



Comparing Formulaic Sequences in English as a Lingua Franca and English as a Native Language in Academic Lectures



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ABSTRACT

The high significance of Formulaic sequences (FSs) in each language is an acceptable issue which almost all scholars have consensus over it. This study aimed at comparing the use of FSs in Lingua Franca English (ELF) and English as Native Language (ENL) lectures. Additionally, it attempted to discover the textual and structural functions of used FSs in two corpora of lectures. Finally, it aimed at finding the position of FSs in sentences. To this end, two corpora, namely the transcribed corpus of spoken English of ELF and Michigan were selected to be studied. From each corpus, 50,000 words were selected. The study employed Antconc software in order to accomplish its goal. Then, 638 FSs were extracted from previous studies and examined one by one in corpora. They were analyzed from different perspectives according to the objectives of the study. The results indicated non-native speakers used FSs more than native ones. Moreover, the most used textual function was sapio-temporal one both by non-native and native speakers. The most used structure by both groups was prepositional phrase. Furthermore, both groups used FSs in initial position more than other positions. The present study has implications for students, teachers, curriculum and course developers.

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1. Introduction

As an appropriate way for improving language learners' communicative skills, fixed expressions or chunks have been at the center of focus within applied linguistics. These words are formulaic sequences (FSs) which are also recognized by other terms such as lexical bundles, chunks, and formula. Wray (2008) defined FSs as words which have "an especially strong relationship with each other in creating their meaning" (p. 9). FSs are some prefabricated multi-word structures (Appel, & Trofimovich, 2017) that are in human brains' repertoire as wholes and are recalled when the individuals are engaged in a conversation (Wood, 2010). The word formulaic can cover various types of formulaic language such as proverbs, idiomatic expressions, collocations, perplex word forms, and fixed sequences (Myles & Cordier, 2017). Semantically, the strings of words which are formulated in a fixed order, are retrievable the same as single lexical blocks of language (Schmitt, 2004). However, it seems that scholars agreed that FSs are some prefabricated multi-words that store in the brain as a whole and retrieve as a whole as well (Wood, 2010) and have been recognized as an essential feature of native speaker's language (Le-Thi, Rodgers & Pellicer-Sánchez, 2017).

Biber, Johansson, Leech, Conrad, and Finegan (2002) demonstrate that 30 percent of the spoken language, and around 21 percent of formal tutorial texts contain prefabricated chunks. In terms of Conklin and Schmitt (2008), half of the spoken and written texts are prefabricated language and are considered as an essential part of native speaker's language knowledge which help them achieve

communicative impact (Wray, 2017). Use of predictable and fixed expression is a helpful way for native speakers to show how competent (Boers & Lindstromberg, 2008) and fluent in communication (Schmitt, Jiang, & Grabe, 2011) they are in their mother tongue. Cognitive psychology analysis unconcealed language speakers' obsession for the frequent happening of a wide range of FSs (Ellis, 2008).

Knowledge of FSs has been reported to affect significantly foreign language (FL) reading performance (Kremmel, Brunfaut, & Alderson, 2017) and writing proficiency (Bestgen, 2017). The use of FSs also help FL learners sound more fluent in their speech (McGuire & Larson-Hall, 2017) and their usage is critical to the success of communicative acts (Buerki, 2018). Besides, teaching FSs can help language users avoid grammatical errors (Jiang & Nekrasova 2007). The use of FSs is a kind of safe zone for the students, and also suitable use of FSs might lower the risk of errors when learning a FL (Boers & Lindstromberg, 2008). Besides, accustomed to stuck chunks of language will facilitate students to be appeared as native speakers (Howarth, 1998).

The study of FSs is not a new topic within linguistics. Many researchers have studied FSs inside and outside Iran. However, the present study is going to look at this issue differently. First, it uses a new framework for data analysis which is Halliday's (2014) textual functions of formulaic sequences. This model exactly points to the term of formulaic sequences which might be different from other terminologies such as lexical bundles or chunks which were mentioned in older models. Second, the present study uses lingua franca instead of English native oral texts. It is believed that lingua franca is a kind of English which is different form native English;

however, comprehensible yet. This type of language employed by people who do not share the same culture and first language (L1) and its focus is mostly on accomplishing business goals is lingua franca. English as a lingua franca (ELF) is widespread round the world and is useful in fulfilling wants once individuals cannot perceive one another through their L1s.

