

CHAPTER IV

FINDINGS AND DISCUSSIONS

This chapter presents the results of the data analyses that consist of description of the data, the findings of the study, and the discussion of the sentences types and noun phrase structures, and the similarities and differences between native and non-native writers of the research journal articles on the use of sentence types and noun phrase kinds and structures.

A. Data description

The data of the study, sentence types and noun phrase construction, is sourced from six articles of three different research journal fields—English language teaching, linguistics, and medical. Two articles of each field is contributed by a native and a non-native speakers of English. Parts of an article from which the data was collected are the introduction, findings, discussion, and conclusion. The findings of sentence types and noun phrase construction are presented in terms of the frequencies of occurrences and variety of constructions. Furthermore, the findings of the noun phrase constructions are seen from three different angles: 1) structural parts of the articles such as introduction and conclusion; 2) subject and object

positions; and 3) native and non-native speakers of English contributing the target articles.

The data of sentence types and noun phrase constructions are analysed into different categories. The sentence types are categorized into simple, complex, compound, and compound complex. The noun phrase construction are analysed into premodifiers, heads, and postmodifiers.

The sentences as the element from which sentence types and noun phrase constructions were collected are primarily important to be described. Of six articles, there are 688 sentences with the average number of sentences is 100 in introductions, 316 in findings, 219 in discussions, and 53 in conclusions. The complete description of the sentences could be seen in table below.

Table 1: Table of the average number of sentences in each parts of articles

Article	Writer	sentences				Number of Sentences
		Introduction	Findings	Discussions	Conclusion	
*ELT	Native	8	9	70	8	95
	Nonnative	27	90	34	13	164
Linguistic	Native	9	108	20	6	143
	Nonnative	27	42	36	20	125
Medical	Native	12	23	23	4	62
	Nonnative	17	44	36	2	99
Average Number		100	316	219	53	688

*ELT: English Language teaching

B. Findings

The findings of the study are presented in accordance with the research questions. Thus, they are the sentences used in research journal articles, the noun phrase constructions used in the research journal articles; and the similarities and differences between native and non-native speakers of English on the use of the noun phrase constructions in their writings of research journal articles.

a) The sentences used in research journal articles

The findings of data analysis on the sentences used in the articles are shown in the table below.

Table2: overall findings on the types of sentences:

Article	Simple	Compound	Complex	Compound complex	Total sentence
ELT-NNS*	72	4	86	2	164
ELT-NS*	56	8	30	1	95
MEDICAL-NNS	61	7	29	2	99
MEDICAL NS	34	7	21	0	62
LINGUISTICS NNS	70	5	49	1	125
LINGUISTICS NS	75	8	58	2	143
TOTAL	368	39	273	8	688
PERCENTAGE	53%	6%	40%	1%	100%

*NNS:non native speakers
NS:Native speakers

The total numbers of sentences that are used in the articles are 688 sentences comprising 734 main clauses, 333 subclauses, and 16,759 words. The findings reveal that there are 368 simple sentences, 39 compound sentences, 273 complex sentences, and 8 compound complex sentences. It shows that the type of sentences that mostly appears in the research journal articles is the simple sentences. It is more clearly seen in percentage that the most frequently used sentences are simple (53%) which are sequentially followed by complex sentences (40%), compound complex (1%). The examples of sentences are presented below:

1. Simple sentence (*med nns,1,59, 99)

Introduction	Findings and discussion	Conclusion
Chronic obstructive pulmonary disease (COPD) is a preventable and treatable disease characterized by progressive airflow limitation that is not fully reversible. ¹	The Begg's test did not reveal any evidence of publication bias ($p = 0.107$) (Fig. 7).	Further large-scale high-quality trials are warranted.

*med nns: medical non native speaker sentence number 1,59,99

2. Compound sentence (*eltns8, eltns66, lingns143)

Introduction	Findings and discussion	Conclusion
In later sections of the paper, extracts from language lessons representative of Dogme ELT are exhibited in order to address this question; first, however, a review of classroom talk as relevant to the themes of this article is presented.	Similarly, the teacher requests students to move into small group formation; they will usually comply and carry out that request.	An understanding of hierarchy and the levels of integration in the combined clauses of the English language has significant value for researchers, teachers and students whose goal is to better understand English grammar.

*eltns8,eltns66,lingns143: english language teaching native speaker sentence 8,english language teaching native speaker sentence 66, linguistic native speaker sentence 143

3.complex sentence (*lingns8,medns29,medns60)

Introduction	Findings and discussion	Conclusion
For further support of the legitimacy of the proposed hierarchical description of English clauses, a corpus analysis was conducted.	It is not surprising that the environment plays an important role in falling.	When seeking to reduce fall risk, mental and physical states may be more important to address than mobility or strength issues.

*lingns8, medns29, medns60: linguistic native speaker sentence 8, medical native speaker sentence 29, medical native speaker sentence 60

4. compound complex sentence (eltnns55)

Introduction	Findings and discussion	Conclusion
-	Next, the students read the passage silently and the teacher offered some assistance if they needed some clarification.	-

The massive use of simple and complex sentences marks grammatical feature of sentences used in the research journal articles (RJA). Sentences in RJA are made up of one main or independent clause (53%) and of one main clause with one or more dependent or subclauses (40%). Sentences used in RJA rarely use conjunctions as only 6 percent sentences use conjunctions. However this doesn't necessarily mean that simple sentences are shorter than other types of sentences.

To see whether the simple sentences are shorter than other types of sentences, it is necessary to see the amount of words used in all types of sentences. In so doing, the tables below show the amount of words used in simple, compound, complex, and compound-complex sentences in the four elements of RJA—introduction, findings and discussion, and conclusion. The average number of words in a type of sentences is derived by dividing the total amount of words used in the type of sentence with the total amount of

that type of sentences. In average of the six articles, a simple sentence uses 22 words, the compound sentence uses 22 words, the complex sentence uses 26 words, and the compound-complex sentence uses 14 words.

Table 3: The average of words used in simple, compound, complex, compound-complex sentences

the average of number of words per types of sentences												
article	simple	clause		compound	clause		complex	clause		compound-complex	clause	
		main clause	sub-clause		main clause	sub clause		main clause	sub-clause		main clause	sub-clause
medical ns	22.294	1	0	21.333	1.5556	0	29.429	1	1.1905	0	0	0
medical nns	21.581	1	0	18.3	1.3	0	22.133	1	1.0333	20	0.8	0.4
linguistic ns	20.838	1	0	16.5	0.5	0	28.94	1	1.0702	18.6	0.8	0.4
linguistic nns	22.6	1	0	21.833	1.8333	0	25.551	1	1.2245	12.333	0.6667	0.3333
ELT ns	25.161	1	0	28.222	1.6667	0.3333	27.267	1	1.1034	8	0.6667	0.33333
ELT-nns	21.819	1	0	23.2	1.6	0	27.802	1.0116	1.2941	12.5	1.3333	0.6667
total average	22.38216667	1	0	21.564667	1.409267	0.05555	26.85367	1.001933	1.152667	11.9055	0.711117	0.355555
average 2 digits	22	1	0	22	1	0	26	1	1	14	1	0

From the table 3 above, it shows that the average of number of words on the overall articles of sentences different. The highest number of word appear in the used of complex sentence. There are about 26 words is used in complex sentence. Simple sentence and compound sentence has been shown the same result. The average of words used in those sentences is around 22 words. The number of the smallest words has been found in compound complex sentences. The average of number of main clause in the simple sentence consists of one main clause. In complex sentence, there are one main clause and one sub clause.

b) The noun phrase constructions used in the research journal articles

The total noun phrase used in the articles in subject and object position is 1524 noun phrase. The noun phrase used in the subject position is

899 noun phrases. The noun phrase used in the object (complement) position is 625 phrases.

