

# Investigation of Passive Voice Occurrence in Scientific Writing

Urip Subagio · Johannes A. Prayogo · Emalia Iragiliati

Universitas Jambi, Jambi, Indonesia

Email corresponding author: subagiourip21@gmail.com

**How to cite this paper:** Subagio, U., Prayogo, J. A., & Iragiliati, E. (2019). Investigation of Passive Voice Occurrence in Scientific Writing. *International Journal of Language Teaching and Education*, 3(1), 61-66. <https://doi.org/10.22437/ijolte.v3i1.7434>

**Accepted:** July 25, 2019

**Published:** July 31, 2019

Copyright © 2019 International  
Journal of Language Teaching and  
Education

This work is licensed under the  
Creative Commons Attribution  
International License (CC BY 4.0).  
<http://creativecommons.org/licenses/by/4.0/>



---

## Abstract

This study investigated passive voice use in theses of Graduate EFL students, Universitas Negeri Malang. The occurrences of passive voice in research method chapter in two periods, 1985 - 2000 and 2002 - 2015 were compared. Passive voice occurrence in the chapter of the research method was also investigated, then it was compared with the active. Passive voice occurrence in theses before 2002 investigated which was 1458 and 1171 in theses published after 2000 indicated the fact that today passive voice use in scientific writing indeed less frequent compared to the past. Also, unlike the findings of some previous studies that claimed passive voice occurrence is still more dominant than the action in the method section of scientific writing, this study found that, even in the chapter of research method, active voice today occurs more frequently. It was 1883 occurrences of active voice, and 1171 of passive voice were found.

## Subject Areas

Scientific Writing

## Keywords

Passive voice, passive voice occurrence, scientific writing

---

## 1. INTRODUCTION

One among the essential issues to discuss language use in scientific writing is about passive voice. It can be seen from some existing writing guides proposed contexts when to use the passive voice and when to avoid it in scientific writing and numbers of studies investigated its occurrence.

About the occurrence of passive voice in writing, some studies had been conducted. Riley (1991) investigated the occurrence of passive and active voice in scientific writings. Twelve experimental reports of the journal of speech and hearing disorders were investigated. She stated that the stable percentage of passive voice's higher frequency compared to the activities occur in the Method section. However, looking at his table of the ratio between the use of passive voice and active, in overall sections of the articles, the active voice was found occurred more frequently. Other study conducted by Ahmad (2012). He investigated passive voice, nominalization, and interrogative gambit in scientific research papers drawn from medical and natural science. About passive voice, he pointed

out that in method and result sections, passive voice is more dominant. While, even though it is only a slight number, active voice in the abstract, introduction and discussion sections are higher. Still, in overall sections, active voice occurrence is more abundant in number. Widiati et al. (2014) investigated the occurrence of active and passive construction in undergraduate theses written by undergraduate students of English Department Universitas Negeri Malang, major in English Pedagogy, English Linguistics, and English Literature. This study found that overall, the occurrence of active voice constructions is higher than passive. The difference is significant, 64.8 % active construction and 35.2 % passive. Once again, this study revealed that the active voice is more dominating than passive. However, the finding is similar to Ahmad's (2012) in term of higher occurrence of passive voice in Method and Result section.

From those three studies, it can be inferred that active voice occurrence is higher than passive in most of the sections in scientific writing. However, it was inevitable that passive voice is not less prominent than active in terms of how contributory it is to be employed in the method section, as it was considered better to tell procedures of how the writer conduct their research or report.

In response to the findings of the three studies, three things become fruitful to explore. The first thing is the passive voice occurrence in scientific writing in method section during periods. By doing it, the tendency about passive voice use in the method section of scientific writing, whether it increases or decreases could be figured out. The second thing is the passive voice use in the method section of scientific writing compared to active during periods. By exploring it, the consistent tendency to use more passive than active in this section can be examined.

