

How to Promote Contributorship and Data Sharing to Cultivate Research Integrity

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ABSTRACT

Published papers are used as a proxy indicator of research integrity by the Indonesian government, which is often not true. Contributorship is more important than authorship to us. Authorship is part of contributorship and not the other way around. Although CREDIT is now the standard for submission of papers, the Draft Regulation of the Head of LIPI (now the National Research and Innovation Agency) refers to the author's role and the 14 contributing roles in CREDIT. Data also builds research integrity, not just the one embedded in the research outcomes, but also the raw data that can be reused by other researchers. Other researchers should be able to access and use the data as well as cite the data. As a result of the belief that sharing data would violate ethics, the data-sharing culture has not yet been rooted in Indonesia. A detailed discussion of the problems associated with the way Indonesian scientists approach to research is provided in this article. Western university alumni mainly took a literal approach to the issue since they compared the practices in their place of study with those in Indonesia and expressed disappointment at the disparities. In essence, ethics is about "explaining why an action can be morally justified" rather than a matter of "may or may not". If a case with ethical nuances "sticks out", the punitive approach (punitive, retributive) is often heard. It is essential to avoid the above-mentioned three approaches during the early stages of debriefing for novice lecturers and researchers.

KEYWORDS

Authorship, research, contributorship, data sharing, research integrity, CREDIT, LIPI

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INTRODUCTION

The research measurement in Indonesia is very eminently reliant on metrics. Both the government through various national level regulations at national level and the university leaders are engrossed in measuring output in the form of papers. The publication of the paper is used as a proxy indicator of research integrity which is often not the case. Research integrity is still not a priority as evidenced by the launch of the Minister of Education, Culture, Research and Technology Regulation (Permendikbudristek) Number 39 of 2021 concerning Academic Integrity in Producing Scientific Work, which was published at the end of 2021 but has not been socialized at the national level to date.

We promote contributorship not just authorship. Authorship is a part of contributorship and not the other way around. Although, CREDIT has now become the standard for the submission of papers, authorship





remains the norm of appreciation. We reviewed Permendikbudristek. Article 9(d) and Article 10(4), state about provisions regarding unauthorized authorship or authorship. Illegal authorship means that an author does not actively contribute to the writing of scientific work, nor contribute ideas, opinions, and/or an active role related to the related scientific field. We hope that this sentence is a "fresh opportunity" to promote Contributorship, because "joining yourself as an author" in the Permendikbudristek can be based on an active role in preparing the manuscript or other roles that have not been defined operationally.

Moreover, the Draft Regulation of the Head of LIPI (now the National Research and Innovation Agency) Article 32 states that "contributor status for collaborative activities is assessed based on the role of the researcher's contribution (contributorship)" can be an indicator of researcher performance. This means the author's role can refer to the 14 contributing roles in the CREDIT guide.

Our second focus was the practice of sharing data (data sharing). Data also builds research integrity. Analysis cannot be done without data; therefore, it must always be embedded in various research outcomes. Not just data tables that are in the paper, but also raw data that can be reused by other researchers. The data should be closely related to researchers who either design data collection systems or experimental devices, those who collect data in the field or conduct experiments as well as institutions that fund them. What is unrelated is data as private ownership, especially for state-funded research. Data sharing can spur the development of science further and faster. International conversations have led to data as independent research output. This means that the data should be shared with other researchers and with data citations.

The lack of deep-rooted data-sharing culture in Indonesia is a chronic problem as indicated by the following:

- Misinformation about the "research code of ethics" -as if sharing data would violate the code of ethics
- Perception of loss or loss, especially for data that cannot be easily obtained (such as data from the interior in Indonesia)
- Confusion about determining the level of sensitivity of the data

Currently in Indonesia, ethics in research is identical to the ethics commission which only examines the ethics of using data related to human/personal and animal data.

The highest values for research ethics are honesty, trust, justice, honor, responsibility and determination as stated in Article 2(2) of Permendikbudristek.

All research actions need to be compared from time to time for their compatibility with these values. Because "passing ethical review" is not the primary goal. It reduces the likelihood of entrapping in the practice of "getting around the institutionalization of research and publication ethics", for example covering up unethical practices for the sake of fulfilling certification and/or campus accreditation and obtaining funding from sponsors who have a strong desire to control the publication of research results for the benefit of the community.

The provision of research ethics is highly needed by lecturers or novice/early career researchers as part of the introduction of research integrity to be able to overcome the following three important problems below. We found three major problems in introducing the integrity or ethics of research and publications in Indonesia, which resulted in ethics not being fully integrated into the research/academic practices of Indonesian lecturers and researchers.

These three problems are related to the approach of Indonesian scientists to research which is:

- Westernized
- Black and white (all or none)
- Prioritizing punishment

First problem: A literal approach was taken by western university alumni. They bring literate research ethics and publications from their alma mater to Indonesia. They compared the practices they witnessed, learned and experienced in their place of study with practices in Indonesia, then expressed their disappointment that academic culture in the country is not as ethical as academic culture abroad.

Furthermore, they organize various seminars and workshops with the ambition to "clear up" the unethical practices of lecturers and researchers in Indonesia. What they forget is what we call "patience in understanding the Indonesian context". Various studies and studies have found that cultural sensitivity is needed in understanding and managing practices that are considered "integrity" in the West but which are "as tolerated" in the East (such as in Indonesia). In terms of plagiarism, for example, empirical studies and studies by Adiningrum and Kutieleh (2011), Nash (2018) and TurnItIn (2017) have found that cultural sensitivity is needed in addressing ethical cases.

Second problem: The approach is related to the approach in the first problem. Universal understanding will only produce a single viewpoint. We forget that ethics is not a matter of "may or may not", "black or white", but in essence, ethics is an "accountability for why an action can be morally justified".

Take, for example, scientists who are accustomed to a one-dimensional view will most likely be surprised to hear:

- The study of Aydin Mohseni (2020)-who has a broad interest in Middle-Eastern philosophy-which accounts for his view that "HARKing (hypothesizing after results are known) can be good"
- Reflections on Andrew Gelman (2017) who provide a critical analysis that the term "p-hacking" needs to be challenged because it presents a prejudice that researchers whom do it have a conscious intention to cheat. These two examples show that efforts to overcome the problem of "replication crisis" which are attributed to the practice of HARKing and p-hacking will not progress, especially in Indonesia, if we are not able to consider the complexities behind these practices

Third problem: The punitive approach (punitive, retributive) is often heard in conversations when a case with ethical nuances "sticks out". In 2020, we have already called for, "Don't judge before we have made

systematic efforts to literacy about practices that are considered questionable". This is very much in line with the advice from COPE (Committee on Publication Ethics), "COPE would always advocate educational rather than punitive action."

Early debriefing steps for novice lecturers and researchers need to avoid the above-mentioned three approaches that are forming the problems. Providing insight into ethics needs to be incorporated into the undergraduate curriculum, which is currently only filled with publication-related content, which is downstream from research. The presentation needs to include real examples that occur in the world of research from upstream to downstream. The way COPE presents cases in the form of questions and answers can be adapted.

CONCLUSION

Research integrity should be the priority in Producing Scientific Work and should be socialized at the national level in Indonesia. Contributorship is just as important as authorship. Similarly, data sharing culture should be introduced in the region. For which debriefing steps for novice lecturers and researchers should focus on problems related to the approach of Indonesian scientists to research.