Russian Journal Whitelist: questions to be answered

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Russian Journal Whitelist: Questions to be answered

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Abstract. The article studies the issues related to the compilation of the Russian Journal Whitelist, which is intended to be used in research evaluation. Currently, this list has been approved and posted on the website of the Russian Center for Scientific Information. Building a hierarchy of journals within this list is still under discussion. A number of questions have been raised in the academic community about the composition and principle of compiling the whitelist, and an answer is required. In addition, there are a number of broader questions, in particular, to what extent journal publications are the best way to evaluate research and researchers. I have formulated a number of such questions, inviting readers to reflection and discussion. Despite the difficult situation that has now developed in international scientific communication, one should look at it not only as a crisis, but also as an opportunity to create one of the best systems for research assessment at the moment, free from accumulated bias.

Keywords: journal whitelist, research evaluation, research assessment, scientific journals, scientific publications, open peer review, preprints

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Белый список российских журналов: вопросы, ждущие ответа

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Резюме. В статье рассматриваются вопросы, связанные с формированием российского «Белого списка» научных журналов, на основе которого планируется осуществлять административную оценку научной деятельности. В настоящее время данный список утвержден и размещен на сайте Российского центра научной информации (РЦНИ/РФФИ). Построение иерархии журналов внутри этого списка все еще находится в стадии обсуждения. Состав и принцип формирования «Белого списка» вызывает ряд вопросов, которые активно обсуждаются в научном сообществе и требуют ответа. Кроме того, есть ряд более широких вопросов, в частности, насколько оптимальным способом оценки научных исследований и исследователей являются журнальные публикации. Я сформулировал ряд таких вопросов, приглашая читателей к размышлению и дискуссии. Несмотря на непростую ситуацию, сложившуюся сейчас в международной научной коммуникации, следует смотреть на нее не только как на кризис, но

и как на возможность создать одну из лучших на данный момент систем оценки научной деятельности, свободную от накопленных, уже известных ошибок, и творчески внедрив появившиеся недавно концепции и техники.

Ключевые слова: оценка результатов научной деятельности, научные журналы, научные публикации, белый список журналов, открытое рецензирование, препринты

Благодарности. Хочу выразить глубокую благодарность моей жене Ирине, а также уважаемым коллегам Владимиру Пислякову, Алексею Железнову и Лудо Вальтману, чьи комментарии позволили сделать этот текст намного лучше. Данное исследование выполнено без внешнего финансирования.

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Introduction

As the classic of political economy W. Petty said, one should write "*to rid [one's] head of so many troublesome conceits, and not to apply them to the use of any one particular People or Concernment*" [1, Preface]. Practically the same idea guided me when I started writing this article. At the same time, like Petty, I have a faint hope that someone will find my text useful.

The article itself took the form of questions. I provide a brief statement of my position and argumentation, but the final answer to each of the questions remains with the reader.

Situation Description

Current situation in Russia (I mean scientific communication here) has two prerequisites for its occurrence and development. One of them is very recent. On February 24, 2022, life in Russia changed, and the changes did not pass the scientific sphere at a distance. One of the first sanction strikes was the disconnection of Russian users from the global scientific databases. In May 2022, Clarivate Analytics decided to close the Russian office and suspend Russian users from access to *Web of Science* [2]. Elsevier, which owns the Scopus abstract database, took a dual position: on the one hand, the company refused to conclude an agreement to renew the national subscription, on the other hand, access for Russian users has been open throughout 2022. However, it is already known that Elsevier will suspend access to Scopus at the beginning of 2023.

Thus, by the beginning of 2023, we are left without the two largest global databases. One can say that the search for scientific information can now be conducted by a variety of tools, and he will be right. But the problem is somewhat different: in recent years, the government system of research evaluation has been built on the data of Scopus and Web of Science. Many legal acts are linked to these databases. Indicators based on Scopus and Web of Science data were included as key performance indicators for the largest national projects, including the *Priority 2030* program (see, e.g., [3]), which is a part of the *Science and Universities* national project.

