
Germany	158
China	149
Spain	142
South Africa	120
Netherlands	116
New Zealand	114
Iran	112
Sweden	95
Portugal	92
Brazil	85
Greece	78
France	74
Japan	68
Turkey	63
Israel	60
Norway	60
Ireland	56
Finland	47
Denmark	46
Switzerland	46
Hong Kong	44
Belgium	42
Poland	42
South Korea	39
Malaysia	38
Nigeria	38
Mexico	37
Singapore	37
Taiwan	37
Russian Federation	35
Romania	34
Egypt	29
Argentina	23
Austria	22
Pakistan	21

Country	Responses
Hungary	20
Serbia	17
Chile	16
Tunisia	16
Czech Republic	15
Saudi Arabia	15
Bangladesh	12
Lebanon	12
Thailand	12
Botswana	11
Colombia	11
Philippines	11
Lithuania	10
United Arab Emirates	10
Algeria	9
Croatia	9
Cyprus	9
Jordan	9
Morocco	9
Indonesia	8
Uruguay	8
Oman	7
Slovakia	7
Uganda	7
Ghana	6
Latvia	6
Malta	6
Ukraine	6
Vietnam	6
Zimbabwe	6
Bulgaria	5
Estonia	5
Ethiopia	5
Iceland	5
Kenya	5
Slovenia	5
Cameroon	4
Georgia	3
Macau	3
Namibia	3
Nepal	3

Country	Responses
Papua New Guinea	3
Sudan	3
Tanzania	3
Trinidad and Tobago	3
Barbados	2
Belarus	2
Costa Rica	2
Fiji	2
Iraq	2
Jamaica	2
Kazakhstan	2
Lesotho	2
Luxembourg	2
Mauritius	2
Mongolia	2
Panama	2
Puerto Rico	2
Qatar	2
Albania	1
Armenia	1
Aruba	1
Azerbaijan	1
Bahrain	1
Benin	1
Bermuda	1
Bolivia	1
Brunei Darussalam	1
Cape Verde	1
Guam	1
Laos	1
Macedonia	1
Madagascar	1
Malawi	1
Palestine	1
Rwanda	1
Saint Kitts and Nevis	1
South Sudan	1
Venezuela	1
Zambia	1

Total

7,268

Appendix B

 χ^2 -values and U-values for Statistical Significance Tests

This appendix provides a full list of the χ^2 -values and Mann-Whitney U-values and the resulting p-values, which were given next to those Questions common to both the 2013 and 2014 Taylor & Francis Open Access Surveys.

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Many of the questions covering **Attitudes & Values**, **Licences**, **Article Submission Practices**, **Open Access Services** and **The Future** are consistent with the wording used in the 2013 Taylor & Francis Open Access Survey. This allows direct comparisons to last year's results as presented in the charts.

The p-values given on the charts are the results of significance tests, carried out to determine if any differences observed between the 2014 data-set and the 2013 data-set are statistically significant, that is, more than just sampling variation.

All statistical tests were conducted in SPSS 16.0 for Windows.

Statistical Significance Tests for Categorical Data: Licences and The Future

The sections of the survey covering **Licences** and **The Future** both required authors to select one option from amongst several mutually exclusive categories. It is therefore necessary to determine if the distribution of frequencies among the categories in the 2013 and 2014 data-sets are significantly different to the distribution that would be expected to arise if they were, in fact, both part of one mixed data-set.

