Conjunctions in Argumentative Writing of Libyan Tertiary Students

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Abstract
The aim of this study was an attempt to investigate the use of conjunctions in argumentative essays written by English as a Foreign Language fourth-year undergraduate Libyan students majoring in English at Omar Al-Mukhtar University in Libya. A corpus of 32 argumentative essays was collected from a sample of 16 students in order to be investigated in terms of Halliday and Hassan’s (1976) taxonomy of conjunction. Findings showed that the Libyan EFL students used the conjunctions inappropriately, and that the adversative conjunctions posed the most difficulty for the learners, followed by additives and causals. Of the adversatives, on the other hand was the most difficult conjunction for the participants, followed by but and in fact. With the use of additive conjunctions, moreover was the most problematic, followed by and and furthermore. Among the causals, the conjunction so was the most challenging, followed by because. The findings of this study confirm previous studies that learners of English as a foreign language have difficulty in using conjunctions in their writing. The difficulties encountered by participants in employing the conjunctions can be attributed to three reasons: 1) first language (Arabic) negative transfer; 2) overgeneralisation in the second language (English) and 3) the presentation of conjunctions in lists in ESL/EFL textbooks without showing the subtle difference between them in terms of semantic function. These findings are discussed in this paper with implications for teaching the use of conjunctions in the Libyan context.

Keywords: Libyan EFL undergraduate students, conjunctions usage, appropriate, inappropriate, argumentative essays (English)

1. Introduction
Writing has been proven to be the most difficult language skill for learners of English as a second language/English as a foreign language (Ting, 2003; Ong, 2011) and even for native speakers (Norrish, 1983). Apparently, as Prommas and Sinwongsuwat (2011) assert, writing is more difficult than speaking in that in written communication there is no additional means of help in terms of nonverbal expressions, such as gesture, facial expressions, and head movement, to ensure that the message is accurately conveyed. Hence, it is important for ESL/EFL learners to write in a way that makes the message clear for the reader. Not only does academic writing require the ability of university students to construct grammatical sentences, but it also requires the ability to construct cohesive text using conjunctions. Conjunctions signal logical relations in a text and help the reader to connect different units and paragraphs to make sense of the text (Heino, 2010), and as such, they are some of the most important cohesive devices.

However, no correlation has been found between the use of cohesive ties and coherence in writing development (Granger & Tyson, 1996). Nevertheless, the use of conjunctions has been found to be problematic for second and foreign language learners and also for native speakers of English. Nippold, Schwarz and Undlin (1992) conducted a study to investigate the comprehension and production of conjunctions in American high school and university students. They found that even though these students were able to master conjunctions in reading tasks, they had trouble with writing.

Several studies (Crewe, 1990; Field & Yip, 1992; Chen, 2006; Heino, 2010; Martinez, 2004) have shown the underuse, overuse and misuse of conjunctions by ESL and EFL students. These studies have also found that these learners have problems in the application of conjunctions. Few studies, however, have investigated the use of conjunctions in Arabic-speaking EFL or ESL learners’ writing (Hinkel, 2001; Mohamed-Sayidina, 2010; Abdalwahid, 2012). Indeed, these studies have given scant attention to the investigation of conjunctions which
connect inter-sententially such as moreover, however, and for example. In order to bridge this gap, the present study targets tertiary Libyan students majoring in English as a Foreign Language.

2. Literature Review

Halliday and Hasan (1976, p. 226) define the term conjunction as “Conjunctive elements are cohesive not in themselves but indirectly, by virtue of their specific meanings; they are not primarily devices for reaching out into the preceding (or following) text, but they express certain meanings which presuppose the presence of other components in the discourse”.

Whilst there are a number of labels used in the literature to refer to conjunctions, they all perform the same function in texts. Quirk, Greenbaum, Leech, and Svartvik (1985) and Zamel (1983) refer to them as conjunctions. Others have adopted different labels, for example: connective adverbs (Huddleston & Pullum, 2002); connectors (Granger & Tyson, 1996); discourse markers (Fraser, 1999; Parrot, 2000); discourse connectors (Cowan, 2008); linking adverbials (Biber, Conrad, & Leech, 2002); logical connectives (Crewe, 1990); and logical connectors (Celce-Murcia & Larsen-Freeman, 1999). Following Halliday and Hasan’s (1976) framework, the term conjunction is used throughout this study.