Table 4: overall findings

article	phrase structures																											
	pre-modification distribution															Head Distribution			post modification distribution									
	art	pos	de	m	q	nu	m	mi-	clat	wh	clat	adj	ed-	ing	N	oth	er	tot	al	N	pro	tot	rel	to-	-ing	-ed	pre	oth
elt-ns	19	1	8	1	4	1	0	0	0	6	1	0	2	7	1	15	46	10	56	0	0	2	0	9	0	11		
elt-ns	9	0	2	1	0	0	0	0	1	0	0	1	1	1	15	7	3	10	0	0	0	0	3	1	2			
elt-ns	13	1	9	1	0	0	0	0	1	0	0	2	3	30	33	14	47	0	0	1	0	4	1	6				
elt-ns	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	4	6	0	0	0	0	0	0	0				
medical-ns	11	1	1	1	4	0	0	5	0	3	4	30	36	1	37	1	0	0	1	11	13	0	0	2				
medical-ns	2	0	3	2	2	0	0	2	0	0	0	2	13	13	0	13	0	0	0	0	0	0	0	0				
medical-ns	4	1	4	2	3	0	0	1	0	0	3	2	20	23	4	27	0	0	0	1	3	4	8					
medical-ns	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0					
linguistic ns	45	1	9	4	4	0	0	27	0	17	10	117	78	7	85	1	0	2	0	7	0	10						
linguistic ns	5	0	4	1	1	0	0	2	0	0	1	14	11	3	14	0	0	0	0	0	0	1						
linguistic ns	33	1	6	3	2	1	0	21	1	0	9	7	84	66	15	81	0	0	0	0	6	1	7					
linguistic ns	0	0	0	0	0	0	0	1	0	0	2	0	3	3	2	5	0	0	0	1	0	1						
elt-ns	27	3	1	0	1	0	0	9	0	3	8	4	56	53	0	54	5	1	4	3	24	0	37					
elt-ns	5	1	1	1	1	0	0	1	0	0	0	2	12	12	1	13	0	0	1	0	1	0	2					
elt-ns	23	2	3	1	1	2	0	13	2	1	2	1	51	38	2	40	0	0	0	10	1	10						
elt-ns	0	2	0	0	0	0	0	0	0	0	2	0	4	2	0	2	0	0	0	0	0	0	0					
medical-ns	11	0	0	2	1	0	0	4	0	0	13	3	34	13	0	13	0	0	0	2	2	4						
medical-ns	1	0	0	0	0	0	0	0	0	0	2	1	4	8	0	8	0	0	0	0	0	0	0					
medical-ns	5	1	3	0	1	0	0	3	0	1	4	0	18	17	4	23	0	0	0	1	1	1	3					
medical-ns	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0					
linguistic ns	1	0	0	0	0	0	0	2	0	0	1	0	4	2	0	2	0	0	0	0	0	0	0					
linguistic ns	5	0	0	1	1	0	0	4	0	0	3	2	16	8	0	9	0	0	0	1	0	1						
linguistic ns	27	3	0	4	1	1	1	21	4	2	12	13	89	58	0	62	1	1	0	1	22	6	31					
linguistic ns	1	0	0	0	0	0	0	2	0	0	1	0	4	2	0	2	0	0	0	0	0	0	0					
elt-ns	29	0	9	3	4	1	0	3	0	0	6	3	58	65	8	73	2	0	0	1	13	2	18					
elt-ns	2	0	2	0	0	0	0	0	0	0	0	0	4	5	3	8	0	0	0	0	1	0	1					
elt-ns	63	4	27	3	6	1	0	4	1	1	17	8	135	132	31	163	2	0	1	4	13	1	21					
elt-ns	2	0	0	0	0	0	0	0	0	0	0	0	2	2	2	4	0	0	0	0	0	0	0					
medical-nns	16	1	3	7	6	2	0	15	0	1	14	10	75	54	7	61	1	0	2	1	3	11	18					
medical-nns	6	0	3	5	2	0	0	2	0	0	4	1	23	10	1	11	1	1	0	0	0	0	3					
medical-nns	11	0	1	5	4	0	0	6	0	0	14	3	44	31	6	37	0	0	0	0	4	1	5					
medical-nns	0	0	2	2	0	0	0	0	0	0	0	0	4	4	0	4	0	0	0	0	0	0	0					
linguistic nns	35	0	11	5	3	0	0	12	0	2	4	17	89	73	4	77	2	3	0	0	9	1	15					
linguistic nns	7	0	0	0	0	0	0	3	0	1	1	3	15	10	0	10	0	0	0	0	1	0	0					
linguistic nns	28	2	5	2	2	1	0	8	0	1	2	23	74	60	7	67	0	0	0	0	9	0	9					
linguistic nns	2	0	0	0	0	0	0	0	0	0	2	2	4	3	0	3	0	0	0	0	0	1	1					
elt-ns	21	0	0	4	2	1	0	11	0	2	6	4	51	41	1	47	0	0	0	0	7	5	12					
elt-ns	0	0	0	1	0	0	0	0	0	0	0	0	1	6	0	6	0	0	0	0	1	0	1					
elt-ns	32	8	6	7	4	0	0	5	0	3	24	9	98	84	0	89	1	0	0	0	9	10	20					
elt-ns	32	8	6	7	4	0	0	5	0	3	24	9	98	84	0	89	1	0	0	0	9	10	20					
medical-nns	17	0	0	5	5	0	1	8	2	2	12	11	63	24	1	27	1	0	1	6	16	0	24					
medical-nns	4	0	0	1	0	0	0	0	0	2	4	0	11	5	0	5	0	0	0	0	2	0	2					
medical-nns	9	0	1	0	0	0	0	6	0	0	12	1	29	14	0	15	1	0	0	1	2	0	4					
medical-nns	0	0	0	0	1	0	0	3	1	0	1	0	6	3	0	3	0	0	0	1	1	0	2					
linguistic nns	33	1	1	4	3	1	0	11	0	0	9	8	71	44	0	46	0	3	0	1	23	1	28					
linguistic nns	3	0	0	1	0	0	0	1	0	0	4	1	10	9	0	10	0	0	0	0	1	0	1					
linguistic nns	31	3	1	6	3	0	0	14	0	0	6	10	74	49	0	58	0	1	0	0	13	3	17					
linguistic nns	0	0	1	1	0	0	0	1	0	0	0	3	6	2	0	2	0	0	0	0	0	0	0					
total	630	45	133	94	76	12	2	244	12	27	258	183	1714	1345	141	1524	20	10	14	21	232	74	371					
average	13.125	0.938	2.771	1.96	1.58	0.25	0.04	5.08	0.25	0.56	5.38	3.8125	35.71	28.021	2.938	31.75	0.42	0.21	0.292	0.44	4.8333	1.542	7.7292					
percentage	37%	3%	8%	5%	4%	1%	0%	14%	1%	2%	15%	11%	100%	88%	9%	100%	5%	3%	4%	6%	63%	20%	100%					

Noun phrase in the subject position in the overall articles (English language teaching written by non native speaker and native speaker, Medical written by non native speaker and native speaker, linguistic written by non native speaker-native speaker) use phrase different pattern or construction

that divide into several group. The first group use pattern *determiner + HEAD* as subject with total result is 992. This group is divided into several sub-groups. The groups are *articles + head*, *possessive determiners + head*, *demonstrative determiners + head*, *quantifiers + head*, *numerals + head*, *semi-determiners + head*, *wh-determiners + head*. There are 630 phrase use pattern *articles + head*. In the pattern *possessive determiners + head* consist of 45 phrases. 133 phrases have been found in form of *demonstrative determiners + head*. The pattern in form of *quantifiers + head*, there are 94 phrases. In form of *numerals + head*, there are 76 phrases has been found. The other pattern is *semi-determiners + head* that consist of 12 phrases. The last pattern is *wh-determiners + head* which consist of 2 phrases.