The present study breaks the hegemony of native English and its focus on a type of language which is used by non-native users and different from native ones. The reason is that language teaching tries to make language learners proficient communicators rather than English native speakers. As a result, the present study is different from the previous studies since it uses a new and different model for data analysis and it uses different data which is lingua franca. According to the study's purposes in which the focus of the study is on formulaic sequences, following questions are raised:

- RQ₁: What are the most frequent formulaic sequences in ELF and ENL lectures?
- RQ₂: What are the structures of formulaic sequences in ELF and ENL lectures?
- RQ₃: In which positions (initial, middle, end) of a sentences do formulaic sequences happen in ELF and ENL lectures?

2. Review of Literature

Ford and Thompson (1986) studied the combination of conditional clauses in written and spoken English texts and found out that conditional clauses happen mostly in sentence-initial position. Field and Yip (1992) compared the use of FSs in written tasks of native and non-native students and maintained that written academic texts by non-native students might provide more appropriate control data set than native students'

writing. The frequency use of FSs was studied by Milton and Tsang (1993) and stated that overuse of FSs was observed. Likewise, Connor (1996) investigated the frequency of FSs in written texts and found no significant difference in the use of FS between native speakers and advanced learners. Similarly, Granger and Tyson (1996) examined the issue of overuse of FSs in written texts by French language learners. According to their findings, French learners tended to underuse some FSs like *as a result*, overused linking adverbials such as *in doing so*. In a similar study, Altenberg and Tapper (1998) showed that advanced Swedish English learners' written essays showed a kind of underuse of FSs. Moreover, Zhang (2000) investigated the use of FSs in Chinese's essays and found no relationship between the number of FSs used and the quality of their writing. Bolton, Nelson, and Hung (2002) examined the use of FSs in native and EFL learners' argumentative texts and indicated that EFL learners employed more FSs than native ones. Additionally, they found that EFL learners mostly focused on the initial FSs. Wood (2006) conducted a study in order to see how learning prefabricate chunks might affect language learners' speaking ability. He claimed that the FSs could help language learners be more fluent when using English in the real-world situations if the language users memorize them as a whole and recall them in the target situation as a whole. Chen also (2006) investigated the frequency of FSs in written texts by MA students in Taiwan and asserted that overuse of FSs by some participants in written texts was witnessed. Similarly, Jalilifar (2008) conducted a study in order to find out how Iranian EFL learners used FSs in their writing tasks and revealed that as the number of FSs was higher in the essays, the quality of the written texts was higher as well. Chen and

Baker (2010) carried out a study on FSs in L1 and L2 academic writing and they concluded that the use of some of the FSs are discipline specific. In line with previous studies, Valipoor (2010) and Parvizi (2011) investigated the use of FSs in the discipline of education and confirmed that different genres rely on the use of peculiar lexical bundles. Moreover, Rahimi (2011) investigated the frequency of FSs in two genres of written essays as produced by 54 Iranian EFL learners and indicated that FSs were used in argumentative texts more than the expository ones. Talebinejad and Namdar (2011) conducted a study in the Iran in which the use of FS in the reading textbooks were investigated and the results showed that FSs are not sufficiently used in the reading section of Iranian texts which causes comprehension problems for the learners. Zareva (2011) investigated the frequency of FSs in the English speaking skill of students' academic presentations and his results showed that the overuse of some specific FSS was common by them. Lei (2012) examined Chinese graduated students' use of FSs in their theses and found that they overused FSs. Similarly, Staples, Egbert, Biber, and McClair (2013) investigated the frequency of FSs and their use by English students and confirmed that lower level learners use more FSs in their writing.

In summary, it can be understood that teaching the use of FSs can be an appropriate way for improving language learners' communicative skills, has an important role in language teaching and learning. Additionally, they are also of high significance for native speakers. The literature shows that the language segments have not received due attention within linguistics. Moreover, these language components which make up somehow 50 percent of English language have not been studied in Iranian

context. Thus, to fill this gap in the literature, a thorough study is needed to be conducted. The present study aims to fill the gap through analyzing the use of FSs in Persian and English texts from different perspectives.