Halliday and Hasan (1976) categorise conjunctions into four subcategories: additive, adversative, causal and temporal. These four categories are described as follows. First, the additive devices—and, furthermore, for instance, and similarly—are used to link discourse units of semantic similarity. The additives introduce discourse units which repeat and emphasise the key point or add relevant new information to the previously mentioned expressions. Second, the adversative discourse connectors yet, nevertheless, however, in fact, and instead introduce information that mark corrections, contrasts, and opposites in light of previous information. Third, the causal devices, such as, hence, therefore, because, as a result, and in this regard, are used to introduce information that is a result or consequence of the preceding discourse. And finally, the temporal devices—for instance, first, at last, next, previously, and simultaneously—are employed to relate two discourse units with sequential, simultaneous, and preceding relations. These four categories reflect four semantic relations between sentences in text. It is thus important for students to understand the role of conjunctions in organizing written text.

The significance of conjunctions is to signal logical relations in a written text and increase the readability of it (Geva, 1992; Heino, 2010). Ting (2003) asserts that conjunctions are important elements for creating coherent texts; their presence should cause coherence and hence contribute to the quality of the text. Schleppegrell (1996, p.272) points out that, “Conjunction is a grammatical resource for indicating links within texts”. Zamel (1983) asserts that it would be difficult, without conjunctions, to make sense of ideas, since these conjunctions prepare the readers to anticipate the ideas which follow. Hence the appropriate use of conjunctions as an essential skill to acquire as students learn to write has been asserted by researchers on discourse and writing pedagogy (Cook, 1989; McCarthy, 1991).

Several studies have attempted to illustrate how conjunctions contribute to better understanding of written discourse. The findings of these studies have been, to some extent, contradictory. Some studies have shown no significant link between the deployment of cohesive devices and the quality of writing (Castro, 2004; Johnson, 1992; Zhang, 2000). Others have contended that there is a positive correlation between a number of cohesive devices and good writing (Ferris, 1994; Field & Oi, 1992; Jin, 2001; Neuner, 1987). Supporting the studies contending that cohesive devices affected the quality of text, Liu and Braine (2005), in a study using Halliday and Hasan’s (1976) framework, investigated the use of cohesive devices in fifty argumentative essays written by Chinese undergraduate students. Their findings revealed that there was a significant relationship between the number of conjunctions used and the quality of the argumentative writing created by these undergraduate students. Moreover, Sanders and Noordman (2000) indicate that conjunctions help the reader to construct representations, since they provide clear-cut information about the relation between segments. Based on what has been mentioned above, it is explicit that the appropriate use of conjunctions contributes to the clarity and comprehensibility of a text.

However, the application of conjunctions has been found to be challenged for ESL/EFL learners. The problematic of conjunction usage has been investigated by several empirical studies in ESL/EFL learners’ writing. Granger and Tyson (1996) carried out a corpus-based study on connector usage in essays written by French students. They applied qualitative analysis to compare and contrast between French EFL learners and native English speakers in light of connector usage. Their choice of connectors was based on the list in Quirk et al.’s (1985) model of conjunctions. Written essays were collected from French EFL students and native speakers, to be investigated in terms of conjunction usage. The results revealed no overuse of conjunctions in general by the French
learners in their English essay writing, compared with native speakers of English. The results also showed that corroborative, appositive and listing types of connectors were overused in the French learners’ writing. The results also illustrated that the eight conjuncts—however, instead, though, yet, hence, therefore, thus and then—were underused by the French students. The results revealed that the misuse of conjunctions results in semantic and syntactic aspect. Granger and Tyson inferred that the significant overuse and misuse of indeed in the French learners’ writing was very likely L1-related transfer.

A further corpus-based study, conducted by Narita, Sato, and Sugiuira (2004), to investigate the use of logical connectors in essays written by advanced Japanese EFL learners, compares its use in comparable types of native speakers of English. They also present a brief comparison of Japanese learners’ usage with that of advanced French, Swedish or Chinese learners of English. Twenty-five conjunctions were selected, based on the list of logical connectors in Biber, Johansson, Leech, Conrad, and Finegan. (1999) and Quirk et al. (1985). They found that the overuse of first, moreover, in addition and of course was significant, whereas there was an apparent underuse of the logical connectors such as then, yet and instead. The findings also showed that certain similarities and differences among the four learner groups in the use of connectors were evident. Hence it can be deduced that the influence of L1 transfer on the learners’ use of conjunctions remains indeterminate.

