A Corpus-Based Study of Conjunction Used in Academic Writing by Saudi ESL Learners

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Abstract: The purpose of this paper was to investigate the frequency of English connectors usage in the writing of pre-intermediate learners of ESL and present findings based on a quantitative approach methodology. Furthermore, the data was monitored within a short corpus built from written essays by ESL students of King Saud University. Other research related to Saudi students' writing has tackled the 'underuse', and 'overuse' of connectors despite their investigation of causes, this study limited itself to the analysis of both stages that calculated both the frequency of items either the basic and advanced as long as their underuse and overuse. This study used the quantitative method because it is appropriate to measure the frequency of using connectors by students. The results showed that both stages prove the underuse of academic connectors such as (*moreover, however,* and *furthermore*). On the other hand, the result illustrated a fundamental overuse of a wide range of basic connectors such as (also, but, so, and, with, etc.). The findings offer no evidence of reason beyond the avoiding of some connector usage as it is not the primary aim of this paper.

Keywords: learners writing, ESL writing, academic writing, cohesion, connectors, over\under -use

1. Introduction

English language became essential in all stages of education in the Arab world. Its dominance worldwide became a catalyst for most countries to include learning English in curricula and to promote its learning among citizens. In Saudi Arabia, students start learning English as early as the first grade. All Saudi Universities offer majors in the English language. Therefore, several issues associated with learning a foreign language face all kinds of learners. These issues include, but are not limited to, speaking, reading, listening and writing (Ahmad, 2020). A major concern to university students in academic writing and the optimal use of grammatical rules related to conjunctions.

Cohesive devices are important parts of writing that help make connections and transitions between ideas, improving the overall quality of the writing. These connecting devices are important because they help link paragraph phrases and clauses together. They are also important for creating coherence in the text (Unubi, 2019). Conjunctions, or words that join ideas together, are responsible for creating the

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connections between different statements and organizing the structure of a text. Conjunctions are important words that help hold sentences together. In simpler terms, research has looked at reading materials to see how skilled and less skilled readers use implicit logical relationship symbols (Halliday, 1976).

Conjunctions are words that connect different parts of a text. They can suggest implicit relationships between these parts. Writing is a very hard skill to learn in English language classes. Saudi students who are learning English struggle to write clear and logical text in English. The problems include how poorly the information is organized the thesis statement is appropriate, how there are enough examples and details, or the limited vocabulary. There are also issues with how cohesive devices are used incorrectly. Cohesion and coherence are two important things to have in good writing (Othman, 2019).

Connectors in non-native Saudi students' writing, such as moreover, however, also and so, are used by students in forming short paragraphs. Non-use of advanced connectors as (nevertheless, furthermore, hence. etc.) is common among speakers, both native speakers or non-native speakers, can mentally exist logical relationship in the debate in case they are not explicit. On the other hand, misuse always causes comprehensive misunderstanding and perhaps prevent the natural decoding (Lee & Briggs, 2021). The researcher noticed weakness among students in the use of conjunctions in general and aimed to explore the issue. The hypothesis this paper investigated was that non-native writers in English use certain conjunctive cohesive devices to organize their writing different than students who study English as a foreign language.

1.1. Problem Statement

Saudi students face several difficulties in performing their academic writing tasks. Helping these students to overcome such difficulties is based on a comprehensive understanding of the nature of these problems. Because using conjunctions is basic to academic writing, it is important to explore their usage by students in terms of adequacy, frequency and appropriateness. Crucial issues such as the group of 'connectors' identified in written academic texts (assignments, quizzes), and, the analysis and comparison used in some tasks are quantitively measured. A key matter here is that determining validity was affected by the methodology selected, as it led the researcher to set comparability of the results. This research aims to discover the most used connectors of King Saud University students who are in the premediate level of the English language. Moreover, the research presented here focuses on the comparison of the use of connectors in the student's writing. The results will be conducted within the comparison of their corpus approximately built around 52,000 words.

1.2. Question of the study

The study tried to answer the following questions:

1. What is the frequency of using English conjunctions in academic writing of pre-intermediate ESL students at King Saud University?