3. Methodology

The present study enjoyed a mixed methods design by focusing on quantitative and qualitative analysis. However, the data collection method and analysis made it more quantitative rather than qualitative. In fact, the study was an embedded experimental type of mixed methods design that Creswell (2014) specifies as a kind of study in which weighting of qualitative and quantitative parts are unequal and they happen concurrently. In the interpretation of the results, the researcher merges them.

3.1. Corpus

The present study used two different corpora in order to collect data. In fact, it extracted half of the target data from the corpus of transcribed spoken academic lingua franca English (ELF) which is a one-million-word corpus. This corpus consists of spoken academic lectures which have been presented by non-natives English users. The second part of data was extracted from Michigan Corpus of Academic Spoken English (MICASE) which is a corpus of English native spoken texts. Since the focus of this study was identifying formulaic sequences used in spoken lectures as presented by native and non-native English users, the corpus needed to be compiled carefully to serve this purpose.

In terms of the size of the corpus, the principle followed which was suggested by Biber (2006). He argues that a corpus must be large enough to decently represent the occurrence of the features being studied. He also explains the

importance of corpus size emphasizing that it depends on the purpose of the study. Thus the present study selected 100,000 words from two corpora, approximately 50,000 from each one. They were selected randomly.

3.2. Instruments

The present study used one instrument in order to collect the desired data.

3.2.1. Antconc software

Antconc is a freeware, multiplatform tool for carrying out corpus linguistics research and data-driven learning. This software which was developed by Laurant Antony (2007) includes tools such as Concordance, Concordance plot, File view, Clusters, Collocates, Word list and Keyword list among which clusters and

concordances are the most practical and useful tools for identifying lexical bundles with different length in large or small corpora.

Using other software such as word office, plain texts were produced and counted in terms of the number of words and became ready to be uploaded to Antconc. Using cluster tool and giving files to this software, the cluster size was counted. Then, different keywords or search terms such as articles, to be verbs, modals, prepositions, demonstrative adjectives were typed. A cut-off frequency of 20 in one million words was set as well. Giving these features to Antconc, this tool displayed clusters of words that surrounded a search term and ordered them alphabetically or by frequency.