The example of that pattern in subject position is described from the table below:

Pattern	Part of the articles			Articles (field of study)
	Introduction	Findings & discussion	Conclusion	
<i>articles + head</i>	<i>The study</i>	The textbooks	The analysis	Sp,Elt nns27*,elt nns28, eltns88
<i>possessive determiners + head</i>	<i>Their importance</i>	<i>These teachers</i>		Compelt nns114*,complingns28*,
<i>demonstrative</i>	<i>This skill</i>	These	This study	Spelt nns13

<i>determiners + head</i>		tasks		8,spelttnns29, spelttnns162
<i>quantifiers + head</i>	<i>Some district</i>	Many falls		Spelttnns2,commedns31*,
<i>numerals + head</i>		21 percent		,spmednns,
<i>semi-determiners + head</i>		<i>Such questions</i>	Other speech	,Compeltnns121*, simplingnns122*
<i>Wh-determiners + head.</i>				

* Sp,Elt nns27*:simple english language teaching non native speaker sentence 27

Compeltnns114: compound english language teaching non native speaker sentence 114

complingnns28: compound linguistic native speaker sentence 28

commedns31: compound medical sentence 31

The second group use pattern *pre-modifiers + HEAD* with the total phrase in subject position 724 phrases. This group also divides into several sub group such as general adjectives + head, ed-participal modifiers + head, Ing-participal modifiers + head, noun as modifiers + head, two-word pre-modification + head, three-word pre-modification, four-word pre-modification + head. In form of general adjectives + head, there are 244 phrases. In the other pattern on ed-participal modifiers + head, 12 phrases has been found. There are 27 phrases use Ing-participal modifiers + head that have been

found in the articles. 258 phrases has been found written use pattern noun as modifiers + head. Three-word pre-modification + head, two-word pre-modification and four-word pre-modification have not been found yet. The example of those phrases will be shown in the table below:

Pattern	Part of the articles			Articles
	Introduction	Findings & discussion	Conclusion	
adjectives + head	Traditional medicine	Future research	Formal hierarchy	Simmednns9*, simplingns136, comlingns141
ed-participial modifiers + head	-	-	-	-
Ing-participial modifiers + head	<i>Teaching materials</i>	Generating questions		Simpeltns2*, comeltnns107*,
noun as modifiers + head	<i>Reading instruction</i>	Classroom observation	Discussion activities	comEltnns20*, comeltnns120*, Simpeltns90*

* Simmednns9:simple medical non native speaker sentence 9
comeltnns107:complex english language teaching sentence 107
comEltnns20:complex english language teaching non native speaker

The third group use pattern *HEAD + post-modifiers* as the total number of this pattern is 232 phrases. These groups divide into several sub-

group also. Those groups are *HEAD + relative clause*, *HEAD + To-clause*, *HEAD + Ing-clause*, *HEAD + Ed-clause*, and *HEAD + Prepositional phrase*.

The example of these groups can be seen from the table below:

Pattern	Part of the articles			Articles
	Introduction	Findings & discussion	Conclusion	
<i>HEAD + relative clause</i>	students who learn English in a foreign language context	People who sustained an injury	-	Comeltnns19*, Simplmedns35*
<i>HEAD + To-clause</i>	-	-	-	-
<i>HEAD + Ing-clause</i>	-	Information seeking and sharing	-	,comeltnns93,
<i>HEAD + Ed-clause</i>	-	-	-	-
<i>HEAD + Prepositional phrase</i>	<i>reading in a foreign language like english</i>	<i>talk from one such activity</i>		comeltnns18,Simpeltns20,

* Comeltnns19: complex english language teaching non native speaker sentence 19
Simplmedns35:simple medical sentence 35

The overall noun phrase in the object position or complement in the six articles use several pattern that is divided into group. The first group use *determiner + HEAD* as object. There are 566 phrases. The groups are Articles + *HEAD*, Possessive determiners + *HEAD*, Demonstrative determiners + *HEAD*, Quantifiers + *HEAD*, Numerals + *HEAD*, Semi-determiners + *HEAD*, Wh-determiners + *HEAD*.

Pattern	Part of the articles			articles
	Introduction	Findings & discussion	Conclusion	
Articles + <i>HEAD</i>	The authority	The passages	The material	Speltnns, speltnns32, comeltnns160*
Possessive determiners + <i>HEAD</i>	<i>Its methodology</i>	Her students	Their awareness	spEltns8, comelt64, simplingnns107
Demonstrative determiners + <i>HEAD</i>	<i>This review</i>	<i>Their ability</i>	These teachers	Commednns17, Compeltnns137, compeltnns152
Quantifiers + <i>HEAD</i>	<i>all language</i>	Many questions	More pragmatics	Simpeltnns15, simpeltnns76, simplingnns116
Numerals + <i>HEAD</i>	<i>Three departments</i>	Two implications		Compeltnns8*, compeltnns132

Semi-determiners + HEAD	-	Only question	-	,Simpelttns86,
Wh-determiners + HEAD.	-	-	-	-

*comelttns160:complex english language teaching non native speaker sentence 160
 Compelttns8:compound english language teaching sentence non native speaker 8

The second group use different pattern. The pattern that is used is premodifiers + *HEAD*. The total number for this pattern is 239 phrases. The group is divided into several sub-groups such as General adjectives + *HEAD*, *Ed*-participial modifiers + *HEAD*, *Ing*-participial modifiers + *HEAD*, Noun as modifiers + *HEAD*, Two-word premodifiers + *HEAD*, Three-word premodification + *HEAD*, Four-word premodification + *HEAD*. The example of this pattern can be seen from the table below:

Pattern	Part of the articles			Articles (field of study)
	Introduction	Findings & discussion	Conclusion	
adjectives + head	Significant interest	Recent innovations	Individual work	Comelttns5,comelttns10, simpelttns93
ed-participial modifiers +	-	Maintained subject	-	,comlingns99,

head				
Ing-participal modifiers + head		Exchanging information	Growing incidence	,simpleltns63,compmednns64
noun as modifiers + head	<i>Comprehension</i> <i>skills</i>	Language skills	Students thinking	Simpeltnns10,simpeltnns126, simpleltns161

The third group use pattern *HEAD + postmodifiers* as object or complement. The group also divide into sub-group such as sebagai *HEAD + relative clause*, *HEAD + To-clause*, *HEAD + Ing-clause*, *HEAD + Ed-clause*, *HEAD + Prepositional phrase*. The descriptions of the total number from each sub group: there are 10 phrases use head+relative clause, 4 phrases use head + to-clause, 8 phrases has been found in form of head+ing-form, 7 phrases use head+ed-clause, in form of head+prepositional phrase consist of 87 phrases. The total number for this pattern is 116 phrases. The example of those phrases can be seen from the table below:

Pattern	Part of the articles			Articles (field of study)
	Introduction	Findings & discussion	Conclusion	
<i>HEAD</i> + relative clause	Disease that is not reversible	Sport which enables the		Simpmednns1*, simpleltns30,

		teacher to subsequently list their nominations		
<i>HEAD + To-</i> clause	-	Attempt to sound polite and to their cultural specificities	-	,comlingnns35*,
<i>HEAD + Ing-</i> clause	-	exchanging information and at times solving problems	Talk occurring	,Simpeltns33, Simpeltns95
<i>HEAD + Ed-</i> clause	<i>Disease</i> <i>characterized</i> <i>by progressive</i> <i>airflow</i> <i>limitation</i>	Questioner followed by a response	-	Simpmednns1, simpEltns41,
<i>HEAD +</i> Prepositional phrase	<i>Area of</i> <i>communicative</i> <i>competence</i>	Ideas about dangerous sport	Opportunities for language learning,	comlingnns27*, Simpeltns21*, simpeltns91

* comlingnns35" complex linguistic non native speaker sentence 35
comlingnns27:complex linguistic non native speaker sentence 27
Simpeltns21:simple english language teaching native speaker sentence 21

From the findings above, the structures of noun phrase construction in subject and object position are different. The difference of noun phrase construction in subject and object position can be seen from the pattern of wh-determiner. In the subject position, those pattern cannot be found. In the other hand, there are two phrases has been found in the object position.