1.3. Significance of the study

This research provided input into the necessity to teach English language appropriately to master the proficiency of the dilemma that determines when and where a connector should be included in academic writing style. The results of the study will help instructors focus on the weaknesses of students when it comes to using connectors. The findings will also help educators understand the level of their students to urge instructors to use the appropriate techniques and teaching styles.

1.4. Delimitations

The study was limited to students at King Saud University in the academic year 2022-2023. The results were also limited to the used instrument and the data collection technique.

2. Literature Review

Writing is among the skills that EFL students need to obtain capability in English. It is respected as more advanced since it measures students' capacity to utilize dialect and go deeper into specific thoughts (McKinley, 2018). Academic writing in English requires any student to illustrate abilities both within the frame and within the work of the English dialect (Marshall & Marr, 2018). Therefore, writing is a tool for ESL students, where they show they ability to expand and clarify thoughts and attend to language-related concerns essentially after their thoughts have been portrayed. Writing is based on considering choices by the author on lexical choices, basic alternatives and conceivable organization of data and concepts (Obeiah & Bataineh, 2016).

Coherence is the integration of different elements inside the text. Halliday and Hasan (2014) argued that "A text is a discourse passage which is coherent in these two respects: it is coherent concerning the context of the situation and, therefore, consistent in the register; and it is coherent concerning itself and, therefore, cohesive' (p. 23). Cohesion includes the usage of linguistic devices that create relationships between the different parts of a sentence or a text to create meaning. The use of such devices is based on the intention of the writer and the space grammatical rules allow such writer to navigate and create meaningful outputs (Akhtar & Riaz, 2019; Atayeva et al., 2019). Several tools for cohesion cover reference, addition, substitution, conjunction and lexical network. This categorization relies on an etymological frame, which can be recognized within the lexico-grammatical framework (Puspita et al., 2019). Lexical cohesion includes different choices, which are based on the lexical reservoir of the speaker, as well as the surrounding environment to produce specific utterances or structures (Dang, 2020).

Cohesive conjunctions, additionally known as conjunctive relations, insinuate to 'help to develop clauses of elaboration, development, and enhancement'. Semantically speaking, conjunctions allow language users to connect parts of the sentences and clauses according to temporal course of action, result, comparison and extension (Puspita et al., 2019). The first type includes additive conjunctions, which include *and*, *or*, *so*, *for but*, *nor*, *and yet*. Each of these connectors is used for a specific function, but they all share the function of adding information or negating the addition of information. These conjunctions are also called coordinating conjunctions as they coordinate the connection between the parts of sentences (Wu & Baccanello, 2019; Cutri et al., 2021).

The second type of conjunction is the subordinating conjunction. Their primary function is to help in connecting parts of the sentences based on cause-and-effect relations. They also help in connecting parts based on time and special relations. These conjunctions include, *however, moreover, furthermore, therefore*, among others (Lamb et al., 2019). English language speakers use these connectors in academic circles, and most students use them in academic writing. These kinds are also called conjunctive relations by Halliday and Hasan (1976) as these conjunctions depict diverse sorts of relations of expansion, refutation, time grouping, reason and reason within the sentences or clauses. Causal conjunctions outline the text's reason, result and reason relations. These conjunctions are advance separated into four sub-categories: causal common, turned around causal, conditional causal, and particular causal (Nirwanto, 2021; Albana et al., 2020).

2.1. Previous studies

Neuner (1987) explored using cohesive devices among weak and strog premediate levels of essays at native universities. Neuner claimed that cohesion can be achieved by using different devices particularly in academic essays by freshmen, putting into account the reference chains, conjunctions, and lexicon ties.

Several studies tackled the issue of cohesion and using conjunction in academic writing. Ahmad (2020) studied the argumentative essays written by Saudi EFL students to see how much the cultural background affects the use of cohesive devices in academic writing. The findings from a study using non-parametric correlation analysis showed that culture did affect the choice of cohesion devices. However, it was not strong enough to support the claims made in previous research. The use of the same words throughout the text was the most important way of keeping it together and related to the culture it is about. Other less important ways included using words like "and", general words, and referring to things already mentioned.

