

Analysis of Scopus-Indexed Scientific Publication of Lecturers in Maluku at SINTA Portal

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Abstract: Research conducted by a lecturer should be published as a scientific communication in the scientific community. Ministry of Research, Technology, and Higher Education of Republic Indonesia has built a system that provides comprehensive and accessible information about Indonesian scientific publications called SINTA. Analysis of the Higher Education Database and SINTA portal shows that 17% of lecturers in Maluku have been registered as verified authors within the SINTA portal. The percentage of verified authors of Maluku lecturers compared with the total verified authors in the SINTA portal is 0.49%. The percentage of Scopus-indexed publications from lecturers in Maluku compared with the total Scopus-indexed publication in the SINTA portal is 0.32%. Most Scopus-indexed scientific publications are from Pattimura University which is 94%. The publications tend to increase each year but decline in 2017. Journal articles are the most publicized type of Scopus-indexed which is 90%. The most widely published subject area is Natural sciences which is 98% of the total Scopus-indexed publications.

Keywords: Scopus-Indexed, Scientific Publication, SINTA Portal, Lecturers in Maluku

1 Introduction

Scientific publication is an important part of the research process. By publishing, the findings of the research can be known by peer researchers in their field specifically and society in general. Researchers can also contribute theoretically and practically in the field of human life, not merely to pursue a career as a scientist [1], [2] because publication is the center of activity of the scientific community that affects the progress of science, either related to the results, methods, standards, or scientific principles [3]. There are three roles of scientific publication in the process of scientific communication, namely the social role to build and maintain intellectual property so that the work of researchers get recognition from the world of related disciplines, the archive role as an attempt to document the scientific work that has been evaluated and accepted by the world of science, and the dissemination role as an effort to disseminate scientific ideas in the perspective of scientific accumulation [4]. In addition, if the researcher is a teacher or a lecturer then scientific publication becomes the main requirement for the promotion of the functional position (Kemendikbud, 2016; Lukman, Ahmadi, Manalu, & Hidayat, 2017).

One of the main duties of lecturers is to carry out research [7]. Publication should be the estuary of any research conducted. In fact, not all lecturers have published their research results even though the condition of Indonesian scientific publication has improved [8]. To

encourage the number and quality of publications of research results, the government through Ministry of Research, Technology, and Higher Education of Republic Indonesia (Kemenristekdikti) build SINTA portal as a central index of publication of Indonesian researchers [9]. At first glance through the SINTA portal it is found that most of the university lecturers in Maluku under the Kemenristekdikti have not been registered. In addition, the number of Scopus-indexed publications of lecturers in Maluku is still very small. It means that the lecturers in Maluku have a very small contribution to the increase of Indonesia scientific publications. Scopus-indexed scientific publication is selected as the scope study because the data is available inside the SINTA portal.

The purpose of this study is to determine the ratio of the number of universities in Maluku in the Higher Education Database (PDPT) [10] to the number of universities enrolled in the SINTA portal [9]; comparison of the number of university lecturers in Maluku with the number of lecturers registered on SINTA; total number of Maluku lecturers' publications on SINTA, years of Scopus-indexed publication, type of Scopus-indexed publications, topics of Scopus-indexed publications, and the total number of lecturer's citation in Maluku on SINTA.

2 Method

This research used a descriptive method. The data were taken from PDPT (<https://forlap.ristekdikti.go.id/>) and SINTA Portal (<http://SINTA2.ristekdikti.go.id/>) in December 2017. For the SINTA portal, because of the continuous changes that occur every hour, particularly related to the total verified authors that impact on SINTA Score and SINTA Rank, the data collection time limitation was dated December 14, 2017 at 07.00 AM. Searching results are selected based on institutional affiliation, the number of authors verified, number of publications, year of Scopus-indexed publications, type of Scopus-indexed publication, topics of Scopus-indexed publications, and number of citations.

3 Finding And Discussion

There are 30 universities in Maluku affiliated to Kemenristekdikti, consisting of 3 State Universities (10%) and 27 Private Universities (90%). Out of 30 universities, 29 universities (97%) have been registered on SINTA and 1 university (3%), which is STKIP Hunimua has not been registered yet.

Table 1. Comparison of The Number of Lecturers in Maluku with The Number of Verified Authors in The SINTA Portal.