Noun phrase in subject position commonly use determiner + head. The sub-group mostly uses article + head. The total number of noun phrase using this pattern is around 342 noun phrases. The pattern of demonstrative + noun as the second place of the pattern that commonly appear. It is about 109 noun phrases. The pattern of *quantifier + head and numeral + head*, it shows there are 47 & 48 noun phrases. In the pre-modifier + head, adj + head pattern mostly appears. In the post modification, head+ prepositional phrase, there are 87 noun phrases have been found. The overall noun phrases modification distribution in the subject position can be seen from the table below:

Table 5. overall subject position

article	phrase structures																						
	Pre-modification Distribution													head distribution			post modification distribution						
	art	poss	dem	q	num	semi-det	wh-det	adj	ed-	ing	N	other	total	N	propnoun	total	relativizer	to-clause	-ing clause	-ed clause	prepositional	other	total
elt-ns	19	1	8	1	4	1	0	6	1	2	7	1	51	46	10	56	0	0	2	0	9	0	11
elt-ns	9	0	2	1	0	0	0	1	0	0	1	1	15	7	3	10	0	0	0	0	3	1	2
elt-ns	13	1	9	1	0	0	0	1	0	0	2	3	30	33	14	47	0	0	1	0	4	1	6
elt-ns	0	0	0	0	0	0	0	0	0	0	0	0	0	2	4	6	0	0	0	0	0	0	0
medical-ns	11	1	1	1	4	0	0	5	0	0	3	4	30	36	1	37	1	0	0	0	1	11	13
medical-ns	2	0	3	2	2	0	0	2	0	0	0	2	13	13	0	13	0	0	0	0	0	0	2
medical-ns	4	1	4	2	3	0	0	1	0	0	3	2	20	23	4	27	0	0	0	1	3	4	8
medical-ns	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
linguistic-ns	45	1	9	4	4	0	0	27	0	0	17	10	117	78	7	85	1	0	2	0	7	0	10
linguistic-ns	5	0	4	1	1	0	0	2	0	0	0	1	14	11	3	14	0	0	0	0	0	0	1
linguistic-ns	33	1	6	3	2	1	0	21	1	0	9	7	84	66	15	81	0	0	0	0	6	1	7
linguistic-ns	0	0	0	0	0	0	0	1	0	0	2	0	3	2	5	0	0	0	0	0	1	0	1
elt-nns	29	0	9	3	4	1	0	3	0	0	6	3	58	65	8	73	2	0	0	1	13	2	18
elt-nns	2	0	2	0	0	0	0	0	0	0	0	0	4	5	3	8	0	0	0	0	1	0	1
elt-nns	63	4	27	3	6	1	0	4	1	1	17	8	135	132	31	163	2	0	1	4	13	1	21
elt-nns	2	0	0	0	0	0	0	0	0	0	0	0	2	2	2	4	0	0	0	0	0	0	0
medical-nns	16	1	3	7	6	2	0	15	0	1	14	10	75	54	7	61	1	0	2	1	3	11	18
medical-nns	6	0	3	5	2	0	0	2	0	0	4	1	23	10	1	11	1	0	0	0	0	0	3
medical-nns	11	0	1	5	4	0	0	6	0	0	4	3	44	31	6	37	0	0	0	0	4	1	5
medical-nns	0	0	2	3	0	0	0	5	0	0	0	0	4	4	0	4	0	0	0	0	0	0	0
linguistic-nns	35	0	11	5	3	0	0	12	0	2	4	17	89	73	4	77	2	3	0	0	9	1	15
linguistic-nns	7	0	0	0	0	0	0	3	0	1	1	3	15	10	0	10	0	0	0	0	1	0	0
linguistic-nns	28	2	5	2	2	1	0	8	0	1	2	23	74	60	7	67	0	0	0	0	9	0	9
linguistic-nns	2	0	0	0	0	0	0	0	0	0	2	2	4	3	0	3	0	0	0	0	0	1	1
total	342	13	109	48	47	7	0	120	3	8	108	101	904	767	132	899	10	4	8	7	87	35	152
average	14.25	0.542	4.542	2	1.958	0.292	0	5	0.125	0.333	4.5	4.208	37.67	31.96	5.5	37.46	0.417	0.167	0.333	0.292	3.625	1.458	6.333
percentage	38%	1%	12%	5%	5%	1%	0%	13%	0%	1%	12%	11%	100%	85%	15%	100%	7%	3%	5%	5%	57%	23%	100%

The description of the total number of noun phrases construction in subject position in each types of sentences can be seen from the table below:

Table 6: findings of phrase construction

article	noun phrase structure in a simple sentence in the subject position																						
	Pre-modification Distribution													head distribution			post modification distribution						
	art	poss	dem	q	num	semi-det	wh-det	adj	ed-	ing	N	other	total	N	propnoun	total	relativizer	to-clause	-ing clause	-ed clause	prepositional	other	total
ilt-nns	29	0	9	3	4	1	0	3	0	0	6	3	58	65	8	73	2	0	0	1	13	2	18
ilt-nat	19	1	8	1	4	1	0	6	1	2	7	1	51	46	10	56	0	0	2	0	9	0	11
medical-nns	16	1	3	7	6	2	0	15	0	1	14	10	75	54	7	61	1	0	2	1	3	11	18
medical-ns	11	1	1	1	4	0	0	5	0	0	3	4	30	36	1	37	1	0	0	0	1	11	13
nguistic-nns	35	0	11	5	3	0	0	12	0	2	4	17	89	73	4	77	2	3	0	0	9	1	15
nguistic-ns	45	1	9	4	4	0	0	27	0	0	17	10	117	78	7	85	1	0	2	0	7	0	10
total	155	4	41	21	25	4	0	68	1	0	51	45	420	352	37	389	7	3	6	2	42	25	85
average	44.2857	1.143	11.71	6	7.143	1.143	0	19.43	0.286	0.714	14.57	12.86	120	100.6	10.57	111.1	2	0.857	1.714	0.571	12	7.143	24.29
percentage	37%	1%	10%	5%	6%	1%	0%	16%	0%	0%	12%	11%	100%	90%	10%	100%	8%	4%	7%	2%	49%	29%	100%

Noun Phrase structure in a compound sentence in the subject position																							
article	phrase structures																						
	Pre-modification Distribution													head distribution			post modification distribution						
	art	poss	dem	q	num	semi-det	wh-det	adj	ed-	ing	N	other	total	N	proper noun	total	relativizer	to-clause	-ing clause	-ed clause	prepositional	other	total
elt-nns	2	0	2	0	0	0	0	0	0	0	0	0	4	5	3	8	0	0	0	0	1	0	1
elt-nat	9	0	2	1	0	0	0	1	0	0	1	1	15	7	3	10	0	0	0	0	3	1	2
medical-nns	6	0	3	5	2	0	0	2	0	0	4	1	23	10	1	11	1	1	0	0	0	0	3
medical-ns	2	0	3	2	2	0	0	2	0	0	0	2	13	13	0	13	0	0	0	0	0	0	2
linguistic nns	7	0	0	0	0	0	0	3	0	1	1	3	15	10	0	10	0	0	0	0	1	0	0
linguistic ns	5	0	4	1	1	0	0	2	0	0	0	1	14	11	3	14	0	0	0	0	0	0	1
total	31	0	14	9	5	0	0	10	0	1	6	8	84	56	10	66	1	1	0	0	5	1	9
average	5.16667	0	2.333	1.5	0.833	0	0	1.667	0	0.167	1	1.333	14	9.333	1.667	11	0.167	0.167	0	0	0.833	0.167	1.5
percentage	37%	0%	17%	11%	6%	0%	0%	12%	0%	1%	7%	10%	100%	85%	15%	100%	11%	11%	0%	0%	56%	11%	100%

Noun Phrase structure in a complex sentence in the subject position																							
article	phrase structures																						
	Pre-modification Distribution													head distribution			post modification distribution						
	art	poss	dem	q	num	semi-det	wh-det	adj	ed-	ing	N	other	total	N	proper noun	total	relativizer	to-clause	-ing clause	-ed clause	prepositional	other	total
elt-nns	63	4	27	3	6	1	0	4	1	1	17	8	135	132	31	163	2	0	1	4	13	1	21
elt-nat	13	1	9	1	0	0	0	1	0	0	2	3	30	33	14	47	0	0	1	0	4	1	6
medical-nns	11	0	1	5	4	0	0	6	0	0	14	3	44	31	6	37	0	0	0	0	4	1	5
medical-ns	4	1	4	2	3	0	0	1	0	0	3	2	20	23	4	27	0	0	0	1	3	4	8
linguistic nns	28	2	5	2	2	1	0	8	0	1	2	23	74	60	7	67	0	0	0	0	9	0	9
linguistic ns	33	1	6	3	2	1	0	21	1	0	9	7	84	66	15	81	0	0	0	0	6	1	7
total	152	9	52	16	17	3	0	41	2	2	47	46	387	345	77	422	2	0	2	5	39	8	56
average	25.3333	1.5	8.667	2.667	2.833	0.5	0	6.833	0.333	0.333	7.833	7.667	64.5	57.5	12.83	70.33	0.333	0	0.333	0.833	6.5	1.333	9.333
percentage	39%	2%	13%	4%	4%	1%	0%	11%	1%	1%	12%	12%	100%	82%	18%	100%	4%	0%	4%	9%	70%	14%	100%

