

Open Science and Academic Integrity: Meeting at the Crossroads

Artem Artyukhov^{1,*} and Robert Rehak²

¹ Sumy State University, 2, Rymkogo-Korsakova st., 40007 Sumy, Ukraine; University of Economics in Bratislava, 1 Dolnozemska cesta, 85235, Bratislava, Slovakia

² University of Economics in Bratislava, 1 Dolnozemska cesta, 85235, Bratislava, Slovakia

Keywords: Academic integrity, Bibliometric analysis, Box approach, Content analysis, Modeling, Open science, White box.

INTRODUCTION

Initiatives for the openness of various components of educational and scientific activities, for example, PlanS [1] or the Open-Source Science Initiative [2], will lead or have already led to a significant increase in the volume of information. At the same time, the correctness of information in the open scientific space is relevant. One of the reasons for the low quality of information is the violation of academic integrity during its creation. In addition, it is interesting to create a general approach to describing the dynamic interaction system between open science and academic (research) integrity.

MATERIALS AND METHODS

A bibliometric analysis for the query “academic integrity” is carried out using bibliometric analysis tools: VOSviewer (<https://www.vosviewer.com/>), and SciVal (<https://www.scival.com/>). To describe the dynamic system of interaction between open science and academic (research) integrity, a “white box” method is proposed, which has found wide application in technical systems. All research

* **Corresponding author Artem Artyukhov:** Sumy State University, 2, Rymkogo-Korsakova st., 40007 Sumy, Ukraine; University of Economics in Bratislava, 1 Dolnozemska cesta, 85235, Bratislava, Slovakia; E-mail: a.artyukhov@pohnp.sumdu.edu.ua

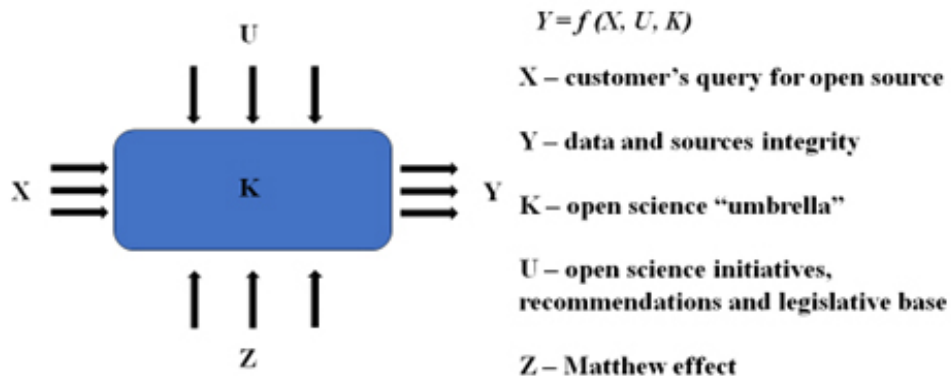


Fig. (2). A “white box” of the dynamic system of interaction between open science and academic (research) integrity.

CONCLUSION

Bibliometric analysis showed the relationship between open science and academic (research) integrity and the main aspects of maintaining academic integrity in the concept of open science. A “box” model of a dynamic system of interaction between open science and academic (research) integrity will be useful for finding optimal management methods at the stage of creating content for open systems under the “umbrella” of open science.

FUNDING

This research was funded by EU NextGenerationEU through the Recovery and Resilience Plan for Slovakia under project No. 09I03-03-V01-00130.

REFERENCES

- [1] Plan S. Available from: <https://www.coalition-s.org/>
- [2] Open-source science initiative. Available from: <https://science.nasa.gov/open-science-overview>
- [3] Andersson AE, Johansson B. *Ann Reg Sci* 2018.
- [4] Boumans MJ. *Philos Perspect* 2009.
- [5] Komargodski I, *et al.* *J Assoc Comput Mach* 2019.

