

**SOCIOLOGY OF INFORMATION PROCESSES: MODERN
CULTURE OF SCIENTIFIC RESEARCH AND CITATION
IN RUSSIA AND IN GREAT BRITAIN**

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Abstract. Digitization of society affects the consciousness and behavior of scientists and heads of scientific organizations. Major changes have occurred in the development of scientific information and communication infrastructure of scientific research. At the same time, the expected full-fledged international scientific integration and cross-country cooperation of scientists is not happening in the 21st century. There is a temptation to introduce a quantitative measure of the quality of work of scientists, new rules for financing research projects, and the participation of the scientific community in assessing the quality of scientific publications.

The impact of the methods for evaluating the performance of science and education on the level of social responsibility of scientists was discussed at the methodological seminar RANEPА (Vasilenko L.A. 2013: 35).

Would Nicolaus Copernicus or Giordano Bruno become the leaders of the citation indexes of their time? How to make so that the meaning of reforms in education and science is not lost behind the "figure"? In a speech in the regime of the teleconference, Daina Bennet (ICE – International Consultants for Entrepreneurship and Enterprise, United Kingdom) cited data on the lack of effectiveness of the selected quantitative indicators, since the citation index does not take into account such an important component as social efficiency, that is, the results that the scientific achievements bring to society. There are cases when scientists with a high citation index were not always able to offer innovations and solutions that are necessary at this stage in the development of society. On the contrary, scientists with significant results, but a low citation index, had no chance to receive funding because of the low score of their research work within the framework of the established system of criteria.

On the basis of a comparative analysis of Russian and foreign sociological research, the author formulates general trends in cultural change and the conditions for conducting scientific research. On the basis of the analysis performed, the common problems inherent in both Russian science and global science are revealed:

- the formation of requirements for scientific personnel and teachers, based only on quantitative indicators of publication activity and citation, forcing scientists to break the integrity of the research description;
- reliance on "external" funding "research scientists;
- short-term contracts and discriminatory rules for young researchers and women.

Based on the analysis of empirical data of several sociological studies, the author identified problems and peculiarities specific to Russian science:

- the main experts in the assessment of the teacher's activities are colleagues in the department and the head of the department, which contributes to unfair competition in scientific and educational groups;
- a ban on joint research with foreign scientists funded from foreign sources under the threat of becoming a "foreign agent".

Summarizing all the above, we emphasize that the system of financing research should rely on the real scientific and practical contribution of scientists to the development of the country, instead of the controversial and not always correctly calculated citation index.

Digital technologies set a new context for creating and using knowledge, shaping a modern culture of scientific research and evaluating their quality. The findings can be a step towards mutual integration of Russian and world science. It is important for scientists from different countries to know each other's professional capabilities, to form a common culture of research. Society is the most complex self-organizing system. It can develop only if there is a variety and richness of internal relations that unite the common world universals of culture.

Keywords: Digital Sociology, Culture of Scientific Research, Science Citation Index, Science International Communication

Introduction

Digital technologies, in their primary sense, mean the use of a binary code for transmitting information between different devices, while in the previous period they used the impulse transmission of electrical signals. This technical solution caused a surge in the development of wireless communication devices and their connection to the Internet. Today, "digital" replaces terms "cyber", "Internet", "online communications", etc. Digital sociology unites studies of social relations in global communications, social networks, covering the social space of the Internet, the influence of other digital media. Its specifics are focused on analyzing the understanding of how distributed digital technologies change people's behavior patterns, online socialization, interaction formats in networked societies. A number of scientists use the terms "social informatics" (Sokolova I, 2018), "sociology

of knowledge", "sociology information processes" (Vasilenko L., 2000), "contactless sociology" (Kryshantovskaya O., 2018: 4), "digital humanities", "computational social sciences", "redistribution of methods of sociological research in the digital environment" (Zhuravleva E., 2015: 27, 30), "virtual methods" (Hine C. 2005: 10), "digital methods" (Rogers, 2009: 5), Big-Data, new sources of quantitative and qualitative data in the global environment (blogosphere, social network accounts, global indices and ratings, global databases and open data), as well as methods and forms of their analysis.

All this create a new context for defining methodology, choosing research methods, organizing the collection of empirical data, creating conditions for the communicative interaction of scientists and evaluation of the results. The problem of introducing a quantitative measure for assessing the quality of the activities of scientists in the conditions of digital society is not only Russian specific.

These aspects demonstrate the relevance of a comparative analysis of empirical data from studies conducted both in Russia and abroad.

Objectives / Purpose of the study

The purpose of the article is to, based on the analysis of foreign and Russian sociological data, analyze the experience of introducing a quantitative assessment of the quality of activity of scientists, consider problems that impede the integration of Russian science into the science world space.