Noun Phrase structure in a compound-complex sentence in the subject position																							
article	phrase structures																						
	Pre-modification Distribution													head distribution			post modification distribution						
	art	poss	dem	q	num	semi-det	wh-det	adj	ed-	ing	N	other	total	N	proper noun	total	relativize	to-clause	-ing clause	-ed clause	preposit	other	total
elt-nns	2	0	0	0	0	0	0	0	0	0	0	0	2	2	2	4	0	0	0	0	0	0	0
elt-nat	0	0	0	0	0	0	0	0	0	0	0	0	0	2	4	6	0	0	0	0	0	0	0
medical-nns	0	0	2	2	0	0	0	0	0	0	0	0	4	4	0	4	0	0	0	0	0	0	0
medical-ns	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
linguistic nns	2	0	0	0	0	0	0	0	0	0	2	2	4	3	0	3	0	0	0	0	0	1	1
linguistic ns	0	0	0	0	0	0	0	1	0	0	2	0	3	3	2	5	0	0	0	0	1	0	1
total	4	0	2	2	0	0	0	1	0	0	4	2	13	14	8	22	0	0	0	0	1	1	2
average	0.66667	0	0.333	0.333	0	0	0	0.167	0	0	0.667	0.333	2.167	2.333	1.333	3.667	0	0	0	0	0.167	0.167	0.333
percentage	31%	0%	15%	15%	0%	0%	0%	8%	0%	0%	31%	15%	100%	64%	36%	100%	0%	0%	0%	0%	50%	50%	100%

Table 6 shows that the noun phrase construction in the four types of sentences in subject position always use overall pre-modifier distribution.

Meanwhile, the use of articles mostly appears in the simple sentence and compound sentence. In compound complex sentence, others pre-modifiers distribution such as noun also appear several times. The use of noun and article in the pre-modifiers distribution in compound complex sentences are balance. The total number is four and the percentage is around 31 %.

In the object position, noun phrase pre-modification that mostly appear is articles + head. There are 288 noun phrases that use those pattern has been found in the object position. The smallest pattern is wh-det +head. It is only two noun phrases that has been found in the object position. There are 145 noun phrases post-modifiers that use pattern head + prepositional have been found in the article. Below is the table overall articles in the object position:

Table 7. overall object position

OBJECT POSITION																								
article	nra modification distribution													phrase structures				Head Distribution			post modification distribution			
	art	poss	dem	q	num	semi-det	wh-det	adj	ed-	ing	N	other	total	N	proper	total	relativ	to-clause	-ing cl	-ed cl	prepos	other	total	
elt-ns	27	3	1	0	1	0	0	9	0	3	8	4	56	53	0	54	5	1	4	3	24	0	37	
elt-ns	5	1	1	1	1	0	0	1	0	0	0	2	12	12	1	13	0	0	1	0	1	0	2	
elt-ns	23	2	3	1	1	2	0	13	2	1	2	1	51	38	2	40	0	0	0	0	10	1	10	
elt-ns	0	2	0	0	0	0	0	0	0	0	2	0	4	2	0	2	0	0	0	0	0	0	0	
medical-ns	11	0	0	2	1	0	0	4	0	0	13	3	34	13	0	13	0	0	0	0	2	2	4	
medical-ns	1	0	0	0	0	0	0	0	0	0	2	1	4	8	0	8	0	0	0	0	0	0	0	
medical-ns	5	1	3	0	1	0	0	3	0	1	4	0	18	17	4	23	0	0	0	0	1	1	3	
medical-ns	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
linguistic ns	1	0	0	0	0	0	0	2	0	0	1	0	4	2	0	2	0	0	0	0	0	0	0	
linguistic ns	5	0	0	1	1	0	0	4	0	0	3	2	16	8	0	9	0	0	0	0	1	0	1	
linguistic ns	27	3	0	4	1	1	1	21	4	2	12	13	89	58	0	62	1	1	0	1	22	6	31	
linguistic ns	1	0	0	0	0	0	0	2	0	0	1	0	4	2	0	2	0	0	0	0	0	0	0	
elt-nns	21	0	0	4	2	1	0	11	0	2	6	4	51	41	1	47	0	0	0	0	7	5	12	
elt-nns	0	0	0	1	0	0	0	0	0	0	0	0	1	6	0	6	0	0	0	0	1	0	1	
elt-nns	32	8	6	7	4	0	0	5	0	3	24	9	98	84	0	89	1	0	0	0	9	10	20	
elt-nns	32	8	6	7	4	0	0	5	0	3	24	9	98	84	0	89	1	0	0	0	9	10	20	
medical-nns	17	0	0	5	5	0	1	8	2	2	12	11	63	24	1	27	1	0	1	6	16	0	24	
medical-nns	4	0	0	1	0	0	0	0	0	2	4	0	11	5	0	5	0	0	0	0	2	0	2	
medical-nns	9	0	1	0	0	0	0	6	0	0	12	1	29	14	0	15	1	0	0	1	2	0	4	
medical-nns	0	0	0	0	1	0	0	3	1	0	1	0	6	3	0	3	0	0	0	1	1	0	2	
linguistic nns	33	1	1	4	3	1	0	11	0	0	9	8	71	44	0	46	0	3	0	1	23	1	28	
linguistic nns	3	0	0	1	0	0	0	1	0	0	4	1	10	9	0	10	0	0	0	0	1	0	1	
linguistic nns	31	3	1	6	3	0	0	14	0	0	6	10	74	49	0	58	0	1	0	0	13	3	17	
linguistic nns	0	0	1	1	0	0	0	1	0	0	0	3	6	2	0	2	0	0	0	0	0	0	0	
total	288	32	24	46	29	5	2	124	9	19	150	82	810	578	9	625	10	6	6	14	145	39	219	
average	12	1.333	1	1.917	1.208	0.208	0.083	5.167	0.375	0.792	6.25	3.417	33.75	24.08	0.375	26.04	0.417	0.25	0.25	0.583	6.042	1.625	9.125	
percentage	36%	4%	3%	6%	4%	1%	0%	15%	1%	2%	19%	10%	100%	92%	1%	100%	5%	3%	3%	6%	66%	18%	100%	

The description of noun phrase construction in the object position in each type of sentences can be seen from the table below:

Table 8: findings of phrase construction in object/complement position

Phrase structures in a simple sentence in the Object/complement position																								
article	phrase structures																							
	Pre-modification Distribution													head distribution			post modification distribution							
	art	poss	dem	q	num	semi-det	wh-det	adj	ed-	ing	N	other	total	N	proper	total	relativizer	to-clause	-ing clause	-ed clause	preposition	other	total	
elt-nns	21	0	0	4	2	1	0	11	0	2	6	4	51	41	1	47	0	0	0	0	7	5	12	
elt-nat	27	3	1	0	1	0	0	9	0	3	8	4	56	53	0	54	5	1	4	3	24	0	37	
medical-nns	17	0	0	5	5	0	1	8	2	2	12	11	63	24	1	27	1	0	1	6	16	0	24	
medical-ns	11	0	0	2	1	0	0	4	0	0	13	3	34	13	0	13	0	0	0	0	2	2	4	
linguistic nns	33	1	1	4	3	1	0	11	0	0	9	8	71	44	0	46	0	3	0	1	23	1	28	
linguistic ns	1	0	0	0	0	0	0	2	0	0	1	0	4	2	0	2	0	0	0	0	0	0	0	
total	110	4	2	15	12	2	1	45	2	7	49	30	279	177	2	189	6	4	5	10	72	8	105	
average	18.3333	0.667	0.333	2.5	2	0.333	0.167	7.5	0.333	1.167	8.167	5	46.5	29.5	0.333	31.5	1	0.667	0.833	1.667	12	1.333	17.5	
percentage	39%	1%	1%	5%	4%	1%	0%	16%	1%	3%	18%	11%	100%	94%	1%	100%	6%	4%	5%	10%	69%	8%	100%	

