

Dear Sir or Madam,

Thank you very much for taking the time to participate in our study about **publication practices and performance measurement in science**. You will need approximately **20 minutes** to fill out the survey.

The goal of this survey is to assess 1) the extent to which open-access journal publications are used in different scientific disciplines and their effects on the scientific community, 2) the appraisal of and experiences with alternative and traditional research performance measures and 3) potential influencing factors on research and working practices.



Survey participants will be offered the chance to participate in the **raffle for an iPad mini**. Upon request (via performance-management.iso.wi@tum.de), we can also send you a **summary of the research questions and results** of the survey.

Please note:

1. There are neither correct nor incorrect answers. It is important that you truthfully specify your personal opinion and appraisal.
2. Although there are no mandatory questions in the questionnaire, we ask you to answer all questions carefully.
3. Your data will be strictly confidential and anonymous and will be used solely for research purposes. In no case would we want to identify individual people with this study. Your name is by no means connected to your data. The results of this study will only be reported in aggregate form. The results of the survey are anonymously saved by the online questionnaire provider QuestBack and by the Chair for Strategy and Organization at the Technische Universität München, Germany. The data will be analyzed by the Chair for Strategy and Organization at the Technische Universität München, Germany.
4. If you would like to participate in the raffle for the iPad mini, your e-mail address will be requested on a separate website. A link at the end of the study will bring you to the raffle website. This website allows us to save your e-mail address independent from the survey data.

Thank you very much for your support!

For any questions or comments, please contact us via e-mail (performance-management.iso.wi@tum.de).

Before the survey starts, please confirm that you have **read the survey information** above and **agree to take part** in this survey. Afterwards please click "Continue".

☐ I agree to participate in the survey

☐ I do not agree to participate in the survey

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TUM School of Management
Chair for Strategy and Organization
Prof. Dr. Isabell M. Welp
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You can voluntarily generate an **ID code** to have the **possibility of withdrawing your data** at any stage during the survey.

The ID code gives us the opportunity to identify the data that must be removed from the data set if you wish to withdraw your data. Your anonymity is fully ensured by this ID code. The generation of an ID code is **optional** and is generated by three questions regarding your person. If you wish to generate an ID code that will allow you to withdraw your data by hindsight, please enter your answers in the corresponding answer fields below. Otherwise please click "Continue" now.

- 1) Please specify the **first two letters** of your **father's first name** (e.g., BE for Ben). ____
- 2) Please specify the **first two letters** of your **mother's first name** (e.g., CA for Catherine).

- 3) Please select the **date of your birthday** (e.g., 04 when you are born on the fourth of a month).

Your ID code for the possibility to withdraw your data from this study is: “____”

Please click "Continue" to proceed with the survey.

1 Open-access journal publications

In this first section, we are interested in why you (might) publish scientific articles in **open-access (OA) journals** (e.g., *PLOS ONE*) and how this publication practice is perceived by the scientific community.

Note: An OA journal is a digital journal that is accessible for all Internet users for free and receives revenue through a fee for submitting authors or institutions (McCabe & Snyder, 2014).

Please state the extent to which the following statements depict a **reason why you (might) publish in an OA journal**:

I (might) choose to publish in an OA journal because...

	Strongly disagree							Strongly agree	
	①	②	③	④	⑤	⑥	⑦		
...I can gain a wider audience (i.e., more citations).									
...it can catalyze the influence of the article through a faster publication .									
...it is a possibility to place my manuscript with no groundbreaking results.									
...it gives me as an author the possibility to receive faster feedback on my article.									
...it corresponds to my values (e.g., free access for the advancement of research).									

...it assigns the copyright to me as an author.	①	②	③	④	⑤	⑥	⑦
...OA publications are highly recognized .	①	②	③	④	⑤	⑥	⑦
...OA publications are supported by my higher education institution .	①	②	③	④	⑤	⑥	⑦
...of the following other reason : _____	①	②	③	④	⑤	⑥	⑦

Next, we would like to know **your appraisal of different publication practices**.