Kuswoyo et al. (2020) examined how English native-speaker and non-nativespeaker engineering students use cohesive conjunctions. The goal was to understand how often they use these words and why they use them. The study analyzed a total of 63680 words from students' writing products. The most commonly used logical connectors were analyzed using the 'AncConc' software. The results show that both groups used cohesive conjunctions in the same way, and most of the connectors were used correctly. The results showed that both English native-speaking and non-nativespeaking engineering lecturers used the words 'so' and 'and' strategically to connect information.

Othman (2019) investigated the mistakes made by male students in Saudi Arabia who are studying English. The study attempted to understand what types of mistakes they make, how often they make them, and why they make them in their written paragraphs. 40 parts of exams from the middle of the first term of the second year of 2019 were selected. The study found that students made errors in using three cohesive devices, which are substitution, reference, and conjunction, in their written paragraphs. So, they were used to fix mistakes in writing. The most common mistakes were using conjunctions wrongly 52% of the time, using references incorrectly 37% of the time, and substituting words incorrectly 11% of the time.

Amayreh and Bin Abdullah, (2022) examined how EFL fourth-year students at Hashemite University in Jordan use conjunctions to connect ideas in expository essays. They gathered a collection of 30 informative essays by selecting them on purpose. The findings revealed that additive conjunction was used the most often, making up 57. 70% of the total. Causal conjunction is used the second most frequently at 6. 44%, followed by adversative conjunction and temporal conjunction, each at 3. 64%.

Alyousef (2021) explored how students in Saudi Arabia who are studying dentistry in English use different ways to connect ideas in their spoken biology lessons. The results found that students used different ways to connect their ideas in their writing. They mostly used similar words, followed by referring back to previous ideas and using words like "and" to join things together. Although ellipsis was not often used in oral biology texts, it was used for a specific purpose: to make it easier to remember information by using bullet points and numbered lists.

3. Methodology

3.1. Research Design

This investigation used the quantitative method because it is appropriate to measure the frequency of using connectors by students. This paper monitored at least two major methodological issues that arose where the study procedure was conducted, which are (i) identifying linguistic items as 'connectors'; and (ii) the measurement of 'overuse' and 'underuse of connectors that quantitatively measured using some techniques and software tools such as (Antconc) where the researcher compared the findings to the previous studies issues. By referring to the first issue, most researchers appear to take the identification of such items as uncontroversial and given within their studies. For example, Field (1992) bases his analysis on Halliday and Hasan's (1976) categorization.

3.2. Data collection

In this paper, the data consisted of over 90 essays derived from (assignments and quizzes) written by undergraduates at King Saud University. These corpora comprise around (52,000 words. In addition, the author examines the concordance of several connectors such as (moreover, however, also, and so on) referenced to the major two methodological concerns identified as mentioned previously. Moreover, the connectors in terms of (overuse and underuse) of their frequency of occurrence times were calculated. First, the list of connectors was purposely chosen to meet the student's level of language proficiency, such as (also, however, moreover. etc). These connectors were the most (overused) connectors as they showed the consideration of the compatible usage among pre-intermediate students and significantly related to the pedagogic and reference grammar existing in their curriculum as they were trained to during their learning. The sample comprises over 52,000 words. Our approach here was to identify these connectors used by non-native learners and measure their occurrences in a valid corpus.

4. Results and Discussion

The current study attempted to find the frequency of using conjunctions (connectors) by pre-intermediate university students. Table 1 below shows a selected list of the coordinating conjunctions found in corpora that were collected from students' texts. The table presents their raw frequencies, and their overused and underused data monitored in their academic writing.

Table 1.

conjunction	Frequency per 52,000 words
and	311
also	193
but	104
with	82
Or	57
So	41
Total	788

Frequency of using coordinating conjunctions

Table 1 shows that the use of basic connectors greatly occurred in students' writing as they avoided using advanced conjunctions. The reason behind their abandoned usages needs to be extensively studied. However, the author assumed the reason underlies avoiding some advanced connectors was related to their unprofessional usage of language. In the university stage, students still practice several aspects of the language. they need deeper knowledge and experience before they start to produce professional texts.