The *moratorium* on the use of Scopus and Web of Science indicators was introduced until December 31, 2022, in order to address this situation[1]. Subsequently, the moratorium was extended until the end of 2023[2]. I should note that the moratorium applies to the acts of government authorities only; most universities use these indicators even now. Some universities, however, no longer consider publications in journals indexed by Scopus and Web of Science.

Anyway, Scopus and Web of Science indicators had to be changed for something else. Thus, at the beginning of March 2022, the Deputy Prime Minister of the Russian Federation Dmitry Chernyshenko set a task to the Russian Ministry of Science and Higher Education to develop the *National Research and Development Performance Evaluation System* [4]. Initially, the issue was discussed at the site of the Public Expert Council within the framework of the Science and Universities natio-

[1] Decree of the Government of the Russian Federation dated March 19, 2022 No. 414 "On Certain Issues of Applying the Requirements and Target Values of Indicators Related to Publication Activity". URL: http://publication.pravo.gov.ru/Document/View/0001202203210040 (accessed: 20.11.2022).

[2] Decree of the Government of the Russian Federation dated September 19, 2022 No. 1655 "On Amendments to Paragraph One of Clause 1 of the Decree of the Government of the Russian Federation dated March 19, 2022 No. 414". URL: http://publication.pravo.gov.ru/Document/View/0001202209210014 (accessed:20.11.2022).

nal project [5]. Later, the Inter-Institutional Working Group of the Ministry of Education and Science was created, which included representatives of the *Russian Academy of Sciences* (*RAS*), the *Russian Centre for Scientific Information (RCSI – former RFBR)* and several universities and scientific organizations. At the exit in November 2022, the *"Whitelist"* of scientific journals was published, which was actually formed from journals indexed in Scopus and Web of Science with the addition of the *Russian Science Citation Index* (*RSCI*) journals that were previously placed as a "*Russian shelf*" on the Web of Science platform [6].

We will talk about the methodological oddities of the compilation of the "Whitelist" (it is no coincidence that even in the announcement on the RAS website this term was taken in quotation marks) a little later. For now, I would like to talk about the second premise of our case. It goes back to the father of information theory, C. Shannon, who introduced the idea of *quantitative measurement of information* and the smallest unit of measurement, *a bit* [7]. By the way, Shannon was not the only one. E.g., R. Wilson proposed to use the unit of measurement *"one Jesus"*, which is equal to the amount of information received during the life of Jesus [8]. However, since that time there has been a strong belief that any information can be measured, including scientific one. But is it possible to measure the evolution of scientific knowledge in the number of scientific publications?

Author's Questions

Let us move on to questions. They can be divided into those that are predominantly of national relevance and those that are relevant regardless of the national context. I will start with the issues that are primarily of concern to the Russian academic community.

Why is the national research assessment system based on the data from foreign commercial enterprises?

The Whitelist includes over 30,000 journals, 944 out of which are included in RSCI. Of course, there are a fairly large number of journals that are included also in the Scopus and Web of Science databases (and most of the journals indexed in RSCI are also indexed in Scopus and Web of Science). At the same time, the list is positioned as a departure from the requirements for publishing research results in foreign publications indexed in Scopus and Web of Science [5]. To be fair, in other countries the share of national journals in the whitelists is even smaller, but there were no such goals declared.

What should Russian journals not included in the list do, and where should Ph.D. students publish?

The accepted Whitelist establishes the segregation of both journals and authors. As of today, the list is closed for Russian journals; it can only be entered through RSCI and Scopus. Considering that there are only 944 journals in the RSCI list, there is a dilemma: either to radically increase the number of journals, which will lead to an inevitable drop in quality, or the rest of the journals are left out. Thanks to the Matthew effect, the quality of Russian RSCI journals will grow due to the opportunities to attract authors and resources, while the quality of other journals will steadily decline.