Phrase structures in a compound sentence in the Object/complement position

article	phrase structures																						
	Pre-modification Distribution													head			post modification distribution						
	art	poss	dem	q	num	semi-det	wh-det	adj	ed-	ing	N	other	total	N	propernoun	total	relativizer	to-clause	-ing clause	-ed clause	prepositions	other	total
elt-nns	0	0	0	1	0	0	0	0	0	0	0	0	1	6	0	6	0	0	0	0	1	0	1
elt-nat	5	1	1	1	1	0	0	1	0	0	0	2	12	12	1	13	0	0	1	0	1	0	2
medical-nns	4	0	0	1	0	0	0	0	0	2	4	0	11	5	0	5	0	0	0	0	2	0	2
medical-ns	1	0	0	0	0	0	0	0	0	2	1	4	8	0	8	0	0	0	0	0	0	0	0
linguistic nns	3	0	0	1	0	0	0	1	0	0	4	1	10	9	0	10	0	0	0	0	1	0	1
linguistic ns	5	0	0	1	1	0	0	4	0	0	3	2	16	8	0	9	0	0	0	0	1	0	1
total	18	1	1	5	2	0	0	6	0	2	13	6	54	48	1	51	0	0	1	0	6	0	7
average	3	0.167	0.167	0.833	0.333	0	0	1	0	0.333	2.167	1	9	8	0.167	8.5	0	0	0.167	0	1	0	1.167
percentage	33%	2%	2%	9%	4%	0%	0%	11%	0%	4%	24%	11%	100%	94%	2%	100%	0%	0%	14%	0%	86%	0%	100%

Phrase structures in a complex sentence in the Object/complement position

article	phrase structures																						
	Pre-modification Distribution													head			post modification distribution						
	art	poss	dem	q	num	semi-det	wh-det	adj	ed-	ing	N	other	total	N	propernoun	total	relativizer	to-clause	-ing clause	-ed clause	prepositions	other	total
elt-nns	32	8	6	7	4	0	0	5	0	3	24	9	98	84	0	89	1	0	0	0	9	10	20
elt-nat	23	2	3	1	1	2	0	13	2	1	2	1	51	38	2	40	0	0	0	0	10	1	10
medical-nns	9	0	1	0	0	0	0	6	0	0	12	1	29	14	0	15	1	0	0	1	2	0	4
medical-ns	5	1	3	0	1	0	0	3	0	1	4	0	18	17	4	23	0	0	0	1	1	1	3
linguistic nns	31	3	1	6	3	0	0	14	0	0	6	10	74	49	0	58	0	1	0	0	13	3	17
linguistic ns	27	3	0	4	1	1	1	21	4	2	12	13	89	58	0	62	1	1	0	1	22	6	31
total	127	17	14	18	10	3	1	62	6	7	60	34	359	260	6	287	3	2	0	3	57	21	85
average	21.1667	2.8333	2.3333	3	1.6667	0.5	0.1667	10.3333	1	1.1667	10	5.6667	59.8333	43.3333	1	47.8333	0.5	0.3333	0	0.5	9.5	3.5	14.17
percentage	35%	5%	4%	5%	3%	1%	0%	17%	2%	2%	17%	9%	100%	91%	2%	100%	4%	2%	0%	4%	67%	25%	100%

Phrase structures in a compound-complex sentence in the Object/complement position

article	phrase structures																						
	Pre-modification Distribution													head			post modification distribution						
	art	poss	dem	q	num	semi-det	wh-det	adj	ed-	ing	N	other	total	N	propernoun	total	relativizer	to-clause	-ing clause	-ed clause	prepositions	other	total
elt-nns	4	0	0	2	0	0	0	0	0	0	0	1	3	6	0	6	0	0	0	0	0	0	0
elt-nat	0	2	0	0	0	0	0	0	0	0	2	0	4	2	0	2	0	0	0	0	0	0	0
medical-nns	0	0	0	0	1	0	0	3	1	0	1	0	6	3	0	3	0	0	0	1	1	0	2
medical-ns	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
linguistic nns	0	0	1	1	0	0	0	1	0	0	0	3	6	2	0	2	0	0	0	0	0	0	0
linguistic ns	1	0	0	0	0	0	0	2	0	0	1	0	4	2	0	2	0	0	0	0	0	0	0
total	5	2	1	3	1	0	0	6	1	0	4	4	23	15	0	15	0	0	0	1	1	0	2
average	0.833333	0.3333	0.1667	0.5	0.1667	0	0	1	0.1667	0	0.6667	0.6667	3.8333	2.5	0	2.5	0	0	0	0.1667	0.1667	0	0.3333
percentage	22%	9%	4%	13%	4%	0%	0%	26%	4%	0%	17%	17%	100%	100%	0%	100%	0%	0%	0%	50%	50%	0%	100%

From the table 8 above, it reveals that the use of articles in the pre-modifier distribution has been findings in the object/complement position. It

can be seen that almost all of the types of sentences use articles in the phrase construction. In the head distribution, noun also appears as the head noun. Here, the percentage of using noun as the head distribution around 94%. In the post-modifiers distribution, prepositional is mostly appear.

c) The noun phrase constructions written by native and non native speakers of English

There are several of the similarities and differences between native and non-native speakers of English on the use of the noun phrase constructions in their writings of research journal articles.

The first differences and similarities is in the use of types of sentences of six articles. The type of compound-complex sentences in part of introduction has not been found yet as the similarities between native and non native speakers. Meanwhile, The use of simple sentence in part of findings and discussion in article written by native speakers as many as written by non native speakers. There are 137-142 simple sentences have been found among native speakers and non native speakers. The differences appear in part of conclusion on compound and compound-complex sentence. In the article written by non native speakers, compound sentence cannot be found. However, there is one compound sentence in the article written by native speakers.

Table.9 sentences ns & nns per part

types of sentences ns												
article	simple			compound			complex			compound-complex		
	introduction	findings and discussion	conclusion	introduction	findings and discussion	conclusion	introduction	findings and discussion	conclusion	introduction	findings and discussion	conclusion
elt ns	4	48	4	1	7	0	3	23	4	0	1	8
medical ns	8	23	3	0	7	0	4	16	1	0	0	0
linguistic ns	6	66	3	0	7	1	3	53	2	0	2	0
total	18	137	10	1	21	1	10	92	7	0	3	8
average	6	45.666667	3.3333333	0.3333333	7	0.3333333	3.3333333	30.666667	2.3333333	0	1	2.6666667

types of sentences nns												
article	simple			compound			complex			compound-complex		
	introduction	findings and discussion	conclusion	introduction	findings and discussion	conclusion	introduction	findings and discussion	conclusion	introduction	findings and discussion	conclusion
elt ns	17	53	2	1	3	0	9	66	11	0	2	0
medical ns	14	46	1	0	7	0	3	25	1	0	2	0
linguistic ns	16	43	11	2	3	0	9	30	10	0	1	0
total	47	142	14	3	13	0	21	121	22	0	5	0
average	15.666667	47.333333	4.6666667	1	4.3333333	0	7	40.333333	7.3333333	0	1.6666667	0

Table 10. types of sentences ns & nns

ELT NNS

NO	PART OF ARTICLE	SIMPLE SENTENCE	COMPOUND	COMPLEX	COMPOUND COMPLEX	TOTAL SENTENCE
1.	Introduction	17	1	9	0	27
2.	Findings and discussion	53	3	66	2	124
3.	Conclusion	2	0	11	0	13
	TOTAL	72	4	86	2	164
	PERCENTAGE	44%	2%	52%	1%	100%

ELT NS

NO	PART OF ARTICLE	SIMPLE SENTENCE	COMPOUND	COMPLEX	COMPOUND COMPLEX	TOTAL SENTENCE
1.	Introduction	4	1	3	0	8
2.	Findings and discussion	48	7	23	1	79
3.	Conclusion	4	0	4	0	8
	TOTAL	56	8	30	1	95
	PERCENTAGE	59%	8%	32%	1%	100%

As a result in table 10 above, it is clearly shown that the differences between article of ELT non native speakers and ELT Native speakers that complex sentences is mostly used in ELT written by non native speakers. The ELT written by native speakers mostly use simple sentence.