Please indicate to what extent you agree to the following statements:

	<i>Strongly disagree</i>			<i>Strongly agree</i>		
I approve of OA journal publication procedures.	①	②	③	④	⑤	⑥
I endorse Open Science .	①	②	③	④	⑤	⑥
I aim to publish in OA journals.	①	②	③	④	⑤	⑥
Post-publication peer-review is better than pre-publication peer-review.	①	②	③	④	⑤	⑥
Post-publication peer-review can be used to create “best of newly published articles” lists (i.e., seal of quality for these articles).	①	②	③	④	⑤	⑥

Next, we would like to assess **effects of OA journal publication practices**.

Please state the extent to which you agree with the following statements:

	<i>Strongly disagree</i>			<i>Strongly agree</i>		
The number of competing articles is high due to OA journal publications.	①	②	③	④	⑤	
The competition among articles for readers’ attention due to OA publishing is high.	①	②	③	④	⑤	
Publication of authors in OA journals makes things more difficult for all scholars.	①	②	③	④	⑤	
Attention to authors who publish in OA journals takes away attention to other authors.	①	②	③	④	⑤	
As authors of OA journals gain power, other scholars lose power .	①	②	③	④	⑤	
I feel motivated to compete with other scholars to publish in OA journals .	①	②	③	④	⑤	
I am keen to compete with other scholars to publish in OA journals.	①	②	③	④	⑤	
I am motivated by the competition among scholars to publish in OA journals.	①	②	③	④	⑤	

2 Alternative and traditional research performance measures

In the next section, we would like to learn more about **your appraisal of** and **experiences with alternative** research performance measures (i.e., “altmetrics“, e.g., tweets, downloads) and **traditional research performance measures** (e.g., number of journal article citations, number of published journal articles).

First, we would like to know **how you see new performance measures** and how these should be integrated into the performance measurement in science.

Please state the extent to which you agree with the following statements:

Alternative measures...

	Strongly disagree					Strongly agree	
	①	②	③	④	⑤	⑥	⑦
...should replace traditional measures.							
...should supplement traditional measures.							
...should not be used .							

Next, we are interested in **your appraisal of alternative** and **traditional research performance indicators**.

Please indicate the extent to which you agree with the statements concerning this matter:

	Strongly disagree					Strongly agree	
	①	②	③	④	⑤	⑥	⑦
It is important to me to know exactly how good my research performance is.							
It is unimportant to me to have precise indicators for the assessment of research performance.							
Indicators that display the research performance of scholars are important to have.							
I approve of bibliometric indicators to measure research performance.							
The performance in traditional research performance measures is crucial for my professional career .							
It is a desire of mine to be able to quickly estimate the success of my article.							

Are the **measures** listed below **relevant to assess the scientific influence** of an article?

Please indicate the extent to which you agree that the respective measures listed below reflect the scientific impact of an article. If you do not know the measure or if you cannot assess the measure, you can click the corresponding button.

	Do not agree at all							Cannot assess this measure
	①	②	③	④	⑤	⑥	⑦	⑧
User statistics (e.g., views or downloads of an article)								
Academic bookmarks (e.g., CiteULike, Mendeley)								
Tags or recommendations (e.g., Digg, Del.icio.us, Facebook Like button)								
Posts in social networks (e.g., Facebook, Twitter, Google+)								

Blogs (e.g., Research Blogging, Nature Blogs)	①	②	③	④	⑤	⑥	⑦	⑧
Reviews (e.g., Faculty 1000 review, research highlights from Nature Publishing Group)	①	②	③	④	⑤	⑥	⑦	⑧
Non-scholarly citations (e.g., google hits, Wikipedia entries, mass media mentions)	①	②	③	④	⑤	⑥	⑦	⑧
Citations (e.g., Web of Science, Scopus, PubMed)	①	②	③	④	⑤	⑥	⑦	⑧
Impact Factor of the journal in which the article was published	①	②	③	④	⑤	⑥	⑦	⑧
Research award due to results published in an article	①	②	③	④	⑤	⑥	⑦	⑧
Other measure , namely: _____	①	②	③	④	⑤	⑥	⑦	⑧

Please indicate the extent to which the following aspects aptly describe the **informative value** that **Facebook likes (also known as recommendations) of a scientific article** have:
Facebook likes of a scientific article...

