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**НАЦИОНАЛЬНЫЕ ЭКОНОМИЧЕСКИЕ
ИНТЕРЕСЫ И БЛАГОПОЛУЧИЕ НАСЕЛЕНИЯ**

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Национальные экономические интересы и благополучие населения / Материалы международной научно-практической конференции, посвященной памяти и 90-летию со дня рождения академика НАН РК, Кошанова Аманжол Кошановича. 11 октября 2024 г., г. Алматы. – Алматы: Институт экономики КН МНВО РК, 2024. – 439 с.

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В сборнике представлены статьи и научные доклады ученых и работников вузов, озвученные на международной научно-практической конференции «Национальные экономические интересы и благополучие населения», посвященной памяти и 90-летию со дня рождения лауреата государственной премии в области науки и техники им. аль-Фараби, заслуженного деятеля науки Республики Казахстан, академика НАН РК, доктора экономических наук, профессора Кошанова Аманжол Кошановича.

В статьях отражены ключевые вопросы защиты национальных экономических интересов, повышения социального благополучия населения в Казахстане через призму общемировых тенденций, обострения глобальных экономических и геополитических рисков, а также перспективные направления экономических исследований в области роста и диверсификации национальной экономики, совершенствования распределительных отношений, укрепления научного потенциала и инновационного развития.

Материалы сборника предназначены для специалистов, работников государственных учреждений, научных организаций и учебных заведений, докторантов, магистрантов и широкого круга читателей, интересующихся данной проблематикой.

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Қалиева С.А., Турдалина Ш.К.

Кедейлікті өлшеудің әдіснамалық аспектілері: қолданылуы, ерекшеліктері 143

Нурланова Н.К., Тлеубердинова А.Т.

Қазақстанда еңбекақының өңірлік дифференциациясының кластерлік талдауы және оны төмендету мүмкіндіктері 148

Сансызбаева Г.Н., Аширбекова Л.Ж.

Перспективы использования искусственного интеллекта в государственном управлении 155

Chulanova Z.K.

Hidden forms of inequality in labor and employment 163

Әбсаттаров Р.

Талантымен танылған ғалым 172

Panzabekova A.Zh.

State policy in distributive relations: seeking a balance between efficiency and equity 184

Tunc D. Medeni, Zhangaliyeva K.N.

Perception of researchers' performance metrics in social sciences 193

Тлеубердинова А.Т., Алдабергенова А.Т.

Туризмді дамытуды басқаруда мемлекеттік-жекешелік әріптестікті ұйымдастыру мәселелері 198

T.A. Soldatenko, Sh. A. Soldatenko

Development of the Automotive Market in Kazakhstan Through the Lens of Global Trends and Geopolitical Opportunities 207

Османов Ж.Д.

Қоршаған ортаның мұнай газ кешені кәсіпорындарының экологиялық тәуекелдері мен қауіптері 214

Днишев Ф.М.

Региональные различия в экономическом развитии и их влияние на неравенство доходов 221

PERCEPTION OF RESEARCHERS' PERFORMANCE METRICS IN SOCIAL SCIENCES¹

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Abstract: Evaluation criteria for research staff are influenced by national goals to improve international rankings, such as the Global Innovation Index and QS index. However, researchers engage in many activities beyond publications and patents, like reviewing papers and supervising students, which are often undervalued. This study explores researchers' perceptions of these evaluation criteria in Kazakhstan and Turkey, aiming to develop a more balanced and fair performance assessment system.

Keywords: research performance, performance evaluation, evaluation metrics, perception of criteria, Kazakhstan, Turkey

Introduction

Evaluating individual and institutional scientific outcomes is crucial for research assessment, influencing funding, hiring, and promotions. However, a lack of internationally recognized standards complicates objective evaluations. This study aims to address these challenges.

Bibliometry, or citation metrics, has emerged as a quantitative tool for assessment, originating from the concept of the impact factor introduced in 1955. It measures various aspects of published work using databases like Web of Science and Scopus. Despite its growing use, bibliometry can be misapplied, particularly offline, and is often criticized for insufficiently capturing individual scientific contributions.

Different fields have unique evaluation methods. For instance, researchers in mechanics and applied mathematics are assessed through various indicators, while in fields like physics and chemistry, a combination of quantitative and qualitative measures is vital. The humanities and social sciences face challenges due to limited bibliometric coverage.

1 This research is funded by the Committee of Science of the Ministry of Education and Science of the Republic of Kazakhstan (AP19678110 Balanced approach to the evaluation of scientific research: methodology and implementation mechanisms).

Bibliometry has potential when used alongside expert evaluations, but it should not solely dictate assessments. In Kazakhstan, the reliance on bibliometric indicators is complicated by the country's citation rates and issues with "predatory" journals.

