Use of Preprint in the Publication of the Scientific Papers

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Abstract. The publication is an important stage in a study. However, the publication stage in an accredited journal must go through a peer-reviewed process and sometimes requires a fee. The preprint server is a media archive for the distribution and distribution of articles that are available free of charge, enabling rapid distribution and use. Currently, there are many preprint servers available which are also recognized by peer-reviewed journals such as Arvix, Academia, Researchgate, OSF and in Indonesia itself there are INA-Rxiv servers. This article aims to explain the use of the preprint server as a publication media for scientific work among academics. The research method used is survey research on all academics in Indonesia. The results of the study showed that 42% of academics did not recognize the preprint server, 58% did not understand the function of the preprint server as a media publication that was fast, extensive, minimal in cost, accessible to the whole world and had DOI. They think the articles that have been published in the preprint can no longer be proposed to be published to an accredited journal. Ignorance causes its user to be very minimal, with only 24% of all academics filling out the questionnaire. The majority prefer to look directly for accredited journals without considering the time and cost required until the article is published.

Keywords: Preprint and Scientific Papers.

1. Introduction

Lecturers have the obligation to do tri dharma in accordance with their profession, one of them is tri dharma in the field of research and community service. The activity was carried out to meet the number of credit points for functional promotions. However, to meet the credit score the researcher is required to publish the results of the study so that it can be claimed by the researcher. The next thing that is expected after publication is a citation. However, before thinking about the results of our research to be used in other people's papers then there are some things that must be considered by researchers. Beginning with the implementation of research using appropriate instruments which are then followed by article writing. Article writing consists of a title, abstract, introduction, method, results, discussion, conclusions, and references which of course must follow the journal writing style to be addressed [1]. Selection of the title plays an important role in the publication of articles related to citation of the article where the clearer the title of the article made, it will facilitate the public in the search for electronic literature that has an effect on the number of citations [2]. In addition, citations are subjective in that if readers find papers on the same topic, they will prefer papers whose language is easily understood, the presentation is more interesting or the references are more complete and up to date [3]. Thus, researchers need to hone their writing skills continuously, especially in English [4].

The next stage is the publication of scientific papers. In this stage it will take a long time until the research is accepted by one of the journals, sometimes it takes 6 months or even up to 1 year. This is due to the peer-reviewed process. Peer-reviewed is an article validation process aimed at improving the quality of articles to be published [5]. To be published, researchers look for accredited journals in accordance with the research focus and the intended journal. After finding the intended journal, the researcher submits his research by starting to register in the journal and then sending the intended article. After that, researchers await confirmation from the journal regarding the continuation of the process of receiving the article.

Next is the dissemination stage or science communication, which is the stage where someone strives for published research results to be known by various parties. This stage is very important but often forgotten. There are various ways that can be taken by researchers, for example uploading them online in open repositories, making submission of lists of publications in newspapers and even actively distributing them on social media. The result of the dissemination stage is that other people will read and evaluate our work whether it is relevant to the research topic they are doing or lead to a citation.

Journals can be distinguished in two types namely Open access and non-open access journals. Currently, the use of open access journals is rife where people are given free freedom to be able to access, download and cite or share articles in the journal [6]. Open access journals have several advantages compared to non-open access, including a significant increase in the number of citations and the use of old journals. For non-open access journals, the increase in attention is only up to 1 month after publishing while for open access draws longer, stable and sustainable attention [6,7]. However, sometimes for open access journals, fees are charged to researchers.

The number of citations is greatly influenced by the ease of access to the community in reading the uploaded article. The article must be freely accessible to the public. Therefore, researchers need media that can be used to speed up the process of claiming articles that can be read and referenced by readers at a minimum cost, one of which is by using preprint.

A preprint is a research article that is made and published publicly before official publication. The preprint server is a media archive for the distribution and distribution of articles that are available free of charge, enabling rapid distribution and use [8]. Currently, there are many preprint servers available which are also recognized by peer-reviewed journals such as Arvix, Academia, Researchgate, OSF and in Indonesia itself there are INA-Rxiv servers. Although it cannot be said to be a formal publication, researchers can still use citation of articles published on preprint servers because they have DOI that is automatically given by the system as well as when articles are uploaded in peer-reviewed journals and indexed by Google engines [9]. Articles published on the preprint server will facilitate the public to access, upload, read and cite with a significant number of citations compared to articles uploaded in journals [10].