	<i>Strongly disagree</i>							<i>Strongly agree</i>
...say something about the general publicity of the article.	①	②	③	④	⑤	⑥	⑦	
...reflect the positive consent towards the article (popularity).	①	②	③	④	⑤	⑥	⑦	
...say something about the article's title (e.g., how broad or humorous the title is).	①	②	③	④	⑤	⑥	⑦	
...say something about the timeliness of the article's topic (latest trends).	①	②	③	④	⑤	⑥	⑦	
...reflect the research performance of the article (scientific contribution).	①	②	③	④	⑤	⑥	⑦	
...say something about the practical relevance of the article.	①	②	③	④	⑤	⑥	⑦	
...can predict whether the article will be published in a journal .	①	②	③	④	⑤	⑥	⑦	
...can predict citations of the article published in a journal.	①	②	③	④	⑤	⑥	⑦	
...have another informative value , namely: _____	①	②	③	④	⑤	⑥	⑦	

Has at least one of your unpublished or published **scientific manuscripts been liked** on one or more websites?

☐ yes ☐ no ☐ not applicable

With regard to your unpublished or published **scientific manuscripts**, we would like to know **on which website(s)** these have been **liked**.

Please name in the text field below the website(s) where your manuscript(s) have been liked.

3 Potential influencing factors on research and working practices

In this section of the survey, we assess potential **organizational** and **individual influencing factors** on your research and assess your work practices.

We are interested in learning more about your **goals regarding your performance** (e.g., in research, teaching and administration) **at your higher education institution**.

Please indicate the extent to which you agree with the following statements:

	Strongly disagree						Strongly agree
Goals are implicitly communicated by (people in) my higher education institution.	①	②	③	④	⑤	⑥	⑦
My targets have been assigned to me.	①	②	③	④	⑤	⑥	⑦
I was able to participate in determining my targets.	①	②	③	④	⑤	⑥	⑦
My targets mainly cover quantitative performance aspects .	①	②	③	④	⑤	⑥	⑦
My target agreement is fair .	①	②	③	④	⑤	⑥	⑦
My target agreement is difficult to achieve.	①	②	③	④	⑤	⑥	⑦

Please specify what your personal **goal** is **at work**.

Please indicate the extent to which you agree with the following statements:

	Strongly disagree						Strongly agree
My goal is to advance science .	①	②	③	④	⑤	⑥	⑦
My goal is to advance in my academic career .	①	②	③	④	⑤	⑥	⑦

In the following, we are interested in your **work motivation**.

Please indicate the extent to which the following statements apply:

	Never or almost never true of me			Always or almost always true of me		
The more difficult the problem, the more I enjoy trying to solve it.	①	②	③	④	⑤	⑥
I am keenly aware of the income goals I have for myself.	①	②	③	④	⑤	⑥
Curiosity is the driving force behind much of what I do.	①	②	③	④	⑤	⑥
I am strongly motivated by the money I can earn.	①	②	③	④	⑤	⑥
I am strongly motivated by the recognition I can earn	①	②	③	④	⑤	⑥

from other people.				
I enjoy trying to solve complex problems .	①	②	③	④
It is important for me to have an outlet for self-expression .	①	②	③	④
I want other people to find out how good I really can be at my work.	①	②	③	④

Now, please evaluate your **research ideas** that occur to you concerning their **originality**.
Please indicate the extent to which you agree with the following statements:

	Strongly disagree				Strongly agree			
The ideas that I generate are very original .	①	②	③	④	⑤	⑥	⑦	
Some of the ideas that I put forward are unique .	①	②	③	④	⑤	⑥	⑦	
The ideas that I generate are generated by only a few other researchers .	①	②	③	④	⑤	⑥	⑦	

Please specify the extent to which you agree with the following statements with regard to **open knowledge-generating systems** (open project participation and disclosure of data and logs), also known as Crowd Science (Franzoni & Sauermann, 2014):

	Strongly disagree				Strongly agree				Cannot assess this
Internet users can jointly create successful creative solutions to complex research questions.	①	②	③	④	⑤	⑥	⑦	⑧	
It is helpful to include non-scholars in complex research questions through the Internet to find high quality solutions .	①	②	③	④	⑤	⑥	⑦	⑧	
The inclusion of non-scholars in complex research questions through the Internet motivates me .	①	②	③	④	⑤	⑥	⑦	⑧	

We would like to know more about the **participation** in **open knowledge-generating systems**.
Please indicate whether the following statements are correct:

During the last year, I **took part** in solving a complex research problem of others through the Internet.

☐ yes ☐ no ☐ not applicable

During the last year, **others took part** in solving a complex **research problem of mine** through the Internet.

☐ yes ☐ no ☐ not applicable

Please state the extent to which you agree with the following statements with regard to your **attitude about yourself** and your behavior among other scholars and coworkers:

	Never or definitely no							Always or definitely yes	
I am a unique individual.	①	②	③	④	⑤	⑥	⑦	⑧	⑨
I enjoy being unique and different from other scholars in many ways.	①	②	③	④	⑤	⑥	⑦	⑧	⑨
It annoys me when other scholars perform better than I do.	①	②	③	④	⑤	⑥	⑦	⑧	⑨
When another scholar does better than I do, I get tense and aroused .	①	②	③	④	⑤	⑥	⑦	⑧	⑨
The well-being of my coworkers is important to me.	①	②	③	④	⑤	⑥	⑦	⑧	⑨
I feel good when I cooperate with others.	①	②	③	④	⑤	⑥	⑦	⑧	⑨
I would sacrifice an activity that I enjoy very much if my institution did not approve of it.	①	②	③	④	⑤	⑥	⑦	⑧	⑨
I would do what would please my institution , even if I detested that activity.	①	②	③	④	⑤	⑥	⑦	⑧	⑨

We are interested in your **work practices** to increase the resonance to your journal articles. We would like to remind you that there are neither correct nor incorrect answers and your data will be strictly confidential and anonymous.

Please indicate the extent to which you exhibit the following behaviors:

	Never do this					Frequently do this	
I cite my own articles to increase their citations.	①	②	③	④	⑤	⑥	⑦
I send my articles to scholars with similar research topics to elevate their citations.	①	②	③	④	⑤	⑥	⑦
I like my own articles with the Facebook Like button when possible to increase their likes.	①	②	③	④	⑤	⑥	⑦
I upload my articles on websites so that they can be liked.	①	②	③	④	⑤	⑥	⑦

We are interested in whether you **plan to stay** or **leave your current institution**.

Please state the extent to which you agree with the following statements:

	Strongly disagree					Strongly agree	
It is likely that I will actively look for a new job during the next year.	①	②	③	④	⑤	⑥	⑦
I often think about quitting .	①	②	③	④	⑤	⑥	⑦
I will probably look for a new job during the next year.	①	②	③	④	⑤	⑥	⑦
I would be very happy to spend the rest of my career in this institution.	①	②	③	④	⑤	⑥	⑦
I do not feel “emotionally attached” to this institution.	①	②	③	④	⑤	⑥	⑦
I do not feel a strong sense of belonging to my	①	②	③	④	⑤	⑥	⑦

institution.							
This institution deserves my loyalty .	①	②	③	④	⑤	⑥	⑦
I would not leave my institution right now because I have a sense of obligation to the people in it.	①	②	③	④	⑤	⑥	⑦
I owe a great deal to my institution.	①	②	③	④	⑤	⑥	⑦

Please state **how successful** you think you are in comparison to your colleagues regarding the following statements:

Considering my professional career so far, I am **in comparison to my colleagues** in the **same scientific field**...