Meisuo (2000) conducted a study to investigate the use of cohesive devices in expository compositions written by Chinese second-year English major students, using both quantitative and qualitative methods. One hundred and seven essays were collected from two universities in China. Halliday and Hasan’s (1976) taxonomy of cohesive devices and their framework for analysis were used. Pertaining to conjunction, the findings showed that the students were inclined to overuse and misuse a variety of additives (and, also, besides, in addition, moreover, furthermore) and temporals (first, first of all, secondly, thirdly, finally), and also misuse some adversatives (but, however, on the other hand, at the same time).

By the same token, Ting (2003) investigated cohesive errors in Chinese tertiary EFL students’ compositions (80 essays), using quantitative and qualitative methods. Halliday and Hasan’s (1976) taxonomy of cohesive devices and their framework for analysis were used. Regarding conjunction, Ting revealed that the use of conjunctions was a weak area for all writers of English with a Chinese first language background. Ting’s findings revealed that students’ essays contained more adversative and additive errors than causal and temporal errors. A high percentage of errors in adversative conjunctions were found in the use of connectors on the other hand and at the same time, where they were applied without any explicit or implied contrast. Ting attributed this to L1 (Chinese) interference. Ting also found that learners used unnecessary additive conjunctions to link short and simple sentences. In conjunction errors of causality, the analysis showed that the learners confused the appropriate order of the cause and the effect. It was found the number of errors in using temporal conjunctions was the smallest.

Lai (2008) conducted a corpus-based study to investigate the use of discourse connectors in the writing of Taiwanese EFL undergraduate writers, applying both quantitative and qualitative analysis. One hundred and eight conjunctions were selected for analysis based on Halliday and Hasan’s (1976) taxonomy of cohesive devices. One hundred and two essays were analysed in the mode of comparison and contrast written by 25 skilled and 26 unskilled Taiwanese undergraduate writers. His quantitative results indicated that the unskilled learners used conjunctions more frequently than the skilled ones, while his qualitative findings generally revealed that even though both groups used conjunctions appropriately, they committed errors in utilising some conjunctions (furthermore, in other words, besides, on the contrary, nevertheless, by contrast, hence, therefore, because) in their writing.

Ong (2011), using quantitative and qualitative analyses, examined the application of cohesive devices in expository essays. The expository essays were written by a group of 20 Chinese EFL learners, who were studying at a local university in Singapore. Ong’s study was based upon an error analysis paradigm and Halliday and Hasan’s (1976) cohesion framework and taxonomy. The results of the study, regarding conjunctions, showed that the inappropriate use of adversative and additive conjunctions represented the most frequent conjunction errors committed by learners. The qualitative analysis revealed that simple additive conjunctions, such as and, in addition and moreover, were used without the cohesive effect of adding to new or more information. It was found that the learners used the wrong adversatives to express adversative relations, for example, whether for however and even for even if.

A further study was conducted by Hinkel (2001), to make comparisons between native speakers and non-native speakers in utilizing cohesive features in their compositions, using 898 academic essays written by American, Japanese, Korean, Indonesia, and one hundred and forty-five Arabic learners. The results illustrated that Japanese and Korean learners applied the same coordinating conjunctions as did native speakers. Conversely, Indonesian
students’ essays included less cohesive ties than native speakers’ compositions, while Arab learners’ essays encompassed coordinators more than in native students’ writing.

Mohamed-Sayidina (2010) conducted a research to investigate the use of transition words and cohesive devices in English compositions written by Arabic-speaking ESL students, who were studying a course in academic English at the American University of Sharjah in the UAE. She found that Arabic speakers use more additive words than English speakers.