Among these advantages, a preprint is still doubtful about the quality of uploaded articles [9]. This doubt cannot be separated from the absence of studies or peer reviews by experts. Although preprint can also be used as a forum to discuss what results are obtained [9]. Authors can still make revisions to articles that have been published so that the articles submitted for peer-reviewed will be of higher quality [11]. However, in the preprint publication, it becomes a big question who will be responsible for the truth of the data, whether the article has been revised in accordance with input from competent experts in the field. To overcome this, the preprint server provides a comment column on the article and allows researchers to save several versions of the article according to their input and given a publication date. In addition to the losses above, other losses have been disclosed including the potential flood of literature with repeated publication and no weight so that the extraction of information is difficult to be reliable [8].

The purpose of this study is to describe the use of preprint servers and the impact of their use on academics

2. Methods
This research is a descriptive study using a survey method conducted to all academics in Indonesia, amounting to 247,157 inhabitants. Subsequent data were analyzed using the Miles and Huberman data
3. Result and Discussion

3.1 Overview of Using Preprint Server

Of 247,157 total academics in Indonesia who filled out the questionnaire were 125,324 people (50.70%). The results of the study showed that 42% of academics did not recognize the preprint server, 58% did not understand the overall preprint server function. The function intended in this case as a media publication that is a fast, extensive, minimal cost, can be accessed throughout the world and has DOI. 35% thought that articles that had been published in preprint could no longer be proposed to be published in accredited journals. Ignorance causes its users to be very minimal, with only 24% of all academics filling out the questionnaire. The majority prefer to look directly for accredited journals without considering the time and cost required until the article is published. The servers that are commonly used are Researchgate (66%), osf (37%), 4shared (25%), Arvix (15%), INArvix (23%), academia (49%). These conditions illustrate that the use of preprint servers among Indonesian academics is still very low.

3.2 Impact of Using Server Preprint

The presence of a preprint server should benefit academics, especially in the publication of the results of studies conducted. The use of a preprint server helps in distributing quickly and at a minimum cost even for free. When compared with publication in journals, it is very different considering the process that must be gone through so that articles can be published in a journal requires a long time because they have to go through a peer-reviewed process. Therefore, sending articles through the preprint server helps expedite research claims. The article submitted also has DOI so that plagiarism can be avoided. A similar statement was expressed by one of the academics that "when my manuscript has been completed while waiting for a decision from the journal I also store it in the preprint server to speed up a publication and have a patent on the results of the study." In addition, access to articles on remote preprint server easier than articles available in accredited journals. With these conveniences certainly, have an impact on the number of article readers.

The increasing number of readers has an effect on the number of citations. This condition is felt by most academics "in the same article, the number of citations from uploads in researchgate is far more than the citations in uploads in journals" (SA). In addition to increasing the number of citations, published articles can also obtain comments from readers so that it helps the writer to further refine the writing before sending it to the journal. In contrast to the reviews obtained when submitting manuscripts to journals where there are only 2 or 3 reviewers, the reviews obtained on the preprint server can be more and more critical. Every reader can post comments so they can better point out errors or weaknesses of the articles presented. Readers can also suggest the latest data arguments or collaboration suggestions for better journal publications. Comments are given either directly or via e-mail. This was also expressed by FF who stated that "the article I sent on the preprint media server helped me find the right journal after getting advice from readers".

Apart from the benefits that can be obtained from using the preprint server as a publication media, there is still a rejection of the use of this media. This is because they still consider publication through a preprint server not legally recognized. This is consistent with the reason given by an academic that "from our scientific field, the preprint server is still not recognized so we do not use it in disseminating the results obtained" (MM).

On the other hand, there are still many who ask the quality of articles published on the preprint server. This condition is related to the absence of a peer-reviewed process before the manuscript was published so that when using preprint articles as study material it can cause losses. With this in mind,
some academics also refused to send their articles to the preprint server.

Another concern arising from the use of preprints is the rejection of the journal because the article sent is considered to have been published previously. The incident was also experienced by HY who stated that "Some journals that I have opened refused to accept articles that have been published before even though only through preprint media". However, nowadays there are many journals that accept and acknowledge the benefits of preprints so that in submitting publications the journal provides specific guidance.

With various weaknesses and strengths of preprint and the willingness of journals who have also begun to open themselves to recognize preprint publications, it is expected that academics will be able to use preprint media as the initial publication media. Nevertheless, preprint media is expected to continue to improve in filtering the articles submitted so as to improve the quality of the preprint server itself.

4. Conclusion
The results obtained indicate that the use of preprint servers is still very low. This is due to the lack of knowledge of academics regarding the preprint and preprint function itself. This lack of understanding has an impact on its use even though the publication of manuscripts on preprint has many advantages. The advantages that can be obtained include articles can be published in a fast time, minimal cost, easily accessed and has DOI. While the drawback is that the publication is not yet legal, doubts about the quality of the article and the rejection of some journals.

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