Both between non native speakers and native speakers are rarely use compound sentences. Both also minimize using compound – complex sentences. Both of the articles only use 1 % of compound complex sentence.

Table 10. medical nns & medical ns

MEDICAL NNS

NO	PART OF ARTICLE	SIMPLE SENTENCE	COMPOUND	COMPLEX	COMPOUND COMPLEX	TOTAL SENTENCE
1.	Introduction	14	0	3	0	17
2.	Findings and discussion	46	7	25	2	80
3.	Conclusion	1	0	1	0	2
	TOTAL	61	7	29	2	99
	PERCENTAGE	62%	7%	29%	2%	100%

MEDICAL NS

NO	PART OF ARTICLE	SIMPLE SENTENCE	COMPOUND	COMPLEX	COMPOUND COMPLEX	TOTAL SENTENCE
1.	Introduction	8	0	4	0	12
2.	Findings and discussion	23	7	16	0	46
3.	Conclusion	3	0	1	0	4
	TOTAL	34	7	21	0	62
	PERCENTAGE	55%	11%	34%	0%	100%

The articles of Medical written by Non native speakers and native speakers, they use the same type of sentences. The medical native speakers use almost more than a half which is 55 % of simple sentences used in their articles. Similar with Non native speakers they only use 29 % of complex sentences in their articles. The medical article written by native speakers show significance finding that they do not write even only one of sentence that is use compound complex sentence.

Table.11 linguistic nns & linguistic ns

LINGUISTIC NNS

NO	PART OF ARTICLE	SIMPLE SENTENCE	COMPOUND	COMPLEX	COMPOUND COMPLEX	TOTAL SENTENCE
1.	Introduction	16	2	9	0	27
2.	Findings and discussion	43	3	30	1	77
3.	Conclusion	11	0	10	0	21
	TOTAL	70	5	49	1	125
	PERCENTAGE	56%	4%	39%	1%	100%

LINGUISTIC NS

NO	PART OF ARTICLE	SIMPLE SENTENCE	COMPOUND	COMPLEX	COMPOUND COMPLEX	TOTAL SENTENCE
1.	Introduction	6	0	3	0	9
2.	Findings and discussion	66	7	53	2	128
3.	Conclusion	3	1	2	0	6
	TOTAL	75	8	58	2	143
	PERCENTAGE	53%	6%	41%	1%	100%

The types of sentences that used in linguistic articles from non native speakers and native speakers mostly use simple sentence around 50-56 %. The use of compound complex sentence is only 1 %. Therefore, both also still use compound sentence in their article about 39-41 %.

Table 12: findings of Noun Phrase in Subject position in Non Native Speakers articles

Noun Phrase structure in a simple sentence in the subject position

article	phrase structures																						
	Pre-modification Distribution													head distribution			post modification distribution						
	art	poss	dem	q	num	semi-det	wh-det	adj	ed-	ing	N	other	total	N	propernoun	total	relativizer	to-clause	-ing clause	-ed clause	prepositional	other	total
elt-nns	29	0	9	3	4	1	0	3	0	0	6	3	58	65	8	73	2	0	0	1	13	2	18
medical-nns	16	1	3	7	6	2	0	15	0	1	14	10	75	54	7	61	1	0	2	1	3	11	18
linguistic nns	35	0	11	5	3	0	0	12	0	2	4	17	89	73	4	77	2	3	0	0	9	1	15
total	80	1	23	15	13	3	0	30	0	3	24	30	222	192	19	211	5	3	2	2	25	14	51
average	26.6667	0.333	7.667	5	4.333	1	0	10	0	1	8	10	74	64	6.333	70.33	1.667	1	0.667	0.667	8.333	4.667	17
percentage	36%	0%	10%	7%	6%	1%	0%	14%	0%	1%	11%	14%	100%	91%	9%	100%	10%	6%	4%	4%	49%	27%	100%

mpound sentence in the subject position

article	phrase structures																						
	Pre-modification Distribution													head distribution			post modification distribution						
	art	poss	dem	q	num	semi-det	wh-det	adj	ed-	ing	N	other	total	N	pronoun	total	relativizer	to-clause	-ing clause	-ed clause	prepositional	other	total
elt-nns	2	0	2	0	0	0	0	0	0	0	0	0	4	5	3	8	0	0	0	0	1	0	1
medical-nns	6	0	3	5	2	0	0	2	0	0	4	1	23	10	1	11	1	1	0	0	0	0	3
linguistic nns	7	0	0	0	0	0	0	3	0	1	1	3	15	10	0	10	0	0	0	0	1	0	0
total	15	0	5	5	2	0	0	5	0	1	5	4	42	25	4	29	1	1	0	0	2	0	4
average	5	0	1.667	1.667	0.667	0	0	1.667	0	0.333	1.667	1.333	14	8.333	1.333	9.667	0.333	0.333	0	0	0.667	0	1.333
percentage	36%	0%	12%	12%	5%	0%	0%	12%	0%	2%	12%	10%	100%	86%	14%	100%	25%	25%	0%	0%	50%	0%	100%

Noun Phrase structure in a complex sentence in the subject position

article	phrase structures																						
	Pre-modification Distribution													head distribution			post modification distribution						
	art	poss	dem	q	num	semi-det	wh-det	adj	ed-	ing	N	other	total	N	pronoun	total	relativizer	to-clause	-ing clause	-ed clause	prepositional	other	total
elt-nns	63	4	27	3	6	1	0	4	1	1	17	8	135	132	31	163	2	0	1	4	13	1	21
medical-nns	11	0	1	5	4	0	0	6	0	0	14	3	44	31	6	37	0	0	0	0	4	1	5
linguistic nns	28	2	5	2	2	1	0	8	0	1	2	23	74	60	7	67	0	0	0	0	9	0	9
total	102	6	33	10	12	2	0	18	1	2	33	34	253	223	44	267	2	0	1	4	26	2	35
average	34	2	11	3.333	4	0.667	0	6	0.333	0.667	11	11.33	84.33	74.33	14.67	89	0.667	0	0.333	1.333	8.667	0.667	11.67
percentage	40%	2%	13%	4%	5%	1%	0%	7%	0%	1%	15%	13%	100%	84%	16%	100%	6%	0%	3%	11%	74%	6%	100%

Noun Phrase structure in a compound-complex sentence in the subject position

article	phrase structures																						
	Pre-modification Distribution													head			post modification distribution						
	art	poss	dem	q	num	semi-det	wh-det	adj	ed-	ing	N	other	total	N	pronoun	total	relativizer	to-clause	-ing clause	-ed clause	prepositional	other	total
elt-nns	2	0	0	0	0	0	0	0	0	0	0	0	2	2	2	4	0	0	0	0	0	0	0
medical-nns	0	0	2	2	0	0	0	0	0	0	0	0	4	4	0	4	0	0	0	0	0	0	0
linguistic nns	2	0	0	0	0	0	0	0	0	0	2	2	4	3	0	3	0	0	0	0	0	1	1
total	4	0	2	2	0	0	0	0	0	0	2	2	10	9	2	11	0	0	0	0	0	1	1
average	1.33333	0	0.667	0.667	0	0	0	0	0	0	0.667	0.667	3.333	3	0.667	3.667	0	0	0	0	0	0.333	0.33
percentage	40%	0%	20%	20%	0%	0%	0%	0%	0%	0%	20%	20%	100%	82%	18%	100%	0%	0%	0%	0%	0%	100%	100%

C Discussion

Based on Biber explanation (2002:42), He stated that noun phrase has its characteristics. The characteristics of noun phrase are about the modifications. The modifications are divided into two types. The types of

modifications are pre-modification and post-modification. The distribution of pre-modification is determiners such as articles, possessive, demonstrative, quantifier, semi-determiner, wh-, adj, -ed, -ing, noun, and others. There are four head distribution such as noun, proper noun, adjective and prepositional. Post-modifications distribution has five types. The five types of post-modifications distribution are relativizer, to-clause, -ing clause, -ed clause, prepositional.