Here another question arises, where Ph.D. students should publish, because there are not enough RSCI journals for everyone. Now in Russia there is the list of peer-reviewed scientific publications in which the main results of dissertations for the degree of candidate of science and Doctor of Science should be published (also known as the *VAK List*). This is the oldest Russian whitelist, which was first published in 2001. Since then, it has undergone many changes both in composition and methods. At the moment, the List contains more than two and a half thousand publications. In 2022, the task was set to rank the list by category. The recommended publications were divided into three categories depending on the demand/popularity in the academic community; the Science Index (citation index based on data from *Russian Index of Scientific Citation – RISC*) became the main indicator for assigning to one or another category[3]. All the journals in the List are divided into three categories (K1, K2, K3) in a percentage ratio of 25:50:25.

At the same time, the VAK list has been criticized by the academic community almost throughout all its history. First, the composition of scientific publications raises a lot of questions. Thus, despite the declared principle of "wide popularity

[3] Letter of the Ministry of Science and Higher Education of the Russian Federation dated December 6, 2022 No. 02-1198. RISC is the largest mass scale Russian scientific index.

of specific publications (series) both in Russia and abroad", the List includes many little-known, obviously weak bulletins and proceedings of universities and research institutes. On the other hand, many scientists believe that truly authoritative journals in their field did not make it to the List. The non-transparent procedure for the compilation of the VAK list and the form of its presentation are also often criticized.

However, the task is to form a single Whitelist for everyone and everything. Will Ph.D. students be able to publish on the current Whitelist without diluting the quality of the list? It seems to me that the solution to this problem could be the creation of the RSCI "dressing room". The selection should be conducted by an expert in the subject area, consulted by bibliometric data (in this case, it is of a reference nature). According to the questionnaire, a certain number of points is obtained, and the journal falls into this group when the threshold value is reached. Annually, both an examination of new applications and a reassessment of existing ones should be organized. Based on the results of the reassessment, three decisions can be made: an extension for a year (I propose to establish a maximum stay in this group of three years on the principle of "grow or die"), an increase in the RSCI, delisting. Ph.D. students will be able to publish in these journals. Thus, we get a single Whitelist, in my opinion, quite an acceptable solution.

Why were experts not actively involved in the discussion of the Whitelist?

Initially, the Minister of Science and Higher Education of the Russian Federation Valery Falkov declared an open approach to the discussion: "*it is necessary to develop a new assessment system, taking into account the opinion of the professional and expert community*" [5]. The working group included representatives of government agencies, major universities, and research institutes. However, the group mainly comprised administrative and managerial staff (not without exceptions, of course, the group also included editorial and publishing experts very respected in the community). In my opinion, it was also worth bringing this issue up for the discussion by the academic community. At least, one could have shown the methodology to the experts in the relevant fields (quantitative and qualitative research of science, scientific and educational policy), since there are quite a lot of such experts in our country.

I should note here that in the end, the Whitelist is based on entirely bibliometric indicators. At the same time, almost all fundamental documents in the field of research evaluation and scientometrics clearly interpret the use of bibliometrics without peer review as a non-responsible practice (see, for example, [9, 10]). Let's hope that the peer review of journals will still be conducted; at the same time, it is still not too late to involve experts in the evaluation of methodology.

Global Issues

As it turned out, the problem of whitelists is relevant not only and not so much for Russia. In this section of the article, I have partly used the discussion "*Journal Lists: How Useless Are They?*" [11]. The initiator of the discussion, T. Becker, offers the following answer:

– External reward reduces intrinsic motivation, while intrinsic motivation increases performance.

– It is an authoritarian means of manipulating democracy.

– It is an attempt to motivate people who are already motivated.

The answers are quite obvious from the standpoint of the Western university model. It is enough to recall the *Magna Charta Universitatum* [12] and, so beloved by management coaches, *Maslow's pyramid* [13]. However, I would like to ask one more fundamental question.

Do we really need journal publications for research evaluation?