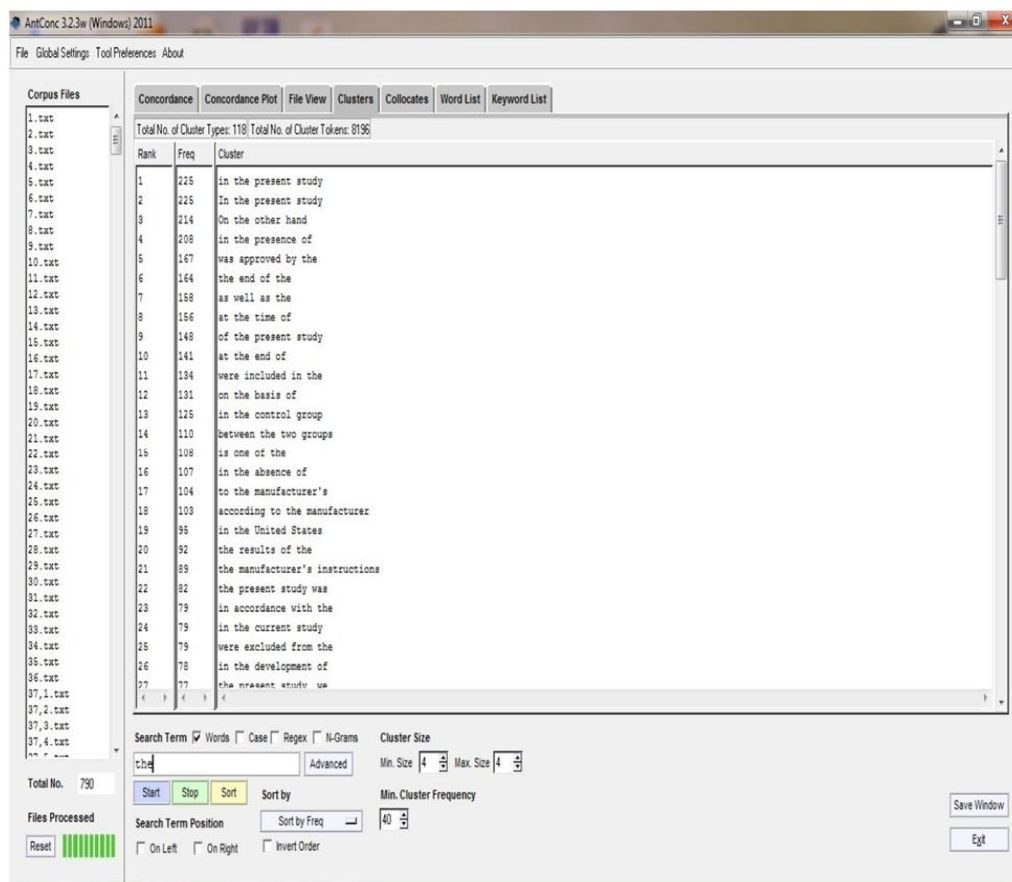


Figure 3.1. Antconc screenshot showing the bundles

3.3. Procedure

First of all, the lectures were drawn from the corpora. There were two different corpora and

50,000 words were drawn from each of them. These selected words were changed to word office document to be readable by Antconc. Next, the FSs were drawn from different works such as

Halliday (2014), Wang (2017), and Wang (2018). There were 638 FSs which were of different lengths and structures. The selected FSs were used one by one when searching them in the corpora.

3.4. Data Analysis

The study used two frameworks to analyze the

data. Formulaic sequences have a specifying potential when employed in different registers; they can signify the type and purpose of the research projects. To meet the determined aims, Halliday's (2014) functional classification was utilized. Table 3.1 shows Halliday's (2014) classification.

Table 3.1. Classification of textual functions

Category	Sub-category	Function	Example
Elaboration	exposition	Restatement or re-presentation of an element	In other words, I mean Which means that You know
	Exemplification	Providing more details by example	For instance Let's say
	Clarification	Making the elaborated element more precise by means of particularizing, summarizing, evaluating, etc.	In particular, at least all in all, in fact
extension	additive	Adding new information related to the current information	In addition, Neither ... nor Apart from
	Adversative	Expressing a replaceable, subtractive, or alternative relationship	on the other hand in contrast
	Variation	Expressing a replaceable, subtractive, or alternative relationship	not ... but either ... or
Enhancement	Spatio-temporal	Signposting the macro-structure of the discourse; referring to physical or abstract entities	with regard to, first of all I'll show you if you look at, as I said
	Causal-conditional	Expressing logical connection between adjacent utterances (e.g. causal-resultative, conditional, concessive)	as a result, for that reason if ... then, despite that even though
	Manner	A statement X is made by means of comparison with another statement Y, or simply via Y.	as ... as as well by which means

In order to study the structure of FSs, Biber et al. (2002) framework was used. The structure

of FSs is presented in Table 3.2.

Table 3.2. Classification of textual structure

Noun phrase with <i>of</i> -phrase fragment	<i>the existence of,</i>
Other noun phrases	<i>the present study</i>
Prepositional phrase + <i>of</i>	<i>as a consequence of</i>
Other prepositional phrases	<i>with respect to</i>
Passive + prepositional phrase	<i>are shown in</i>
Anticipatory <i>it</i> + verb or adjectival phrase	<i>it is likely that</i>
Copula <i>be</i> + adjective phrase	<i>is consistent with</i>
(Verb phrase or noun phrase) + <i>that</i> -clause fragment	<i>this suggests that</i>
(Verb or adjective) + <i>to</i> -clause fragment	<i>to account for</i>
Adverbial clause fragment	<i>as described before</i>
Other expressions	<i>as well as</i>

The frequency, position, and structure of the FSs were presented and explained in detail.

4. Results

4.1. Frequency of Formulaic Sequences

Selecting the appropriate framework and using

Antconc software, it was revealed that non-native English speakers used more FSs than native ones regarding both the type and frequency of them. However, not all searched FSs were presented in the both corpora. There were 421 different types of FSs in ELF corpus and 396 FSs in Native corpus.