	...less successful				...more successful		
...at my institution...	①	②	③	④	⑤	⑥	⑦
...in my country...	①	②	③	④	⑤	⑥	⑦
...worldwide...	①	②	③	④	⑤	⑥	⑦

We are interested in the extent to which you have published (at least one) scientific article(s) in **open-access (OA) journals** (e.g., *PLOS ONE*).

How many **scientific journal articles** have you **published in OA journals** (irrespective of the Impact Factor)?

If you have not published in an OA journal yet, please enter a zero.

_____ OA journal publications

How many **citations** according to the Web of Science has your **best published OA journal publication** received so far?

_____ citations

How many **Facebook likes** has your **best published OA journal publication** received so far?

_____ Facebook likes

Next, we are interested in your scientific journal publications that you did not publish in OA journals, i.e., in paid-access journals (paid by readers/subscribers).

How many **scientific journal publications** have you **published in paid-access journals** (irrespective of the Impact Factor)?

If you have not published in a paid-access journal, please enter a zero.

_____ paid-access journal publications

How many **citations** according to the Web of Science has your **best published paid-access journal publication** received so far?

_____ citations

How many **Facebook likes** has your **best published paid-access journal publication** received so far?

_____ Facebook likes

Please indicate whether the following statement is correct:

I have **not published in an OA journal** so far because I had **no manuscript yet** that could be submitted to a journal.

☐ correct ☐ incorrect

Please state the extent to which the following statements depict a **reason why you have not published in an OA journal** so far:

Please indicate to what extent you agree with the following statements.

	<i>Strongly disagree</i>					<i>Strongly agree</i>	
I had no financial resources to finance the author fees.	①	②	③	④	⑤	⑥	⑦
OA journal publication policies do not correspond to my values (e.g., paying as an author for the publication).	①	②	③	④	⑤	⑥	⑦
OA journal publications are not acknowledged in my scientific community.	①	②	③	④	⑤	⑥	⑦
I had another reason , namely: _____	①	②	③	④	⑤	⑥	⑦

4 Final data

Please state in this last survey section final data regarding **your person** and your job.

Please state your **sex**. ☐ male ☐ female

Please state your **age**. _____ years

Select a country/region that resembles the **culture you** (primarily) **belong to**.

Drop down menu

Select the **country/region** where you (primarily) **work at the moment**.

Drop down menu

What is your **current position** at your higher education institution?

Please indicate the position that best reflects your current position (e.g., check “assistant professor” if you are a junior professor). Multiple answers are possible.

- ☐ PhD student
- ☐ postdoc
- ☐ assistant professor
- ☐ associate professor
- ☐ tenured professor
- ☐ other position, namely: _____

In which **scientific discipline** do you work? Multiple answers are possible.

- ☐ biology
- ☐ business
- ☐ chemistry
- ☐ economics
- ☐ medicine
- ☐ physics
- ☐ psychology
- ☐ sociology
- ☐ other scientific discipline, namely: _____

How many **scientific conferences** do you **attend**, on average, annually? ____ conferences per year

If you have any **questions or remarks**, you can specify these in the field below. We are looking forward to your comments.

Please click "Continue" to reach the final page of the survey, which will provide you with the link to the separate iPad mini raffle website.

You have reached the end of our survey.

Thank you very much for supporting our survey.

To thank our survey participants, we will **raffle an iPad mini**. To protect your anonymity, you can take part in the raffle by **following [this link](#)**, which will bring you to a **separate website**.

This separate website ensures that your survey data cannot be linked to your raffle data.

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