No.	Affiliation	Lect.	Aut.	%
1	Pattimura University	1.083	264	24%
2	Darussalam University Ambon	122	12	10%
3	Iqra University Buru	69	7	10%
4	Ambon State Polytechnic	246	37	15%
5	Tual State Fishery Polytechnic	87	15	17%
6	Indonesian Christian University of Maluku	127	10	8%
7	Maluku Maritime Academy	24	1	4%
8	STIA Trinitas	17	1	6%

No.	Affiliation	Lect.	Aut.	%
9	STP Hatta-Sjahrir Banda	17	0	0
10	STIA Darul Rahman Tual	12	0	0
11	STIA Abdul Azos Kataloka	23	0	0
12	STIE Umel	14	0	0
13	STIS Mutiara	14	0	0
14	STIA Langgur	8	0	0
15	STISIP Kebangsaan	23	0	0
16	STIE Saumlaki	15	0	0
17	STKIP Gotong Royong	24	1	4%
18	STIEM Rutu Nusa	12	0	0
19	STIA Said Perintah	12	0	0
20	STIA Saumlaki	9	0	0
21	STKIP Hatta Sjahrir	10	1	10%
22	STIKES Maluku Husada	23	0	0
23	STIKES Pasapua Ambon	12	0	0
24	STIKOM Ambon	21	1	5%
25	STKIP Saumlaki	11	0	0
26	STIH Muhammad Thaha Tual	8	0	0
27	STKIP Ita Wotu Nusa	11	0	0
28	Aru Midwifery Academy	5	0	0
29	<i>Akper Rumkit</i> Tk. III Latumentten	10	2	20%
Total	2069	352	17%	

(Notes: Lect. = Lecturer, Aut. = SINTA Verified Authors)

Table 1 shows the total number of lecturers at universities in Maluku registered in PDPT, which is 2,069 people while the number of lecturers registered in the SINTA portal as verified authors is 352 people (17%) with the largest percentage coming from Pattimura University (75%). The percentage of verified authors in Maluku is 0.49% of the total verified authors on the SINTA portal, which is 72,505.

Table 2. Total Number of Lecturers in Maluku Scientific Publications and Citations on SINTA Portal.

No.	Affiliation	Sep	Sep Cit	GS	GS Cit
1	Pattimura University	174	4.565	1.805	9.374
2	Darussalam University Ambon	5	5	110	140
3	Iqra University Buru	2	8	91	95
4	Ambon State Polytechnic	1	0	120	50
5	Tual State Fishery Polytechnic	1	0	49	34
6	Indonesian Christian University of Maluku	0	0	28	19
7	Maluku Maritime Academy	2	2	10	5
8	STIA Trinitas	0	0	10	2
9	STP Hatta-Sjahrir Banda	0	0	0	0
10	STIA Darul Rahman Tual	0	0	0	0
11	STIA Abdul Azos Kataloka	0	0	0	0
12	STIE Umel	0	0	0	0
13	STIS Mutiara	0	0	0	0
14	STIA Langgur	0	0	0	0
15	STISIP Kebangsaan	0	0	0	0
16	STIE Saumlaki	0	0	0	0
17	STKIP Gotong Royong	0	0	6	0
18	STIEM Rutu Nusa	0	0	0	0
19	STIA Said Perintah	0	0	0	0

No.	Affiliation	Scp	Scp Cit	GS	GS Cit
20	STIA Saumlaki	0	0	0	0
21	STKIP Hatta Sjahrir	0	0	6	2
22	STIKES Maluku Husada	0	0	0	0
23	STIKES Pasapua Ambon	0	0	0	0
24	STIKOM Ambon	0	0	8	0
25	STKIP Saumlaki	0	0	0	0
26	STIH Muhammad Thaha Tual	0	0	0	0
27	STKIP Ita Wotu Nusa	0	0	0	0
28	Aru Midwifery Academy	0	0	0	0
29	<i>Akper Rumkit</i> Tk. III Latumentten	0	0	6	0
<i>Total</i>		185	4.580	2.249	9.721

(Notes: **Scp** = Publications Indexed by Scopus, **Scp Cit** = Scopus Citation, **GS** = Google Scholar, **GS Cit** = Google Scholar Citation)

Table 2 shows the number of Scopus-indexed publications is 185, generated in 6 Universities (21%) with the largest percentage coming from Pattimura University (94%). The percentage of Scopus-indexed publication of lecturers in Maluku is 0.32% out of the total Scopus-indexed publications on SINTA portal which is 59,580. The number of citations in Scopus-indexed publications is 4,580 with the largest percentage of citation coming from publications on Pattimura University lecturers (99.67%).

The number of publications indexed by Google Scholar is 2,249, generated by 12 Universities (41%) with the largest percentage coming from Pattimura University (80%). Percentage of publications indexed by Google Scholar of lecturers in Maluku is 0.27%, out of total publication indexed by Google Scholar on SINTA portal which is 831,464 documents. Number of citations in publications indexed by Google Scholar is 9,721 with the largest percentage of citation coming from the publication of Pattimura University lecturers (96%).