The major methodological consideration that this study investigated is the calculation 'ratio of occurrence'. According to Table 1, the most frequent connectors used by pre-intermediate Saudi students were (and, also, but, with, or, and so). Students' inclination to use simpler conjunctions could be because of the familiarity of

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these connectors with the students' levels. Students find it easier to remember these connectors and use them in sentences. Students also tend to use simple and compound sentences often because it is easier than complex sentences. These results are in consensus with previous research on the use of English conjunctions (Kuswoyo et al., 2020; Othman, 2019; Alyousef, 2021). These studies showed the frequent use of coordinators by students more than other devices of cohesion.

The focused part was to compare the most frequent items regarding the plethora frequencies of English connectors as this study monitored within a short corpus. Accordingly, the most frequent item is (and) by over than (311) occurrences. Therefore, some connectors showed slight differences in occurrence ratio, however, they have significant result to measure the non-native learners' preferences as findings may have sharp differences in case the corpus have more than a million words and vice versa. In terms of the overused connector, the second stage of the analysis showed that the item (and) was a significantly overused connector by occurring (311 per 52,000), followed by the connector (also) as it occurred (193). The connector (so), however, was calculated as the least frequent item among the list of basic connectors as occurred only (41) times. Some advanced connectors were monitored within this investigation, therefore, they have less than 5 occurrences that are not worth discussing.

The study also selected some advanced conjunctions (subordinating conjunctions) to check their frequency. The following table shows the rare frequency of academic connectors (however, moreover, furthermore, and therefore) as they show the unproficiency of ELS pre-intermediate learners.

Table 2.

Frequency of using subordinating conjunctions		
Connector	Frequency per 52,000 words	
However,	11	
Moreover	3	
Furthermore	0	
Therefore	0	

Frequency of using subordinating conjunctions

Table 2 shows less use of subordinating conjunctions by students. The connector 'however' was used the most, followed by moreover with 3 frequencies per 52,000 words. The other two connectors 'furthermore and therefore' were not used at all by students. Students face difficulties building up complex and complex compound sentences. This result was reported in different studies within the Saudi context (Othman, 2019; Ahmad, 2020; Alyousef, 2021).

The underuse of advanced conjunctions in English could be rationally predicted, however, the research ethics never allowed merely predictions of such an educational phenomenon. In fact, in similar cases, a pedagogical finding must be built regarding a completed scientific investigation/research. Puspita et al. (2019) argued that EFL students have challenges in using English language advanced conjunctions due to their complexity and the lack of vocabulary reservoir. It is vital to understand that all language skills are intertwined and mostly depend on each other.

In summary, the corpus shows considerable various levels of overuse of basic connectors and remarkably shows much smaller levels of advanced English connectors underuse, outcomes restricted on the part of all the students' collected texts. Academic writing requires the use of both basic and advanced conjunctions and other devices of creating cohesion in the text. Therefore, it is vital for instructors to focus on using optimal techniques and methods to encourage students in pursuing learning more about cohesion.

5. Conclusion

By analyzing the chosen corpus of writings, we were able to detect basic and advanced connectors as well as determine the overuse and underuse of these connectors across students' writings at KSU. The results revealed that the overuse of connectors is built on basic items rather than advanced, but is a prominent feature of students' academic writing generally as they are considered to be pre-intermediate level. As a result, both stages of measures are quantitively approached. The overuse of some connectors shows a lack of repertoire of lexical proficiency. Their academic writing was poor because of advanced connectors. Based on the corpora outcomes, the items such as *and*, *with*, *so*, *also*, and *but*, were the most frequent connectors with a frequency of more than (788). The ratios occurrence of linguistic behaviour helped in the identification of the most used connectors by our sample. It is clear that students are inclined towards using the basic forms of connectors due to their familiarity and simplicity. As indicated above, this study was a way far from investigating the reasons beyond the two stages of analysis, thus, it meant to monitor the connectors in both areas (basic and advanced) frequency respectfully.

The study recommends conducting a deeper analysis of the reasons behind such underuse and overuse of connectors. It is also recommended to expand the circle of the sample of this study to include different universities and other educational stages. The study urges future research to focus on other cohesion devices English language speakers use.

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