1. Preprints have a number of advantages; the accelerated presentation of results to the academic community is certainly among them. On the other hand, *preprints* (not postprints) do not go through the peer review process. However, there is an open peer review. In 2019, the *BioRxiv* preprint server allowed publishing reviews of preprints, as well as comments on them. This is how the practice of open review of preprints appeared; it has approved itself very well during the Covid-19 pandemic. *ASAPbio* also launched the *Preprint Reviewer Recruiting Network*. It is a young project, but tangible results are already visible [14].

2. Beginning from 2020, higher education and research assessment have been reformed in

China [15]. One of the key points of this reform is the refusal to consider only publications in Web of Science. The freedom from quantitative publication indicators was also declared: the researcher submits for peer review a small selection of works that best represent his results.

3. Similar principles are laid down in the British *Research Excellence Framework (REF 2021)* [16]. Universities themselves form a set of outputs for evaluation. The REF assesses research quality, impact, and the research environment; in other words, it evaluates quality, not quantity. It is important to note that all types of research outputs are accepted for evaluation (not only publications, but also patents, software, datasets, translations, and more).

However, I should acknowledge that there are major discrepancies between formal policies and what is actually happening in these countries. Besides, there is no certainty that at the university level there is a need to evaluate even qualitative indicators. Perhaps, from outside the university, it is necessary to evaluate not the indicators themselves, but the procedures for evaluating researchers adopted within the organization.

Let us combine the Chinese and British experience with the practice of posting preprints and open peer review to evaluate researchers and universities, and this could form the basis of the most advanced research evaluation system in the world. It should be noted that this will not lead to the disappearance of scientific journals, but their role will change. Scientific journals will become collectors of thematic collections based on preprints posted in repositories and open peer review data.

Discussion and Conclusion

One might get the impression that the practice of whitelisting is exclusively negative. But there are also positive examples, and these examples are mainly from northern countries (Norway, Denmark, Finland, see [17] for more details), where the creation of whitelists and categorization of journals within them is based solely on peer review. There are also reverse examples – e.g., India, where the whitelist of journals was compiled on a hybrid basis: all publications indexed in Web of Science, to which journals based on expert selection were added. The results were not so good: up to 88% of journals submitted by universities turned out to be of poor quality [18].

In the context of whitelisting and blacklisting, I must mention the ongoing discussion about these terms, which goes far beyond journal listings. The terms "whitelist" and "blacklist" are increasingly seen as *racist*. E.g., in 2020, *Cabell's* replaced "whitelist" by "*Journalytics*" and "blacklist" by "*Predatory Reports*" [19]. This is a topic for a separate discussion, but we should at least acknowledge the existence of this aspect of the problem.

At the moment, we do have the opportunity to build the *most advanced research assessment system* in the world. Instead, we just continue to use data from commercial systems, to which we currently have little access, and call this the National Research Evaluation System. Let us together create a reality where articles will be read, not counted.

I foresee the objections that we will inevitably have a lot of problems with peer review: there are not enough qualified experts in Russia, experts will be guided not by the interests of science, but by the interests of their local communities, and so on. All these issues do exist, but I am firmly convinced that there are much more good experts in our country than bad ones (but not all of them are involved in the process). I want to end the article with an allegory. Imagine that you have to give a lecture in front of a very serious audience. You have bad trousers and very good shorts. So, what do you wear, trousers or shorts? Spoiler – you still need to iron your trousers.

NOTICE OF CONFLICT OF INTEREST

The author is a researcher at a Russian university and deputy editor-in-chief of a Russian scientific journal. Thus, the author has a personal interest in the development of Russian science, including the range of issues discussed in the article. The author is also a former employee of the Ministry of Science and Higher Education of the Russian Federation. No official information received by the author during the period of public service in the Ministry was used in the article.

REFERENCES

1. Petty W. A Treatise of Taxes & Contributions. London: the Angel; 1662. URL: https://www.gutenberg.org/files/61588/61588-h/61588-h.htm (accessed: 20.11.2022).