Recently, a study was conducted by Abdalwahid (2012), to scrutinize cohesion features in argumentative essay written by fourth-year English EFL Libyan students at Omar Al-Mukhtar University, Libya, using Halliday and Hassan’s (1976) cohesion theory. Thirty argumentative essays were collected from a sample of ten students. These essays were specifically analysed in terms of reference, conjunction, and lexical ties. Regarding conjunction, he concluded that the use of additive devices was the most problematic for learners, followed by adversative, causal, and temporal devices. The results also revealed that the students overused the additive *and*. He attributed the overuse of the additive *and* to negative transfer, resulting from the learners’ first language (Arabic).

According to this review of studies on the use of conjunctions in the Arabic context, it is found that these studies place little attention on investigating conjunction errors in terms of their semantic function. For example, the studies by Hinkel (2001) and Mohamed-Sayidina (2010) focused on the frequency of use of conjunctions to make comparisons between native and non-native speakers of English. Hinkel and Sayidina did not address the erroneous use of conjunctions in their study. In contrast, Abdalwahid (2012) investigated the application of conjunction only in Arabic students’ writing, instead of making a comparative study, by using the terms: “overuse”, “underuse” and “misuse” in describing conjunction errors. Even though Abdalwahid’s study scrutinized the erroneous use of conjunctions in students’ writing, he put little emphasis on conjunctions linking between sentences and paragraphs in terms of their semantic function.

With reference to the above discussion, the present study will differ from those studies conducted in the Arabic context since it examines comprehensively the use of conjunctions in terms of their semantic function. It focuses on conjunctions linking between sentences and not within them. Also, the terms “overuse”, “underuse” and “misuse”, which were used in previous studies, will be replaced with the terms “appropriate” and “inappropriate” to avoid the ambiguity in scrutinizing conjunctions usage. The present study is designed to investigate conjunction use in argumentative essay writing by Libyan tertiary students, and applies a qualitative approach in its investigation to gain an understanding of the issues under investigation.

### 2.1 Research Questions

The current study attempts to investigate the use of conjunctions by undergraduate Libyan EFL learners in argumentative writing. In doing so, it attempts to answer the following questions:

1) To which extent are conjunctions used appropriately or inappropriately?

2) Do some conjunctions cause more difficulties than others to undergraduate Libyan learners of EFL in argumentative writing?

### 2.2 Theoretical Framework of the Study

The selection of conjunctions for this study was based on Halliday and Hasan’s (1976) taxonomy of conjunctions. Halliday and Hasan divided the conjunctions into four subtypes; additive such as *furthermore* and *in addition*, adversative like *nevertheless* and *yet*, causal like *therefore* and *thus*, and temporal such as *finally* and *first*. The Halliday and Hasan’s (1976) taxonomy of conjunctions adapted in the current study to analyse conjunctions in Libyan students’ writing. The reasons for the selection of Halliday and Hasan’s (1976) taxonomy of conjunctions as a framework for this study were that they provided the most complete account of cohesive ties in English, and a comprehensive coding scheme for analysing the ties (Ong, 2011).

### 3. Method

#### 3.1 The Participants

The participants in this study were enrolled at Omer Al-Mukhtar University (Al-Beida Campus) in Libya. The sample comprised 16 fourth-year undergraduate students (8 male & 8 female) majoring in English as a Foreign Language, who received instruction in writing skills for three years at university level. All participants shared similar linguistic, cultural, and educational backgrounds. For example, they were all Libyan EFL learners with Arabic as their first language. These participants had been learning English for twelve years: two in the primary school, three in the preparatory school, three in the secondary school, and four in the university. In the primary,
preparatory, and secondary schools, the participants were only taught English grammar rules, whereas in the university, these participants were broadly taught the four macroskills—writing, speaking, reading and listening.

3.2 Instruments and Data

This study made use of two instruments for the purpose of collecting data. The first instrument is a questionnaire designed to gather participants’ demographic data. The second instrument comprised two argumentative essays of between 200-250 words written by each student (n=16) on two different topics.

3.3 Data Collection

The data (compositions) in this study were collected from the participants through the following steps. First, a demographic information questionnaire was distributed to all sixteen participants. Then the participants were asked to write two argumentative essays on the following topics:

Topic 1:
Children should be slapped on their hands when doing something wrong. To what extent do you agree or disagree with this statement?

Topic 2:
Drivers should be banned from using their cell phones while driving car. Do you agree or disagree with this statement?

The sixteen participants completed the two essays within a two-week period, and a total of thirty-two essays were collected.