Table 4.1. Top 50 Formulaic Sequences in Order of Frequency

Rk	Fq.	FSs in ELF corpus	Rk.	Fq.	FSs in native corpus
1	23	as well as	1	26	as well as
2	22	in order to	2	21	the rest of
3	19	the rest of	3	19	the use of
4	19	the results of	4	18	in order to
5	18	the role of	5	17	more likely to
6	17	of social sciences	6	15	of present studies
7	17	in this study	7	15	the relationship between
8	15	in terms of	8	14	in terms of
9	14	the present study	9	14	the role of
10	14	the use of	10	11	the fact that
11	13	the journal of	11	11	the number of
12	13	on the other	12	11	the effect of
13	13	the effect of	13	10	the importance of
14	12	of teaching language skills	14	10	as a result
15	12	the relationship between	15	10	a number of
16	11	in other words	16	10	the evolution of
17	10	quality of life	17	10	the case of
18	10	of this study	18	9	the development of
19	10	on the other hand	19	9	the end of
20	9	the fact that	20	9	the same time
21	9	the development of	21	9	in this study
22	9	the most important	22	8	the university of
23	9	as a result	23	8	at the same
24	9	of foreign affairs	24	8	on the other
25	8	of the study	25	8	the context of
26	8	the number of	26	8	to engage in
27	8	in the region	27	8	the effects of
28	8	the process of	28	8	the impact of
29	8	a number of	29	7	at the same time
30	8	the study of	30	7	the process of
31	8	the importance of	31	7	the nature of
32	8	in line with	32	7	the study of
33	8	in the following	33	7	in the same
34	7	of the country	34	7	likely to be
35	7	in this regard	35	7	a series of
36	7	the end of	36	6	of this article
37	7	the history of	37	6	in the context of
38	7	with respect to	38	6	the concept of
39	7	it seems that	39	6	are more likely
40	7	the impact of	40	6	the politics of
41	7	the ministry of	41	6	annual review of
42	7	this study was	42	6	can be found
43	7	the lack of	43	6	on the other hand
44	6	the findings of	44	6	the emergence of
45	6	in addition to	45	5	the issue of
46	6	in relation to	46	5	a result of
47	6	the analysis of	47	5	ways in which
48	6	in the present	48	5	the idea of
49	6	the context of	49	5	in the first
50	6	at the same	50	5	are more likely to
total	511		total	467	

The results of data analysis showed that 421 FSs with frequency of 1423 were used in 50,000

words of ELF corpus. It meant that 2.8 percent of the words were FSs. On the other hand, 396 FSs

with frequency of 1371 were used by native speakers. Thus, 2.7 percent of native speakers' words were FSs. It was indicated that non-native English speakers used FSs more than native ones. Additionally, non-native speakers used 421 FSs which was more than the 396 FSs that native speakers used. The conclusion was that non-native speakers overused the FSs. Furthermore, the top ten frequently used FSs by non-native speakers were *as well as, in order to, the rest of, the results of, the role of, of social sciences, in this study, in terms of, and the present study*. On the other hand, the top ten frequently used FSs by native speakers were *as well as, the rest of, the use of, in order to, more likely to, of present studies, the relationship between, in terms of, the role of, and the fact that*.

There were 8 FSs which were common between two groups among top ten frequent one. Non-native speakers used *the results of* and *the present study* among top ten frequent FSs which were not present among top ten frequent one by native ones and also native speakers used *more likely to* and *of present studies* which were absent in top ten list by non-native ones. *as well as, the rest of, the use of, in order to, the relationship between, in terms of, the role of, and the fact that* were the 8 common FSs between two corpora which had the top frequency of use.

Considering the Halliday's (2014) textual classification, there was not a difference between native and non-native English speakers.