Table 3. Types of Scopus-Indexed Publications on 6 Universities in Maluku.

No.	Affiliation	Types of Scopus-Indexed Publication		
		Journal Articles	Book Chapters	Conference Papers
1	Pattimura University	157	5	12
2	Darussalam University Ambon	4	0	1
3	Iqra University Buru	2	0	0
4	Ambon State Polytechnic	1	0	0
5	Tual State Fishery Polytechnic	1	0	0
6	Maluku Maritime Academy	2	0	0

Table 3 shows that Scopus-indexed scientific journals are the primary choice of lecturers in Maluku to publish their research results. In accordance with Scopus data, scientific journals are the most indexed source of data compared to conferences and books [11].

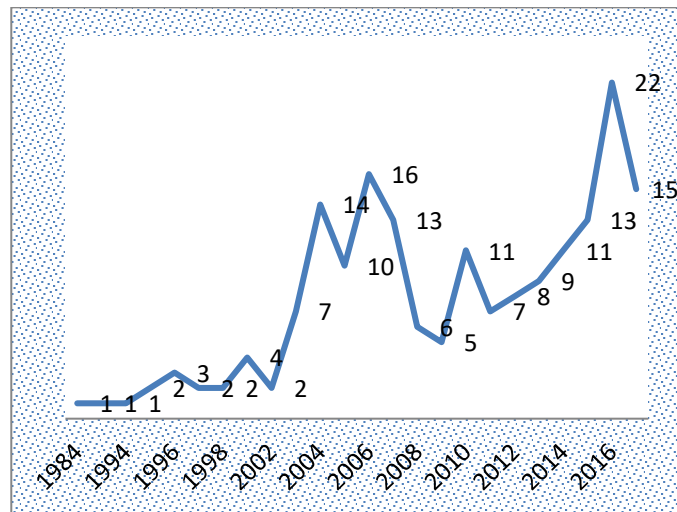


Fig. 1. Number of Scopus-indexed publications based on publication year.

Figure 1 shows that Scopus-indexed scientific publications tend to fluctuate since they were first indexed in 1984. Nevertheless, the trend of increase in publications per year occurred since 2011 to 2016 but declined in 2017.

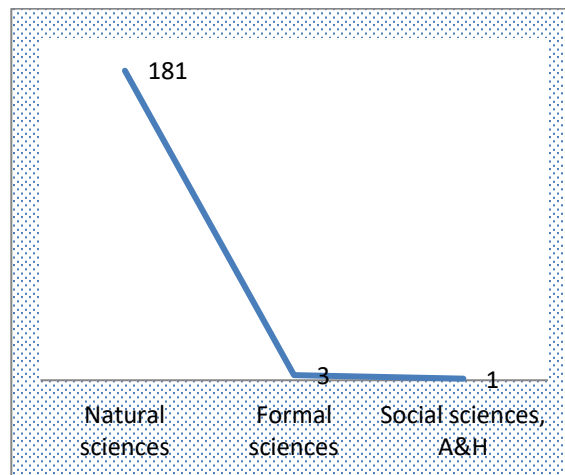


Fig. 2. Scopus Subject Coverage Area of Lecturers in Maluku Scientific Publication

Figure 3 shows that researchers in the field of natural sciences have published much of their research either in the form of Scopus-indexed journals articles, book chapters or conference papers compared to researchers in the fields of Social Sciences, Arts and Humanities) as well as Formal Science such as Mathematics. More specifically, Scopus-indexed scientific fields include: (1) *Life sciences* involving *Neuroscience, Pharmacology, and Biology*; (2) *Social sciences* involving *Psychology, Economics, Business, Arts and Humanities*; (3) *Physical sciences* involving *Chemistry, Physics, and Engineering*; (4) *Health sciences* involving *Medline, Nursing, Dentistry*. If Life sciences, Physical sciences, and Health sciences are incorporated into Natural sciences, the Scopus-indexed publication title is more

than Social Sciences, Arts and Humanities [11]. It is also in line with several findings regarding the difference in the number of publications by field of science in which Natural Sciences shows a high trend and increases year by year while Social Sciences, Arts and Humanities tend to be low and the increase is not significant [12]–[15].

4 Conclusion

Analysis of PDPT and SINTA portals can be used as data for mapping the scientific publications of lecturers in Maluku. It is expected that the lecturers who have not published the results of their research can do the publication as a professional responsibility. For lecturers who have conducted research publications but have not registered as verified author on SINTA portal should register themselves. Pattimura University as a State University included in the top 50 of SINTA rankings can help other universities in Maluku for scientific publications. Lecturers in the social sciences of humanities can be more active in publishing research results, possibly the Scopus-indexed one. In addition, all universities in Maluku have time to clean up to address these facts.

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