3.4 Data Analysis

The data analysis procedure was based on previous studies conducted on the use of conjunctions in EFL writing, for example, Ting (2003), Lai (2008) and Ong (2011). Their investigations of conjunctions were based on identification, classification, and description of errors. However, the description of errors was replaced by specification of the appropriate and inappropriate use of conjunctions, since the description of errors describes the types of errors—misuse, overuse, and underuse. To analyse the data, a coding system based on the taxonomy of conjunctions by Halliday and Hassan (1976) was used.

Analysis of the data proceeded as follows: First, each conjunction linking between sentences or paragraphs was manually highlighted in the students’ writing. The researcher then read the texts again to classify the identified conjunctions in terms of their semantic functions. Having identified and classified the conjunctions, the researcher reread the texts to specify the appropriate and inappropriate use of conjunctions. The appropriate and inappropriate uses of conjunctions were identified individually according to their semantic function. Next, the top three conjunctions which were most frequently used by the participants, in each conjunction type, in terms of their percentage of inappropriateness were ranked. Finally, the top three conjunctions in each conjunction type were extracted to be discussed in terms of their semantic functions.

4. Findings

4.1 The Overall Percentage of Conjunction Use in Participants’ Written Texts

![Graph of the use of conjunctions in participants’ writing](image)

Figure 1. Total percentage of appropriate and inappropriate use of conjunctions in participants’ writing.
As shown in Figure 1, the highest frequency of inappropriate use of conjunctions committed by the learners was in the use of adversatives (76%), followed by causals (64.71%) and additives (45.45%).

4.2 Total Number of Appropriate and Inappropriate Use of Conjunctions in Participants’ Writing

Table 1. Total number of appropriate and inappropriate use of conjunctions in participants’ writing

| Subcategory | Appropriate | Inappropriate | Total |
|-------------|-------------|---------------|-------|
| Additive    | 17          | 16            | 33    |
| Adversative | 6           | 19            | 25    |
| Causal      | 6           | 11            | 17    |
| temporal    | 21          | 7             | 28    |
| Total       | 50          | 53            | 103   |

Table 1 shows that a total of 103 conjunctions had been used in participants’ written texts, of which 53 were used inappropriately.

4.3 The Appropriate and Inappropriate Use of Adversative Conjunctions

Table 2. The appropriate and inappropriate use of adversative conjunctions

| Conjunctions | Appropriate | Inappropriate |
|--------------|-------------|---------------|
|              | N | % | N | % |
| On the other hand | 1 | 12.5 | 7 | 87.5 |
| But          | 1 | 16.67 | 5 | 83.33 |
| In fact      | 1 | 20 | 4 | 80 |
| However      | 3 | 60 | 2 | 40 |
| Unlike       | 0 | 0 | 1 | 100 |

As shown by the data in Table 2, the highest frequency of inappropriate use of adversative conjunctions was *on the other hand* (7), followed by *but* (5), and *in fact* (4).

4.4 The Appropriate and Inappropriate Use of Additive Conjunctions

Table 3. The appropriate and inappropriate use of additive conjunctions

| Conjunctions | Appropriate | Inappropriate |
|--------------|-------------|---------------|
|              | N | % | N | % |
| And          | 1 | 20 | 4 | 80 |
| Moreover     | 0 | 0 | 4 | 100 |
| Furthermore  | 2 | 50 | 2 | 50 |
| For example  | 9 | 81.82 | 2 | 18.18 |
| For instance | 2 | 100 | 0 | 0 |
| Also         | 3 | 75 | 1 | 25 |
| In addition | 0 | 0 | 1 | 100 |
| In other words | 1 | 100 | 0 | 0 |
| As well as  | 1 | 100 | 0 | 0 |
As can be seen in Table 3, the additive conjunctions and and moreover had the highest frequency of inappropriate use (4) for each, followed by furthermore (2).

4.5 The Appropriate and Inappropriate Use of Causal Conjunctions

Table 4. The appropriate and inappropriate use of causal conjunctions

| Conjunction | Appropriate | Inappropriate |
|-------------|-------------|---------------|
|             | N | % | N | % |
| Causal      |   |   |   |   |
| So          | 6 | 42.86 | 8 | 57.14 |
| Because     | 0 | 0   | 3 | 100  |

In the inappropriate use of causal conjunctions, it was found that so had the highest frequency use of errors (8), followed by because (3).