## **2. METHOD**

This is a descriptive qualitative study used to describe the condition that exists, the opinions that are held, processes that are going on, or the trends that are developing (Best, J.W., Kahn, J.V in Latief, M.A (2015). Therefore, this study is descriptive as it was intended to investigate passive voice occurrence in theses then describe the finding of the opinion that is held about problems of language use in scientific writing that may be caused by the use of passive voice. Also, this study was qualitative as the analysis fulfilled two among the six characteristics of qualitative research suggested by Creswell (2012:16). He stated that "The characteristics are (1) a problem is explored and a detailed understanding of a central phenomenon is developed (2) data for description and themes are analyzed by using text analysis and the deeper meaning of the investigation result was interpreted.

Based on two characteristics mentioned, this study can be said to be categorized as qualitative in the way that from some writing guides, this study had explored the problem in language use in scientific writing that may be caused by the use of passive voice. Then, findings from some previous studies, which explain the phenomenon of passive voice use in term of its occurrence were discussed to develop a deeper understanding of passive voice use phenomena. Finally, passive voice occurrence in text, Research Method chapter of theses, was analyzed, and interpretation of this occurrence was made.

The data of this study were from research method chapters of theses written by graduate students in the English Language Teaching Program of Universitas Negeri Malang published from 1975 to 2016. In other words, theses published from that period will be the population of this study. This data source was taken from the list of theses and dissertations titles provided by the library of Pascasarjana UM. Not all theses written by graduate students in ELT published from 1975 to 2016 will be investigated. There were 31 theses represent 31 years of their publication. One year of publication will be represented by one thesis. Those 31 years of publication are 1975, 1982, 1985, 1989, 1990, 1991, 1992, 1993, 1994, 1995, 1996, 1997, 1998, 1999, 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016.

Considering this, purposive random sampling was then applied. According to Guarte and Barrios (2006), “purposive sampling is described as a random selection of sampling units within the segment of the population with the most information on the characteristic of interest.” In this study, the population is defined as all theses published in 31 years of publication. Then, in relation to purposive sampling definition above, the segment of this population are years of publication (1975, 1982, 1985, 1989, 1990, 1991, 1992, 1993, 1994, 1995, 1996, 1997, 1998, 1999, 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016) and research designs (Classroom Action Research, Descriptive Qualitative, R & D, Experimental, Case Study, Correlation, Ex post Facto, Descriptive Quantitative, Content Analysis, Survey, Mix Method, Corpus-Based Study, Classroom Research, and Ethnography). Moreover, these segments fulfill the information on the characteristic of interest, which are theses which had been written by UM graduate students in ELT.

As not all theses planned to be investigated were found, then those taken as sampling were theses published in 20<sup>th</sup> century 1985, 1990, 1991, 1992, 1993, 1994, 1995, 1996, 1997, 1998, 1999, 2000, then it they were called as group 1 and those published in 2002, 2003, 2005, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, called group 2.

### **3. RESULTS AND DISCUSSIONS**

#### **3.1. Comparison of Passive Voice Occurrence between Group 1 and Group 2**

From the data, it was found that the occurrences of passive voice between the two periods are different. In group 1 theses, it was found 1458 occurrences, while it was 1171 occurrences in group 2. It means that there were 287 different occurrences. Based on the types, the distribution of occurrence in group 1 was 932 occurrences (63.92 %) for Basic passive, 304 (20.85 %) for bare, 113 (7.75 %) for modal, 51 (3.50 %) for perfective, 32 (2.19 %) for to-infinitive, 24 (1.65 %) for non finite ING, and 2 (0.14 %) for progressive. While for group 2, the distribution was 720 occurrences (61.49 %) for Basic passive, 262 (22.37 %) for bare, 106 (9.05 %) for modal, 43 (3.67 %) for perfective, 28 (2.39%) for to-infinitive, 8 (0.68 %) for non finite ING, and 4 (0.34 %) for progressive. In both groups, Modal Perfective passives were not found. The following is the distribution:

**Table 1.** Passive Voice Types and their percentages

Number	Types	Gr 1	%	Gr 2	%
1	BSC	932	63.92	720	61.49
2	BRE	304	20.85	262	22.37
3	MDL	113	7.75	106	9.05
4	PERF	51	3.50	43	3.67
5	TI	32	2.19	28	2.39
6	NF ING	24	1.65	8	0.68
7	PROGRESSIVE	2	0.14	4	0.34
Total		1458		1171	

Even though the difference between passive voice occurrence in group 1 and group 2, it was not easy to state whether the less passive voice occurrence in group 2 compared to group 1 could explain that there was a decline on passive voice use in scientific writing seen from the period of 20<sup>th</sup> century to today. However, the same number of theses investigated, which was 12 for each group could explain that the occurrence of passive voice in the two periods had been compared relatively, and further, this comparison could be the guidance for the interpretation to show that the decline exists.

This decline then implies that the trend of passive voice use in theses of Graduate EFL students Universitas Negeri Malang investigated was found the same as a global trend. It can be seen from the total number of passive voice occurrence in the 20<sup>th</sup> century, which was higher than those occurring today (from 2001 to 2015). This local trend is considered the same as the global. As stated by Ding in Alvin, L.P (2014:1) that passive voice became something preferred for the reason of objectivity in scientific discourse in the 20<sup>th</sup> century, which then implied that it frequently occurred in scientific writing in this time period but the situation change, as today, many writing guides promote the use of active voice for the reason of clarity and conciseness (Alvin, 2014:1), which then implied it occurred less frequently in this time period compared to the previous.

There are possible factors that can make the trends appeared the same. Students' awareness of today's issue of the decreased occurrence of passive voice in scientific writing can be the first factor. They may be more careful when deciding to use it in scientific writing. Shifting their passive voice immediately into action, when it becomes something risky in term of resulting hard reading for the readers, may then become their consideration to express their ideas clearly. The second factor might be, as EFL learners, theses' authors are encouraged to be able to use English in the same way as the native speaker of English.

They may feel that having such an ability is satisfaction and reflection of how successful they are in learning English. This ability is not only about being able to communicate using English but also being able to apply the same style in language as the native speakers. About passive voice use in scientific writing, the theses' authors may follow the style of native speaker writers who today apply less passive in their scientific writing.

### 3.2. Comparison of Active and Passive Voice Occurrence between Group 1 and Group 2

The data showed that total, in group 1 theses the occurrence of passive voice was higher than the active, it was 1458 occurrences and 1065 respectively. On the other hand, in group 2, the active voice was higher, 1883 while, the passive was 1171. The following table showed the occurrence of active and passive voice per year of publication.

**Table 2.** Distribution of Active and Passive Voice per each Year of publication

N	Y	Gr 1		Y	Gr 2	
		Act	Pasv		Act	Pasv
1	1985	132	197	2002	97	85
2	1990	92	227	2003	108	115
3	1991	40	91	2005	193	111
4	1992	315	130	2007	199	90
5	1993	136	178	2008	121	60
6	1994	34	53	2009	230	123
7	1995	30	55	2010	250	167
8	1996	29	36	2011	107	82
9	1997	127	232	2012	38	84
10	1998	59	106	2013	222	109
11	1999	50	112	2014	205	89
12	2000	21	41	2015	113	56
Total		1065	1458	Total	1883	1171

Pasv: passive voice

Act: active voice

Out of the declined occurrence on passive voice use by the theses authors, the subsequent thing which was interestingly found was about the comparison between passive and active voice. On this issue, this study found that that unlike the previous studies which found that passive voice occurrence in the method section of scientific writing was higher than the active, in theses investigated, it was found that this tradition occurred only in theses in group 1. While, in group 2, active voice occurrences were found to occur more frequently than the passive.