Consequently, a χ^2 test was conducted on the 2013 and 2014 data-sets for these questions with a significance threshold of $\alpha = 0.05$. The p-values given in Section 2 and Section 7 of this report are based on χ^2 -values shown in the table below:

	Question and Response	Degrees of freedom	χ²	p-value	Significant at α = 0.05
Q6	Most preferred licences	5	291.443	< 0.0005	Yes
	Second most preferred licences	5	236.664	< 0.0005	Yes
	Least preferred licences	5	759.111	< 0.0005	Yes
Q15	Types of research output	1	0.235	0.628	No
Q16	Types of publication outlet	3	49.934	< 0.0005	Yes
Q17	Open access publication	2	106.056	< 0.0005	Yes
Q18	Choice of publication outlet	1	91.926	< 0.0005	Yes
Q19	Metrics	2	55.769	< 0.0005	Yes

Since authors were asked to select from the six licence options (hence 5 degrees of freedom) for their most, second most and least preferred licence, it is the sum of the preferences that total 100%, not the sum across any individual licence. Hence the distributions being compared are the distribution of first preferences, second preferences and last preferences.

In the section about The Future, authors were selecting one option from between two and four options (hence between 1 and 3 degrees of freedom) which best described what they *think* will happen in the next ten years. In the 2013 Taylor & Francis Open Access Survey, half the population was asked what they *think* will happen, whilst the other half what they would *like* to happen, in the next ten years. Therefore the 2014 data-set is being compared to the *'think'* sub-set of the 2013 data-set.

U Statistical Significance Tests for Ordinal Data: Attitudes & Values, Article Submission Practices and Open Access Services

The sections of the survey on **Attitudes & Values, Article Submission Practices** and **Open Access Services** required authors to rate how strongly they agreed or disagreed on a scale of 1 to 5 with various statements. Hence a Mann-Whitney two-tailed U-test was conducted on the 2013 and 2014 data-sets for these questions with a significance threshold of α = 0.05. The p-values given in Section 1, Section 3 and Section 6 of this report are based on U-values shown in the table below:

	Question and Response	U-value	p-value	Significant at α = 0.05
Q1	Wider circulation	4.933×10^7	< 0.0005	Yes
	Higher visibility	4.945×10^7	< 0.0005	Yes
	Faster publication	5.268×10^7	< 0.0005	Yes
	Larger readership	5.127×10^7	< 0.0005	Yes
	Drives innovation	5.435×10^7	< 0.0005	Yes
	Cited more heavily	5.107×10^7	< 0.0005	Yes
0.2		5 500 407	0.274	NLa
Q2	Lower quality	5.588×10^{7}	0.374	NO
	Lower production standards	5.607×10^{7}	0.750	No
	No fundamental benefits	4.870 × 10'	< 0.0005	Yes
Q5	Non-commercial gain	5.429×10^{7}	< 0.0005	Yes
	Commercial gain	$5.470 imes 10^7$	< 0.0005	Yes
	Text- or data-mining	5.160×10^{7}	< 0.0005	Yes
	Translate my work	$5.646 imes 10^7$	0.992	No
	Include in an Anthology	$5.464 imes 10^7$	< 0.0005	Yes
	Adapt my work	5.636×10^7	0.766	No
		-		
Q8	Rigorous assessment of the merit and novelty	4.025×10^{7}	< 0.0005	Yes
	Accelerated peer review with fewer rounds of revision	4.199×10^{7}	< 0.0005	Yes
	Accelerated peer review that reviews technical soundness	4.330×10^{7}	< 0.0005	Yes
	Post-publication peer review after a basic formal check	4.383×10^7	< 0.0005	Yes
		1 005 10 ⁷		
Q14	Rigorous peer review	4.025 × 10'	< 0.0005	Yes
	Rapid publication of my paper	3.870 × 10'	0.004	Yes
	Rapid peer review	3.749×10^{7}	< 0.0005	Yes
	Promotion of my paper post-publication	3.566×10^{7}	< 0.0005	Yes
	Automated deposit of my paper	$3.083 imes 10^7$	< 0.0005	Yes
	Guidance on how I can increase the visibility of my paper	3.590×10^7	< 0.0005	Yes
	Pre-peer review services	3.563×10^7	< 0.0005	Yes
	Provision of alt-metrics	3.602×10^7	< 0.0005	Yes