Methodology, methods

The quality of scientific activity is considered as a set of properties and characteristics of scientific activity, ensuring its ability to develop the economy and innovation. In this article, the author conducted a comparative analysis of the results of the empirical researches carried out in Russia and in the UK. We considered studies of similar objectives and topics, methods, and sample of respondents, including: expert online surveys and expert community discussions: a) "The culture of scientific research". June and September 2014. On-line survey (N = 970), 15 discussions (740 speakers and participants) at 15 UK sessions at the universities of Wales Scotland, England and Northern Ireland, organizer: Nuffield Council on Bioethics, United Kingdom; b) "Attitude to the Russian Science Citation Index: problems and development prospects". 2015. Respondents: scientists of the Russian Academy of Sciences and Russian Universities, N = 101. PANEPA. Moscow. Russian Federation; c) in-depth interview: "Evaluation of the education in modern Russia". 2015-2016 year. Respondents: universities professors in the Sverdlovsk region. Ural Federal University named after B.N. Eltsin, Yekaterinbur, Russian Federation; d) "Prospects for the development of the RSCI (Russian citation index)". April 2016 - February

2017. Respondents: scientists of the Russian Academy of Sciences (N = 35). PANEPA. Moscow.

Results / Findings

The results of all studies showed a complete consensus of Russian and British scientists that cooperation leads to improved communication between researchers, a wider exchange of data and methods, less competition between different research groups and a decrease in the sense of isolation among researchers. They consider cooperation, multidisciplinary, openness and creativity important for improving the quality of research. In the UK university professors polls, 61% of the responses expressed a positive attitude towards openness, respondents believe that increased transparency and data sharing contribute to the dissemination of results. Revealed the desire to create discoveries, the motivation in science to learn more and understand. High quality scientific research was expressed through such words as Rigorous, Accurate, Original, Honest, Transparent (Joynson C. and Leyser O. 2015).

Problems caused by the quality assessment system of scientific research

Respondents of all empirical studies indicate the disadvantages of a culture of managing the quality of research activities.

The most painful problem is the requirements for scientific personnel and the faculty of universities in the format of quantitative indicators of publication activity and citation. Elena Grunt, on the basis of her in-depth interview of experts, notes: “Among the key problems associated with the evaluation of the activities of teachers at Russian universities is the problem of the subjects carrying out this assessment. The main experts in assessing the activities of teachers in Russian universities are colleagues in the department and the head of the department” (Grunt E. 2016: 9812).

There is a lack of confidence among British scientists in the method of assessing the quality of research - 40% of respondents expressed a negative attitude towards the management organization implemented by the Expert Council (the Research Excellence Framework (REF)), considering this a key of the pressure factor on researchers. As a result, the integrity of the research description may be lost. Scientists are forced to split description them up into several publications in indexed journals in order to improve their rating indicator (The culture of scientific research, 2014)

It is revealed that the prevailing culture of university management supports a high level of competitive relations between scientists for jobs, and creates unfair competition. The research funding system is not conducive to cooperation and creates incentives for poor research practices; highly competitive environment with a narrow range of assessment methods, acts as the main risk factor, creates opportunities for unfair competition in

scientific and educational teams in a situation of sharp reduction in the number of universities and scientific organizations and reduction of jobs in the system of Higher Education and Science in Russia (2015-2016). As for world practice, in many universities, it is graduates, employers, members of the professional community who assess the quality of the work of professors and teachers.

The fears of British respondents cause short-term contracts. The existing retention tools for posts are considered controversial: “pressure on publications”, reliance on funding through grant support, high competition for jobs, the need for periodic moves to take up the following positions, and limited career opportunities for women. Young scientists must achieve quick results during the first year (Joynson C. and Leyser O. 2015).

Real cross-country integration and scientific communications imply a good knowledge of each other's professional capabilities, a culture of research, methodology and methodology. For integration to take place, we need joint research. The participation of Russian scientists in cross-country research is becoming problematic. The main reason in the legislation of Russia. Non-profit organizations through which research is funded from foreign sources receive the very unpleasant status of a “foreign agent”. Financing such studies from Russian sources excludes payment for the work of foreign colleagues, that is, cooperation is almost impossible (Vasilenko L., Fominyh K. 2015: 68). The mechanism of bilateral grants through national scientific foundations has a very narrow range of research topics.

Discussion

The research results are discussed in the scientific community in the form of the interpretation of empirical data, explanations of the situation, sound proposals for solving problems. In international practice, scientists often enter into communication before the publication of results. The institute of reputation acts as a guarantor of the honesty, impartiality and professionalism of the scientist. This allows you to improve the text of a scientific article, correctly identify a journal for publication, find new scientific partners, new ideas, new research topics in discussions.

In the era of digitalization, discussions and discussion of research materials abroad change their forms. They are moving from private forums to discussions in information systems on universal telecommunication platforms. Here scientists can express their thoughts on specific articles, and the editors of journals find their authors. Such platforms are also available in Russia (for example, Researcher ID, SSRN, elibrary.ru.). The research experiment on the accessibility of the Researcher ID resources for Russian scientists conducted by the author of this article did not reveal any discriminatory aspects. The placement of research materials and

publications was successful. Communication with the authors working on similar topics took place, the requested texts of articles were received. At the same time, it is difficult for Russian researchers to enter into such communications. They have a poor command of the English language and culture of communication in such environments.

The culture of scientific communication in Russian practice does not suggest a discussion of research materials prior to publication. An obstacle to openness and communication activity is a poorly functioning the institute of reputation. For example, announcements on the provision of an expensive service to increase the citability index are distributed on the Internet. Among scientists, the informal opinion is widespread that some Russian journals, indexed in the Web of Science and Scopus databases, do not always build transparent relationships with potential authors (Fominyh K. 2015: 160; Intellectual colonialism on the global education market 2017; The culture of scientific research. Summary of discussion events 2014).

Conclusion

Summing up, we note that the relationship between the management system, scientific institution and scientists plays a priority role not so much the subject of information exchange with a set of scientometric characteristics, as the relationship of participants, the culture of scientific activity. The society's underestimation of the intellectual and social potential of a person and its possible impact on the social system is destructive. The topic of efficiency and quality assessment of scientific activity depends on the degree of development of the scientific infrastructure, digital and financial communications, ownership of digital technologies, social relations between scientists and heads of scientific and educational organizations.

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