Table 4.2. Distribution of FSs of Different Functional Categories in the Data

Category	Sub-category	Example	Non-native	native
Elaboration	exposition	In other words, I mean	158	163
	Exemplification	For instance, Let's say	215	208
	Clarification	In particular , at least	57	51
extension	additive	In addition, Neither ... nor	178	170
	Adversative	on the other hand, in contrast	103	102
	Variation	not ... but, either ... or	95	89
Enhancement	Spatio-temporal	with regard to, first of all if you look at, as I said	285	260
	Causal-conditional	as a result, for that reason if ... then, despite that	217	209
	Manner	as ... as, as well	115	119
total			1423	1371

The result of data analysis indicated that spatio-temporal FSs were the most used one both by non-native and native speakers. Non-native speakers used 285 spatio-temporal FSs and native ones used 260 of them. Causal-conditional FSs were in the second rank for both groups. Non-

native speakers used 217 causal-conditional, whereas native ones used 209 of them. The third frequently used FSs were exemplification for both groups as well. Non-native speakers used 215 exemplification FSs, while native ones used 208 of them. Therefore, it was concluded that the

most frequently used FSs were almost equal to both groups concerning their textual functions.

4.3. Structures of Formulaic Sequences

The second research question was *what are the*

structures of formulaic sequences in ELF and ENL lectures? This question was answered considering Biber et al. (2002) textual structure framework in which 11 types of FSs were presented.

Table 4.3. Classification of textual structure

Structure	Example	Non-native	Native
Noun phrase with <i>of</i> -phrase fragment	<i>the existence of,</i>	220	228
Other noun phrases	<i>the present study</i>	71	62
Prepositional phrase + <i>of</i>	<i>as a consequence of</i>	292	281
Other prepositional phrases	<i>with respect to</i>	342	334
Passive + prepositional phrase	<i>are shown in</i>	160	162
Anticipatory <i>it</i> + verb or adjectival phrase	<i>it is likely that</i>	66	58
Copula <i>be</i> + adjective phrase	<i>is consistent with</i>	37	35
(Verb phrase or noun phrase) + <i>that</i> -clause fragment	<i>this suggests that</i>	25	19
(Verb or adjective) + <i>to</i> -clause fragment	<i>to account for</i>	48	41
Adverbial clause fragment	<i>as described before</i>	46	40
Other expressions	<i>as well as</i>	116	111
Total		1423	1371

The categorization of FSs revealed that the largest structural category of FSs was prepositional phrases, making up about 634 (with and without “of”) of the total number of FSs for non-native speakers and 615 for native ones. Therefore, non-native English speakers used more prepositional phrases than native ones. Noun phrases were used with overall frequency of 291 and 290 for non-native and native speakers respectively and verb phrases were used with frequency of 176 and 135 for non-native and native speakers respectively. The less frequently used group of FSs was verb phrase + that clause fragments with frequency of 25 and 19 for non-native and native speakers respectively. As it was demonstrated, non-native speakers overused the

FSs. However, the rank of used phrase was the same for both groups.

4.4. Position of Formulaic sequences

The second research question was *in which positions (initial, middle, end) of a sentence do formulaic sequences happen in ELF and ENL lectures?* The results of data analysis showed that 76 percent of FSs used by non-native speakers happened in the initial part and 24 percent of them happened in the middle part of the sentences, whereas 72 percent of FSs used by native speakers happened in the initial part, 27 percent happened in the middle part, and less than one percent happened at the end of the sentences.