The rise of alternative metrics (altmetrics) offers new ways to measure research impact, considering online engagement and societal influence. Platforms like Plum Analytics and ImpactStory provide insights into broader indicators beyond traditional citations.

This study seeks to evaluate academicians' perceptions of their performance metrics, aiming to align these with individual experiences and institutional criteria. Understanding these perceptions can foster a more balanced approach to research evaluation, ultimately enhancing research quality and motivation.

Methodology

This research is based on survey methodology.

The methodologic part measures academicians' perceptions across many factors about their academic performance. This part evaluates whether the current scales measuring academicians' performance are valid and reliable from the academicians' viewpoint. Based on the results of this study, further scales may be developed in the future.

An initial list of all sorts of work usually done by researchers was used to build a questionnaire. Second, scores were assigned to each job according to the institutional importance. Third, researchers were assessed according to those criteria and scores. So, the survey has already been tested in Kazakhstan and Turkey, with an institutional and practical orientation. The survey was done in Turkish (for Turkey citizens) and Kazakh and Russian (for Kazakhstan citizens).

The survey questions are categorised into two categories: demographic data (gender, age, country) and sort of (academic) activity (as criteria). The research questionnaire scale is a Likert-type scale. Likert items measure respondents' attitudes to a particular question or statement. One must recall that Likert-type data is ordinal data, i.e., one score is higher than another, not the distance between the points. The answer scale ranges from 1 to 5, representing: 1 - Unimportant, 2 - Of little importance, 3 - Moderately important, 4 - Important, and 5 - Very important. For each suitable part, the "Other" option, to which respondents can provide open-ended input, can also be included and scaled to get responses in addition to those provided in the options.

First, a descriptive statistical analysis is conducted. Then, Cronbach's Alpha coefficient is calculated to measure the reliability of the academic performance scale. This reliability test ensures that the measures are error-free

and have consistent results. So, the items in the research are acceptable and reliable. Finally, correlation analysis enables us to determine which variables (if any) have a statistically significant effect on another variable.

Findings

The researchers’ activities are classified into six groups: Research, Scientific & Organizational activities, Transfer of scientific results, Professional Advancement, Supervising, and Publications. The overall results of the survey are given in Figure 1. It is

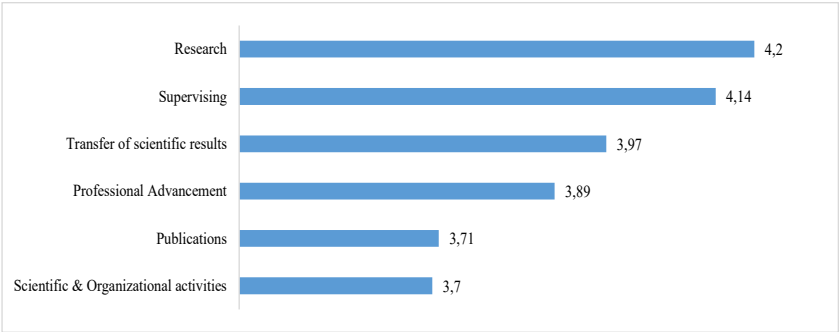


Figure 1 - Average importance of activities by researchers’ perceptions (Likert Scale, 1=unimportant, 5=very important)

The respondents’ profile. There are 123 valid observations for each of the three variables, and no missing values indicate that the dataset is complete.

Age. Mean (2.72) suggests that, on average, participants are between 41 and 49. Standard Deviation (1.068) indicates moderate variability in ages among participants. There is a reasonable spread of ages around the mean. A positive skewness (0.387) indicates a longer tail on the right side of the distribution. This suggests that a few older participants are raising the mean age. 25% of participants are in the age group corresponding to 2 (31-39 years), half fall below 49 years, and 75% are 41-49 years or younger.

Country. The mean (1.53) suggests that most respondents (52,8%) are from Turkey. Skewness (-0.115) is close to zero, indicating that the distribution is relatively symmetric around the mean.

Gender. The mean (1.42) indicates a skew in gender representation based on the coding (where 1 = female and 2 = male). It suggests a predomi-

nance of females in the sample. Standard Deviation (0.496) indicates low variability, suggesting that most of the sample belongs to one gender category, mapping closely to the mean. Positive (0.317) skewness suggests more male respondents might contribute to a higher mean value.

Conclusion

Performance evaluation is a crucial aspect of management. It is defined as quantifying the performance of actions (Hansen, 2017). This evaluation is vital for formulating institutional strategies, determining funding allocations, and addressing recruitment and career advancement matters.