4.6 The Appropriate and Inappropriate Use of Temporal Conjunctions

Table 5. The appropriate and inappropriate use of temporal conjunctions

| Conjunction | Appropriate | Inappropriate |
|-------------|-------------|---------------|
|             | N | % | N | % |
| Temporal    |   |   |   |   |
| First(ly)   | 2 | 66.67 | 1 | 33.33 |
| Second(ly)  | 4 | 80   | 1 | 20   |
| Final(ly)   | 3 | 75   | 1 | 25   |
| First of all| 4 | 80.00| 1 | 20.00|
| In conclusion| 5 | 83.33| 1 | 16.67|
| In the end  | 1 | 100  | 0 | 0    |
| To summarize| 1 | 50   | 1 | 50   |
| Then        | 1 | 50   | 1 | 50   |
| At that point| 1 | 100  | 0 | 0    |

Table 5 indicates that the use of temporal conjunctions was not problematic for the participants. The highest frequency of appropriate use of temporals was in the use of in conclusion (5), followed by first of all and final with the same frequency (4) for each.

5. Discussion

This study was conducted to investigate the use of conjunctions in the argumentative writing of Libyan EFL university students, and to have the following questions answered:

1) To which extent are conjunctions used appropriately or inappropriately?

2) Do some conjunctions cause more difficulties than others to undergraduate Libyan learners’ of EFL in argumentative writing?

In response to the first research question, the results of the study revealed that the participants used the conjunctions—adversatives, additives and causals—inappropriately in their writing and it thus weakened the logical connectivity between sentences and paragraphs. This finding is similar to what was reported in previous studies (see for example, Meisuo, 2000; Chen, 2006; Lai, 2008; Abdalwahid, 2012).

Results for the second research question showed that, among the four sub-categories of conjunctions, adversatives seem to be the most difficult for the participants, followed by additives, and causals (see Table 1). Some studies (Ting, 2003; Ong, 2011) concluded the same findings, that EFL learners committed more errors in using adversatives and additives than in using causals and temporals. The use of temporal conjunctions, however, was not challenged for the participants. The temporal conjunctions, therefore, were excluded from the discussion of findings.
The discussion focuses on the inappropriate use of individual conjunctions in participants’ written compositions, since the inappropriate use of conjunctions creates difficulty in reading comprehension. The discussion is presented according to the subcategories of semantic functions marked by conjunctions. The use of adversatives (on the other hand, but, in fact) is first discussed in section 7.1, followed by the use of additives (moreover, and, furthermore) in section 7.2, and the use of causals (because, so) in section 7.3.

5.1 The Use of Adversative Conjunctions

It was clearly found that the use of the conjunction on the other hand was a problematic area for the participants since the majority of instances of on the other hand were inappropriately employed as shown by the data in Table 2. The inappropriate use of such conjunction is illustrated in Example 1.

Example 1: Some parents think that slapping children on their hands is a good method of discipline because children benefit by avoiding bad behavior. *On the other hand, other parents think slapping children on their hands can damage child development and affect their personality.*

The student in Example 1 used the conjunction on the other hand to link between two sentences, inferring that the relation between them is contrastive. However, there is no contrastive relation between the two sentences since they are different ideas in parallel, given by two different groups of people; some parents and other parents. Since the two sentences are different and not contrastive ideas, the conjunction on the other hand is inappropriately used in this paragraph, as the function of on the other hand is to contrast two aspects or qualities of a single subject (Cowan, 2008). In Example 1, if the employment of on the other hand was substituted for however or but, the passage would be more coherent. There is a study by Meisuo (2000) that concluded a similar finding: that Chinese learners misuse the adversative conjunction on the other hand.

This problematic usage of on the other hand could be attributed, to a great extent, to semantic classification of conjunctions. Most ESL/EFL textbooks present conjunctions in lists without showing subtle differences between them in terms of semantic function. The conjunctions on the other hand, however, and but are classified under the same functional category: adversative. Therefore, the participants apparently believe that the conjunction on the other hand is used interchangeably with however or but.

The ability to use the conjunction but appropriately remains a challenge for the participants (see Table 2). The passage provided in Example 2 is a typical instance of inappropriate use of the conjunction but.