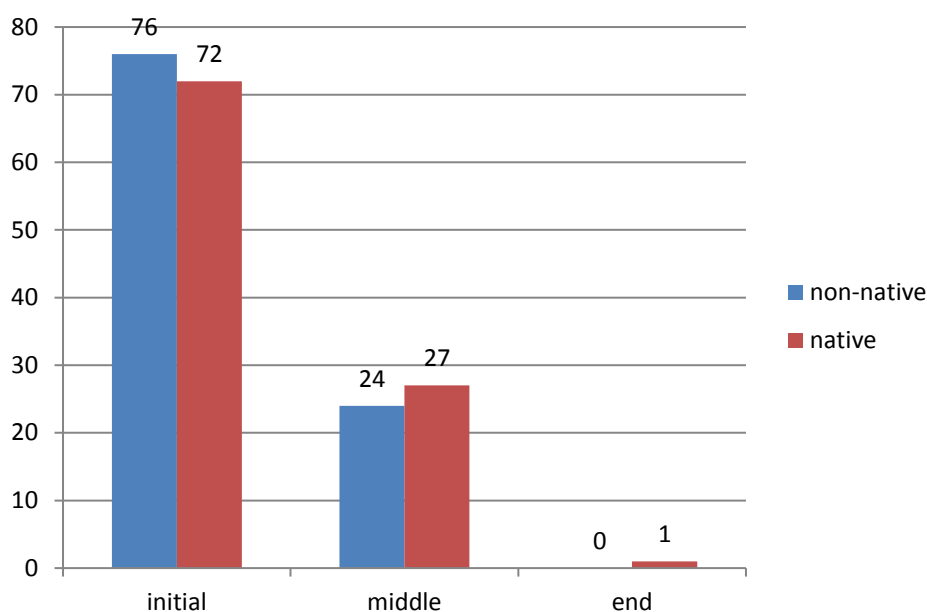


Figure 4.1. Position of FSs in a sentence

It can be seen how FSs were used in native and non-native corpora. Non-native speakers used FSs mostly initially and did not use them at the end of sentences. Although native speakers used FSs in the three positions of a sentence, they also used them mostly in the initial position.

5. Discussion

The present study aimed to scrutinize the formulaic sequences in two corpora, namely spoken academic lingua franca English corpus and Michigan Corpus of Academic Spoken English one. In fact, the study attempted to discover the most frequently used FSs by native and non-native English speakers. Additionally, it aimed at detecting the textual and structural functions of used FSs by native and non-native speakers regarding their frequency. Furthermore, the position of FSs was examined in both corpora. Regarding the first research question, the results of data analysis revealed that *as well as*, *in order to*, *the rest of*, *the results of*, *the role of*, *of social sciences*, *in this study*, *in terms of*, and *the present study* were the most frequently used FSs by non-

native speakers respectively, while *as well as*, *the rest of*, *the use of*, *in order to*, *more likely to*, *of present studies*, *the relationship between*, *in terms of*, *the role of*, and *the fact that* were the most frequently used FSs by native ones respectively. Additionally, it was shown that non-native speakers overused FSs. Moreover, there was no difference between non-native and native corpora concerning textual function of FSs. The results of this study showed that 1423 FSs and 1371 FSs were used by non-native and native speakers respectively which were equal to 2.8 and 2.7 percent of whole words, while in studies carried out by Jalali (2009), Valipoor (2010), and Parvizi (2011), the percentage of FSs was different. For example, Jalali identified 0.2, 0.5, and 1.5 percent in the three corpora of research articles, master dissertation and doctoral thesis in applied linguistics respectively, while Valipoor found 1.8 percent in the 4,000,000 corpus of chemical research articles. In her study, Parvizi (2011) found just 1.9 percent in a 2 million corpus in the field of education. A comparison between the first twenty FSs in the

present study and other three mentioned studies revealed that the common FSs among them were: *on the other hand, on the basis of, as well as the* with different frequency and those which were available in the present study but not in other three studies were: *of the present study, in the control group, in the current study, are shown in table, this study was to*. Identifying and comparing lexical bundles in published articles and students writing in disciplines of history and biology, Cortes (2004) found that there were 0.9 percent FSs in history and 1.2 percent FSs in biology. In both disciplines, it was found that phrasal bundles were leading structures with a difference that bundles in history belonged to two structural groups of noun and prepositional phrases while in biology, a wide variety of structural groups were covered. A comparison between the first twenty bundles of medicine, history, and biology was done and it was found that just nine bundles were common (*the end of the, on the other hand, as well as the, at the end of, in the case of, on the basis of, in the absence of, it is possible that, in the presence of*) (Baker, 2011). In another comparison between the above mentioned number of bundles of current study and the study carried out by Hyland (2008) showed bundles which were not common: *at the time of, were more likely to, in the control group, in the current study, are shown in table, his study was to, in the absence of*. The result are also in line with Chen and Baker (2010) who concluded that some of the lexical bundles are discipline specific because they are identified in this but not in other studies: *in the present study, at the time of, were more likely to, the results of the, of the present study, as shown in fig, in the control group, in the current study, are shown in table, this study was to, it is important to*. Additionally,

it was concluded that FSs were mostly frequent in spoken language comparing the results of the present study and previous ones.