Based on the previous research conducted by Musgrave (2014) stated that noun phrase modification used in the academic writing. Each noun phrase has own modification. In this research, the finding shows that the research journal articles use noun phrase modification. In each noun phrase modification, there are pre-modification distribution, head distribution, and post-modification distribution. The findings reveal that noun phrase modification in research journal article written by non native speakers and native speakers has each distribution. The noun phrase modification is dominated by articles, noun and prepositional.

From the findings above, some differences and similarities of research journal articles written by native and non native has been found. The use of the sentences written by native and non native commonly use simple sentence. Meanwhile, in the article of English language teaching (ELT) written by non native speaker mostly use complex sentence. In the other

hand, ELT written by native speaker use simple sentence in overall part of the articles.

NATIVE		phrase structures																						
article	pre-modification distribution													Head Distribution			post modification distribution							
	art	poss	dem	q	num	semi-det	wh-det	adj	ed-	ing	N	other	total	N	propenoun	total	relativizer	to-clause	-ing clause	-ed clause	prepositional	other	total	
elt-nns	19	1	8	1	4	1	0	6	1	2	7	1	51	46	10	56	0	0	2	0	9	0	11	
elt-nns	9	0	2	1	0	0	0	1	0	0	1	1	15	7	3	10	0	0	0	0	3	1	2	
elt-nns	13	1	9	1	0	0	0	1	0	0	2	3	30	33	14	47	0	0	1	0	4	1	6	
elt-nns	0	0	0	0	0	0	0	0	0	0	0	0	0	2	4	6	0	0	0	0	0	0	0	
medical-	11	1	1	1	4	0	0	5	0	0	3	4	30	36	1	37	1	0	0	0	1	11	13	
medical-	2	0	3	2	2	0	0	2	0	0	0	2	13	13	0	13	0	0	0	0	0	0	2	
medical-	4	1	4	2	3	0	0	1	0	0	3	2	20	23	4	27	0	0	0	1	3	4	8	
medical-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
linguistic	45	1	9	4	4	0	0	27	0	0	17	10	117	78	7	85	1	0	2	0	7	0	10	
linguistic	5	0	4	1	1	0	0	2	0	0	0	1	14	11	3	14	0	0	0	0	0	0	1	
linguistic	33	1	6	3	2	1	0	21	1	0	9	7	84	66	15	81	0	0	0	0	6	1	7	
linguistic	0	0	0	0	0	0	0	1	0	0	2	0	3	3	2	5	0	0	0	0	1	0	1	
elt-nns	27	3	1	0	1	0	0	9	0	3	8	4	56	53	0	54	5	1	4	3	24	0	37	
elt-nns	5	1	1	1	1	0	0	1	0	0	0	2	12	12	1	13	0	0	1	0	1	0	2	
elt-nns	23	2	3	1	1	2	0	13	2	1	2	1	51	38	2	40	0	0	0	0	10	1	10	
elt-nns	0	2	0	0	0	0	0	0	0	0	2	0	4	2	0	2	0	0	0	0	0	0	0	
medical-	11	0	0	2	1	0	0	4	0	0	13	3	34	13	0	13	0	0	0	0	2	2	4	
medical-	1	0	0	0	0	0	0	0	0	0	2	1	4	8	0	8	0	0	0	0	0	0	0	
medical-	5	1	3	0	1	0	0	3	0	1	4	0	18	17	4	23	0	0	0	1	1	1	3	
medical-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
linguistic	1	0	0	0	0	0	0	2	0	0	1	0	4	2	0	2	0	0	0	0	0	0	0	
linguistic	5	0	0	1	1	0	0	4	0	0	3	2	16	8	0	9	0	0	0	0	1	0	1	
linguistic	27	3	0	4	1	1	1	21	4	2	12	13	89	58	0	62	1	1	1	0	22	6	31	
linguistic	1	0	0	0	0	0	0	2	0	0	1	0	4	2	0	2	0	0	0	0	0	0	0	
total	247	18	54	25	27	5	1	126	8	9	92	57	669	531	70	609	8	2	10	6	95	28	149	
average	10.292	0.75	2.25	1.0417	1.125	0.2083	0.0417	5.25	0.3333	0.375	3.8333	2.375	27.875	22.125	2.9167	25.375	0.3333	0.0833	0.4167	0.25	3.9583	1.1667	6.2083	
percent	37%	3%	8%	4%	4%	1%	0%	19%	1%	1%	14%	9%	100%	87%	11%	100%	5%	1%	7%	4%	64%	19%	100%	

NON NATIVE SPEAKERS		phrase structures																						
article	pre-modification distribution													Head Distribution			post modification distribution							
	art	poss	dem	q	num	semi-det	wh-det	adj	ed-	ing	N	other	total	N	propenoun	total	relativizer	to-clause	-ing clause	-ed clause	prepositional	other	total	
elt-nns	29	0	9	3	4	1	0	3	0	0	6	3	58	65	8	73	2	0	0	1	13	2	18	
elt-nns	2	0	2	0	0	0	0	0	0	0	0	0	4	5	3	8	0	0	0	0	1	0	1	
elt-nns	63	4	27	3	6	1	0	4	1	1	17	8	135	132	31	163	2	0	1	4	13	1	21	
elt-nns	2	0	0	0	0	0	0	0	0	0	0	0	2	2	2	4	0	0	0	0	0	0	0	
medical-	16	1	3	7	6	2	0	15	0	1	14	10	75	54	7	61	1	0	2	1	3	11	18	
medical-	6	0	3	5	2	0	0	2	0	0	4	1	23	10	1	11	1	1	0	0	0	0	3	
medical-	11	0	1	5	4	0	0	6	0	0	14	3	44	31	6	37	0	0	0	0	4	1	5	
medical-	0	0	2	2	0	0	0	0	0	0	0	0	4	4	0	4	0	0	0	0	0	0	0	
linguistic	35	0	11	5	3	0	0	12	0	2	4	17	89	73	4	77	2	3	0	0	9	1	15	
linguistic	7	0	0	0	0	0	0	3	0	1	1	3	15	10	0	10	0	0	0	0	1	0	0	
linguistic	28	2	5	2	2	1	0	8	0	1	2	23	74	60	7	67	0	0	0	0	9	0	9	
linguistic	2	0	0	0	0	0	0	0	0	0	2	2	4	3	0	3	0	0	0	0	0	1	1	
elt-nns	21	0	0	4	2	1	0	11	0	2	6	4	51	41	1	47	0	0	0	0	7	5	12	
elt-nns	0	0	0	1	0	0	0	0	0	0	0	0	1	6	0	6	0	0	0	0	1	0	1	
elt-nns	32	8	6	7	4	0	0	5	0	3	24	9	98	84	0	89	1	0	0	0	9	10	20	
elt-nns	32	8	6	7	4	0	0	5	0	3	24	9	98	84	0	89	1	0	0	0	9	10	20	
medical-	17	0	0	5	5	0	1	8	2	2	12	11	63	24	1	27	1	0	1	6	16	0	24	
medical-	4	0	0	1	0	0	0	0	0	2	4	0	11	5	0	5	0	0	0	0	2	0	2	
medical-	9	0	1	0	0	0	0	6	0	0	12	1	29	14	0	15	1	0	0	1	2	0	4	
medical-	0	0	0	0	1	0	0	3	1	0	1	0	6	3	0	3	0	0	0	1	1	0	2	
linguistic	33	1	1	4	3	1	0	11	0	0	9	8	71	44	0	46	0	3	0	1	23	1	28	
linguistic	3	0	0	1	0	0	0	1	0	0	4	1	10	9	0	10	0	0	0	0	1	0	1	
linguistic	31	3	1	6	3	0	0	14	0	0	6	10	74	49	0	58	0	1	0	0	13	3	17	
linguistic	0	0	1	1	0	0	0	1	0	0	0	3	6	2	0	2	0	0	0	0	0	0	0	
total	383	27	79	69	49	7	1	118	4	18	166	126	1045	814	71	915	12	8	4	15	137	46	222	
average	16	1.13	3.29	2.88	2.04	0.29	0.04	4.92	0.17	0.75	6.92	5.25	43.5	33.9	2.96	38.1	0.5	0.33	0.17	0.63	5.71	1.92	9.25	
percent	37%	3%	8%	7%	5%	1%	0%	11%	0%	2%	16%	12%	100%	89%	8%	100%	5%	4%	2%	7%	62%	21%	100%	