Example 2: Slapping children on their hands can cause them to suffer from psychological problems and personality issues. *But every parent should teach children to differentiate between good and bad behavior without slapping.*

The student used the conjunction but inappropriately in the above passage, by using it without adversative relation. It can be seen that the but sentence does not act in opposition to the previously mentioned discourse unit. Rather, it appears to support it—giving advice, derived from the prior sentence, to parents about teaching children to distinguish between good and bad actions. Thus, there is no adversative relation established between the units of discourse connected by but. The inappropriate application of but in this example may interfere with the reader’s understanding of the text. Indeed, if the conjunction but was removed, this passage would be more unified.

It is also found that the participants applied the conjunction in fact inappropriately in their writing. A careful examination of the writing samples reveals that what is introduced by in fact is often contradictory instead of elaborative or affirmative, based on the discourse units preceding in fact. The conjunction has been inappropriately used to show contradictory relation between the sentences it links, rather than to signify an increase in the strength of an affirmation which has been previously mentioned, as Oh (2000) and Cowan (2008) point out. A typical case of the inappropriate use of such conjunction is shown in the following example.

Example 3: Children should be slapped on their hands when they are doing something incorrect. *In fact, this slapping could hurt children both mentally and physically.*

In Example 3 the conjunction in fact is used to connect the sentence—children should be slapped on their hands when they are doing something incorrect—and—this slapping could hurt children both mentally and physically. It is expected that, in the in fact sentence, the student would provide more information to support the true idea mentioned in the first sentence. However, the sentence introduced by in fact neither presents a supporting idea nor increases the strength of the idea with an affirmation of what has been previously mentioned. Rather, it presents information in contradiction to the first sentence. In this instance, the conjunctions however or but should have been used, in that either of them could serve to signify such adversative relation more appropriately than could in fact.
5.2 The Use of Additive Conjunctions

The participants used all the instances of the conjunction *moreover* inappropriately in their writing, since they confused the semantic functions of the conjunction. The participants demonstrated inability to use the conjunction *moreover* in its appropriate place (i.e., adding weight to, rather than presenting an equal point to, what has already been written). Example 4 (extracted from the participants’ writing) exemplifies the inappropriate application of the conjunction *moreover*.

Example 4: *Children should be slapped on their hands when they are doing something incorrect. In fact, this slapping can be hurt the children both mentally and physically. Slapping children on their hands can hurt them mentally. For example, they might become aggressive towards other children. *Moreover, they may be shy when talking with other children. These children may hurt their parents by imitating this slapping.*...

In Example 4 the conjunction *moreover* is employed to connect two pieces of information to support the argument that the writer indicated at the beginning of the paragraph. These two pieces of information joined by *moreover* show the psychological impact of slapping children on their hands. After examination of the two sentences, it is found that these two sentences have equal influence upon the argument. It is expected that the sentence following *moreover* would add greater weight to the preceding sentence or contribute a conclusion to the previous sentences, as Cowan (2008) indicates, but it does not do so. Thus, the application of *moreover* is inappropriate in the above example. In this case, use of the connector also may have been more appropriate.

Having examined the use of *and* in the participants’ written texts, it was found that the majority of the instances of *and* were used inappropriately in their writing. The following sample paragraph serves to illustrate the inappropriate use of *and*.

Example 5: *...We must use the slapping as special case when children do repeatedly wrong actions. But, if we use the slapping from the beginning, children will be violent towards others. *And* the slapping is good sometimes just to know what the right is and what the wrong is....*

In Example 5 the conjunction *and* fails to add a point to the previously mentioned information. The discourse unit introduced by *and* just repeats another sentence in the same paragraph. As it is repetitive, the *and* sentence should be omitted from the paragraph to make the argument consistent.

It can be inferred that the use of the conjunction *and* is problematic for the Libyan participants. This finding is mirrored in previous study (Abdalwahid, 2012). The majority of examples of the conjunction *and* manifested in the participants’ corpus are used inappropriately. The inappropriate use of the conjunction *and* can be attributed, to a greater extent, to the “negative transfer” from the participants’ mother tongue (Arabic). In Arabic, the conjunctions “wa” (and) can express five functions: continuative, additive, commentative, adversative and simulative. The participants seemed to transfer the continuative function of “wa” into their English writing since it is used at the beginning of sentences and paragraphs in Arabic texts (Mehamasdji, 1988). Thus, the participants tended to link between sentences by applying the conjunction *and* which leads to inappropiate use of it.