2. Sokolov K., Poryvaeva L. The owner of the Web of Science database explained the disabling of access to Russian HEIs. RBC. 2022. URL: https://www.rbc.ru/technology_and_media/05/05/2022/6273a5a39a79477cc4ad2ed9 (accessed: 20.11.2022). (In Russ.)

3. Kochetkov D. Priority-2030: the New Excellence Initiative from Russia. Leiden Madtrics. 2022. URL: https://www.leidenmadtrics.nl/articles/priority-2030-the-new-excellence-initiative-from-russia (accessed: 20.11.2022).

4. Russia will develop new approaches to evaluating the output of researchers and scientific groups. TASS. Science. 2022. URL: https://nauka.tass.ru/nauka/14046279 (accessed: 20.11.2022). (In Russ.)

5. Experts discussed the creation of the National Research and Development Performance Evaluation System. Ministry of Science and Higher Education of the Russian Federation. 2022. URL: https://minobrnauki.gov.ru/press-center/news/novosti-ministerstva/48219/ (accessed: 20.11.2022). (In Russ.)

6. "Whitelist" of scientific journals has been approved. Russian Academy of Sciences. 2022. URL: https://new.ras.ru/activities/news/utverzhden-belyy-spisok-nauchnykh-zhurnalov/ (accessed: 20.11.2022). (In Russ.)

7. Shannon C.E. A Mathematical Theory of Communication. *Bell System Technical Journal*. 1948;27:379–423. https://doi.org/10.1002/j.1538-7305.1948.tb01338.x

8. Dennet D.C. From Bacteria to Bach and Back. W. W. Norton & Company; 2017.

9. Hicks D., Wouters P., Waltman L., de Rijcke S., Rafols I. Bibliometrics: The Leiden Manifesto for research metrics. *Nature*. 2015:520;429–431. https://doi.org/10.1038/520429a

10. San Francisco Declaration on Research Assessment. DORA. 2012. URL: https://sfdora.org/read/ (accessed: 20.11.2022).

11. Journal Lists: How Useless Are They? Researchgate. URL: https://www.researchgate.net/post/Journal_Lists_How_Useless_Are_They (accessed: 18.12.2022).

12. Skripnik K.D. Magna Charta Universitatum and historical background for its principles. *Proceedings of South Federal University. Pedagogical Sciences*. 2015:(1);107–116. (In Russ.)

13. Maslow A. Motivation and Personality. New York: Harper & Row; 1954.

14. Preprint reviews & comments enabled journals to find dozens of new reviewers & editors. ASAPbio. 2022. URL: https://asapbio.org/preprint-reviewer-recruitment-network-phase-2 (accessed: 20.11.2022).

15. Zhang L., Sivertsen G. The new research assessment reform in China and its implementation. *Scholarly Assessment Reports*. 2020;2(1):3. URL: https://scholarlyassessmentreports.org/articles/10.29024/sar.15 (accessed: 20.11.2022).

16. Guide to the REF results. REF. 2021. URL: https://ref.ac.uk/guidance-on-results/guidance-on-ref-2021-results/ (accessed: 20.11.2022).

17. Medvedeva O.O., Dyachenko E.L. Journal whitelisting: international compilation experience and the role in science governance [Presentation]. In: *9th International Scientific and Practical Conference "World-Class Scientific Publication – 2021: Global Trends and National Priorities", Moscow, Russian Federation, Moscow, May 24–27, 2021*. URL: https://rassep.ru/academy/biblioteka/106130/ (accessed: 20.11.2022). (In Russ.)

18. Patwardhan B., Nagarkar S., Gadre S.R., Lakhotia S.C., Katoch V.M., Moher D. A critical analysis of the "UGC-approved list of journals". *Current Science*. 2018;114(6):1299–1303. https://doi.org/10.18520/cs/v114/i06/1299-1303

19. Bisaccio M. Announcement regarding brand-wide language changes, effective immediately. Cabells the Source. 2020. URL: https://blog.cabells.com/2020/06/08/announcement/ (accessed: 20.11.2022).

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