Regarding the second research question, the results of data analysis did not find any difference between non-native and native speakers. Jalali (2009), Valipour (2010) and Parvizi (2011) found that 75%, 55% and 84% of bundles were phrasal, respectively. As the same as present study, in these studies *prepositional phrase (with and without) + of* were the most frequently used FSs as well. Besides, Chen and Baker (2010) showed that most of native expert lecturers used wide range of noun and prepositional phrases, while English and Chinese students used more verb phrase bundles than expert writers. In her study, Cortes (2004) revealed that bundles in history were mostly noun and prepositional phrases, while in biology more structural categories were found. Moreover, a comparison between students and published writing indicated that most of the students rarely used bundles identified in published writings. Thus, it can be seen that mode of telling and genre can be detrimental in the use of FSs.

Regarding the last research question, the results of data analysis showed that both non-native and native speakers used FSs in initial position more than other positions and non-native speakers did not use FSs at the end of sentences.

5.1. Conclusion

The present study intended to discover the frequency of formulaic sequences in spoken language in two different corpora which were the corpus of transcribed spoken academic lingua franca English and Michigan Corpus of Academic Spoken English. Moreover, the study was an attempt to detect the frequency of FSs in

the corpora concerning their textual and structural function. The position of FSs in the sentences in both corpora was the other objective of the study. In fact, the study made a comparison between non-native and native English speakers to see how they were different or similar in using FSs. To this end, two corpora which consisted of lectures were selected. One corpus contained non-native English speakers' lectures and the other one consisted of native English speakers' lectures. Finally, 100,000 words were drawn from both corpora randomly. Thus, there were 50,000 words for each corpus. Two frameworks, namely Halliday (2014) and Biber et al. (2002) were used to study the frequency of FSs. The frequency and position of FSs were found out through using Antconc software.

The results of data analysis showed that the most frequently used FSs by non-native speakers were as well as, in order to, the rest of, the results of, the role of, of social sciences, in this study, in terms of, and the present study and the most frequently used FSs by native speakers were as well as, the rest of, the use of, in order to, more likely to, of present studies, the relationship between, in terms of, the role of, and the fact that were the most frequently used FSs by native ones respectively. Additionally, it was revealed that non-native speakers used more FSs than native ones. Moreover, spatio-temporal function was the most used ones by both non-native and native speakers and the less used one by both groups was clarification function. The results of data analysis also indicated that prepositional phrases were the most frequently used ones by both groups. Noun phrase structure was the second frequently used structure by both groups. The less frequently used one was verb phrase + that structure. Finally, the results of data analysis

indicated that most of FSs were used in the initial position by both groups. Non-native speakers did not use FSs at the end of sentence, while native speaker used.

The findings of the present study might be useful for different groups. Having a ready-made inventory of the most common FSs can not only help students who intend to write for international magazines and journals, but also saves the time and energy to a large extent since writers do not need to think of sequencing several words one after another or have doubts about the accuracy of using certain words together. Curriculum developers may utilize the lists of FSs as a complementary inventory to be added to the list of new words or expressions English books usually contain. Alternatively, a list of commonly used expressions can replace the traditional lists of new words at the end of each course. That way, students do not memorize only long lists of single words without gaining any deep insight on the way these words combine with other strings. Moreover, lists of FSs give the chance for EFL students to be able to learn longer stretches of words, thereby enhancing their writing skill level. Students can also benefit from these lists through getting familiar with different functions each FSs serves in sentences and conversations. As a result, their speaking skill may be positively influenced through using multiword strings for their intended functional interactions. Moreover, course developers for business corporations can also benefit from this inventory since introducing the expressions commonly utilized in authentic speech and writing paves the way for raising the validity and international acceptance of the final production.

There were some limitations and delimitation in the present study. First of all, the

lectures of speakers came from different individuals with different characteristics. These factors could not be controlled to make a homogeneous sample. Second, genre of lectures was not controlled which might affect the results of the study. Last, Antconc could not make a difference between different lectures. It considered them as a whole.

As there were some limitations, the present study suggests the lectures presented by Iranian

English speakers be compared with both other non-native speakers and native speakers to find out how Iranian English users might be different from or similar to them concerning the use of FSs. Also, a study can be conducted to detect whether personal and social characteristic affect the use of FSs or not. Moreover, a study can be conducted to compare written and spoken language of both non-native English speakers and native ones.

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