About tendency on using active voice in scientific writing, study by Hinkel (2004) which investigated essays written by advance Non native speakers students of English (Chinese, Japanese, Korean, Indonesian, Vietnamese and Arabic), she pointed out that there is a tendency that non native speaker writers don't really prefer applying complex verb forms in writing. She added that passive voice was one of them and was indeed found to occur less frequently. This tendency may make that the theses' authors are today applying less passive verb and at the same time prefer to apply the active which is more straightforward and considered to be more apparent in delivering ideas in their writings.

## 4. CONCLUSIONS

The passive voice occurrences in scientific writing in theses of Graduate EFL students, Universitas Negeri Malang which was found to decline today shows that this finding is in line with the findings of previous studies (seoane, 2013:91 and Ding, D in Alvin, L.P (2014:1), which suggest that globally,

today, passive voice use in scientific writing tends to go down. Writing guides which explain when to use and when to avoid passive voice in scientific writing and studies which found the tendency of declined use of it may be the factors influence the writers to pay attention when deciding to use the passive voice in their writing.

Today, even in the method section of scientific writing, passive voice occurrence is no longer dominant than the active. The data of this study show different finding from the previous ones on passive voice occurrence in the method section. It was found that active voice occurrence was higher than the active. If the previous studies (Riley, 1991, Ahmad 2012, and Widiati et al. 2014) found that the decline of passive voice didn't impact its higher occurrence compared to the action in method section, this study found that active voice occurrence in today's theses investigated (published in 2002 to 2015) was higher than the passive. It means that the decline occurrence of passive voice in the global impact the inclined occurrence of active voice, even, in the writing section in which passive voices were often found to occur more frequently than the active.

To sum up, three suggestions were offered in this study. They are for writing lecturers, PPKI developers, and scientific writers. For writing lecturers, they should tell the students about the trend on passive voice which decline today. However, to be critical about passive voice use, they can facilitate exercise which trains students to identify the passive voice in writing. The exercise is not only about locating passive voices occurrence but also judging whether they are used appropriately or not. For PPKI developers, in language use chapter, they should give a brief explanation about context or situation both in which passive or active voice is better to use. It should be done to make students aware that both of them are contributory in term of language use in writing and to make them not too worry about using passive voice, even though it is now suggested to be avoided, as long as they are used in context in which passive voice is appropriate.

## References

- [1] Aronoff, Ahmad, J. 2012. Stylistic Features of Scientific English. A study of scientific research article, English Language and Literature studies, (online), (2) (1): 47-55, ([www.ccsenet.org/ells](http://www.ccsenet.org/ells)), accessed on April 2, 2017
- [2] Creswell, J. W., 2012. Educational Research: Planning, Conducting and Evaluating Quantitative and Qualitative Research. From NetLibrary, (online), ([id.bookzz.org](http://id.bookzz.org), accessed on October 7, 2016)
- [3] Guarte, J.M & Barrios, E.B., 2006. Estimation Under Purposive Sampling. Communication and Statistics – Simulation and Computation, (online), 35 (2): 277-284, (<http://www.tandfonline.com/loi/lssp20>), accessed on November 12, 2016.
- [4] Hinkel, E. 2004 Tense, Aspect and the Passive Voice in L1 And L2 Academic Text, Language Teaching Research, (online), 8 (1):5-29, ([ltr.sagepub.com](http://ltr.sagepub.com)), accessed on September 9, 2016.
- [5] Latief, M.A. (2015). Research Methods On Language Learning An Introduction. Malang: Universitas Negeri Malang.
- [6] Leong, P.A.(2014). The passive voice in scientific writing. The current norm in science journals, JCOM, (online), 13(01):1-16 (<http://jcom.sissa.it/>), Accessed on May 27, 2016.
- [7] Riley, K., 1991. Passive voice and rhetorical role in scientific writing. Journal of technical writing and communication, 21(3), 239-257, (online). ([jtwsagepub.com](http://jtwsagepub.com), Accessed on September 17, 2016)
- [8] Widiati et al. 2014 Active and Passive Voice Construction by Indonesian Students Writers, Theory and Practice in Language Studies, (online), 4 (7): 1400-1408, accessed on April 7, 2017