Incentives and rewards in scholarly communication: the good, the bad, and the possible

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ABSTRACT

Science is a dynamic system with many stakeholders performing different activities, expecting incentives or rewards for research outcomes such as published journal article, a conference paper, a book, a patent, or a research data set. Properly communicated, positive research outcomes tend to lead to new grants, academic promotion, or tenure, so it is important for scientists to remain highly motivated. Motivation usually comes from incentives or rewards given by academic institutions, industry, or funding bodies. The good and bad of the existing reward system have frequently been in focus of interest of researchers and science communicators, but problems with research integrity have shifted the spotlights on the reasons driving scientists to do bad science. Besides support (Jindal-Snape & Snape, 2006), current reward systems lure scientists into doing research that brings rewards and neglect or avoid research that does not. Some scientists choose publishable results over accurate ones (Nosek, Spies and Motyl, 2012) to advance their career, which is has become the major problem in science today.

Catillon (2020) identified three key motivators for scientists: a) the intrinsic reward of doing science, b) academic prestige, and c) monetary rewards. The pitfall of the last is that it can drive scientists to do bad science in exchange for money. Such scientists may have conflicted interests, especially if monetary rewards are stipulated by the right kind of results (Catillon, 2020). Zhao (2020) offered another view on types of incentives: 1.) material incentives – the salary incentive; 2.) affirmative incentive – affirming the accomplishment of task, affirming scientific and technological progress and affirming innovative ideas; 3.) cultural incentive; 4.) honorary incentive – linking work performance with promotion 5.) environmental incentive – creation of good office environment including technology advancement.

The EU funded project CONCISE, in turn, considers that incentives to engage in science communication arise from social commitment (whether as a way to pay back to tax payers or as an effort to advance democracy, inform society, raise awareness, or promote science). Other motives may include personal or professional benefit (to attract funding, scientific collaboration, broader audience or influence public policies, or to enjoy themselves). Some, however, fear that sharing research data may lose them competitive edge or diminish their credit in specific research.

This paper will take a look at major issues about incentives and rewards in science today and how they contribute or affect the quality of scientific endeavour.

KEYWORDS

incentives; rewards; science; science evaluation; scientific communication

REFERENCES

- Jindal-Snape, D., Snape, J.B., (2006). Motivation of scientists in a government research institute. Management Decision. 44(10), 1325–1343. https://doi.org/10.1108/00251740610715678
- Catillon, M. (2020). Incentives for Bad Science: How Inadequate Methods Affect Experimental Results and Publication Outcomes of Randomized Controlled Trials https://scholar.harvard.edu/files/mcatillon/files/maryaline_catillon_jmp.pdf
- Hurdles and incentives to science communication in Europe. https://concise-h2020.eu/wp-content/uploads/2020/09/D1.3_Hurdles-and-incentives-to-science-communication-in-Europe.pdf
- Nosek, B. A., Spies, J. R., & Motyl, M. (2012). Scientific Utopia: II. Restructuring Incentives and Practices to Promote Truth Over Publishability. Perspectives on Psychological Science, 7(6), 615–631. https://doi.org/10.1177/1745691612459058
- Zhao, Yuwei. (2020). Research on Incentive Mechanism of Innovative Science and Technology Talents. In: Proceedings of the 5th International Conference on Economics, Management, Law and Education (EMLE 2019), 518-520, Atlantis Press. https://doi.org/10.2991/aebmr.k.191225.092