The analysis underscores researchers' active engagement in various forms of academic output, highlighting their notable involvement in high-impact publications such as monographs, articles, and textbooks. However, it also reveals relatively low participation in specific activities, such as producing brochures and conducting document reviews. The significant negative skewness in responses indicates a predominantly positive perception of contributions among respondents, emphasising the importance of quality publishing for enhancing visibility and academic reputation.

While the findings show a positive research culture, further investigation is essential to understand the reasons behind the lower participation levels in certain activities. Specifically, examining the factors influencing engagement in document reviews could shed light on potential barriers, such as insufficient information or limited opportunities. Training programs or seminars could be beneficial in increasing participation in these low-activity areas and providing methodological support for effective knowledge transfer and grant acquisition.

Additionally, qualitatively exploring supervisors' experiences, particularly between mentoring doctoral and master's students, could yield insights into enhancing supervision effectiveness. Identifying the distinctive requirements and challenges of supervising at different academic levels might lead to resource optimisation and more tailored support.

To continue improving overall engagement and activity levels, monitoring participation trends through follow-up surveys and creating targeted initiatives that encourage engagement in underrepresented areas is crucial. Expanding opportunities for training and local presentations can help elevate the academic output further, fostering a thriving research environment.

In summary, while the data points to a robust engagement in research activities, addressing the identified gaps through focused research and targeted interventions is necessary to enhance researcher participation and foster an enriched academic landscape.

REFERENCES

1. Díaz-Faes, A. A., Bordons, M., & Van Leeuwen, T. N. (2016). Integrating metrics to measure research performance in social sciences and humanities: The case of the Spanish CSIC. *Research Evaluation*, rvw018. <https://doi.org/10.1093/reseval/rvw018>
2. Guba, K. (2023, April 19). Understanding the support of metrics: The role of orientation to Global Science in sociologists' perceptions of performance measurement. 27th International Conference on Science, Technology and Innovation Indicators (STI 2023). <https://dapp.orvium.io/deposits/643fa1a6205ea1a0c1c3ba15/view>
3. Haddow, G., & Hammarfelt, B. (2019). Quality, impact, and quantification: Indicators and metrics use by social scientists. *Journal of the Association for Information Science and Technology*, 70(1), 16–26. <https://doi.org/10.1002/asi.24097>
4. Hansen, M. B. (2017). “Chapter 12 Performance management and evaluation”. In *Handbook of Social Policy Evaluation*. Cheltenham, UK: Edward Elgar Publishing. Retrieved Sep 2, 2024, from <https://doi.org/10.4337/9781785363245.00019>
5. Jean-François Bach & J.F. Bach & Denis Jérôme & Brigitte d'Artemare, 2011. “On the proper use of bibliometrics to evaluate individual researchers [Du bon usage de la bibliométrie pour l'évaluation individuelle des chercheurs],” Working Papers hal-00604136, HAL.
6. Leeuwen, T. van. (2022). Chapter 10: Using research metrics in support of assessing social sciences research performance: a comparison of major bibliographic systems. <https://www.elgaronline.com/edcollchap/edcoll/9781800372542/9781800372542.00017.xml>
7. Mills, K., & Croker, K. (2020). Measuring the research quality of Humanities and Social Sciences publications: An analysis of the effectiveness of traditional measures and altmetrics. <https://doi.org/10.26182/v063-r898>
8. Sahel, J.-A. Quality Versus Quantity: Assessing Individual Research Performance. *Sci. Transl. Med.* 3, 84cm13 (2011).
9. Söderlind, J., & Geschwind, L. (2020). Disciplinary differences in academics' perceptions of performance measurement at Nordic universities. *Higher Education Governance & Policy*, 1(1), 18-31.
10. Svartefoss, S. M., Jungblut, J., Aksnes, D. W., Kolltveit, K., & van Leeuwen, T. (2024). Explaining research performance: Investigating the importance of motivation. *SN Social Sciences*, 4(6), 105. <https://doi.org/10.1007/s43545-024-00895-9>

mezhdunarodnoj konferencii «Dialog 2006»/Pod red. N.I.Laufer, A.S. Narin'jani, V.P. Selegeja. – M.: Izd – vo RGGU, 2006. – S275 – 279.

Kotov A.A. Teoreticheskie osnovaniya dlja opredeleniya rechevogo sredstva vozdejstvija // Juridicheskie aspekty jazyka i lingvisticheskie aspekty prava / Pod red. N.D. Goleva. – Barnaul: Izd – vo Alt. un – ta, 2004. – S.151-162.

Lebedeva N.B. O metajazykovom soznanii juristov i predmete jurislingvistiki (k postanovke problemy)/ N.B. Lebedeva // Jurislingvistika – 2: russkij jazyk v ego estestvennom i juridicheskom bytii. – Barnaul, 2000.

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