The appropriate usage of the conjunction *furthermore* still presented problems to some participants. Example 6 extracted from the participants’ corpus exemplifies the context in which the conjunction *furthermore* used inappropriately.

Example 6: *Children should be slapped on their hands when they are doing something incorrect. In fact, this slapping can be hurt the children both mentally and physically. Slapping children on their hands can hurt them mentally. For example, they might become aggressive towards other children. Moreover, they may be shy when talking with other children. These children may hurt their parents by imitating this slapping. Children can be affected physically when they are slapped on their hands. For example, some parents slap their children with a stick which can cause to them physical ill. *Furthermore, the physical ill can have an impact on children personality.*

The conjunction, *furthermore*, is used to show the additive relationship between the two discourse units it conjoins. Yet, the student fails to employ it in the appropriate place, since the sentence introduced by *furthermore* adds nothing to the preceding sentence. Rather, it introduces a result of what was mentioned before. So the use of *furthermore* is inappropriate in that the sentence—*the physical ill can have an impact on children personality*—is a consequence of what was previously written. Therefore, it may be much better to use the conjunction *consequently* for its use with cause and effect sentences. This type of inappropriate use can be ascribed to overgeneralisation in the target language, which results from incomplete application of conjunction rules.
5.3 The Use of Causal Conjunctions

The proper use of the conjunction *so* to express a causal relation still presents problems to the participants. As the application of *so* was examined, it was found that the participants used the conjunction *so* even though there was no causal relationship between the discourse units linked by the conjunction. The following example extracted from the participants’ corpus shows how the conjunction *so* has been employed inappropriately.

Example 7: The government should do its best to punish violators. *So, government should increase the fine. The government is the only one responsible for affecting cell phone usage while driving.*

The conjunction *so* in Example 7 fails to establish a cohesive relationship of causality between the discourse units it links. It can be seen that the sentence introduced by *so* is neither the result nor the purpose of what has been formerly mentioned. The presence of *so* confuses readers, since they expect that the sentence following *so* would be resultive or purposive of what has been mentioned before, but it is not. Thus, the conjunction should be removed from between these sentences in order to make the text unified.

The inappropriately employed conjunction so can be attributed, to some extent, to the fact that English language teaching in Libya traditionally emphasizes correct construction of sentences, or grammatically correct sentences, in both secondary and tertiary education. Focusing on teaching the conjunction *so* in isolated sentences grammatically, rather than semantically in context, may result in the improper use of it.

The inappropriately used conjunction because made by the Libyan participants lies in the semantic function of *because*, where the sentence introduced by *because* does not contribute to causal relation with the sentence prior to *because*. Such inappropriate use can be found in the following excerpt.

Example 8: Using your cell phone while you are driving car is one of the most dangerous things that you can do. *Because this behavior could hurt both the driver and others....*

In Example 8 the sentence prefaced by *because* does not present the cause or the reason in relation to the presupposed sentence. Instead, it appears to support what has been previously mentioned. In addition to semantic inappropriateness, it is used to introduce an independent clause, violating the syntactic function for the use of *because*. Since the use of the conjunction *because* is neither semantically appropriate nor grammatically correct, it should be removed from the text so as to render the sentences matched. The student seems to be affected by intra-lingual interference, since she confuses the three syntactic categories of conjunction: coordinating & subordinating conjunctions, adverbs and prepositional phrases. This student may have thought that conjunctions are constituted by a single category. Thus, the student has inappropriately employed *because* to introduce an independent clause. This result is similar to the findings in Lai’s (2008) study.

6. Conclusion

The current study has investigated the appropriate and inappropriate use of conjunctions in 32 argumentative essays composed by sixteen participants: Libyan tertiary students majoring in English as Foreign Language. The selection and classification of conjunctions were based on Halliday & Hasan’s (1976) taxonomy, consisting of four categories of conjunctions, in terms of semantic function: additive, adversative, causal, and temporal. The findings show that the examples of both the appropriate and inappropriate application of conjunctions were identified, but the discussion was placed only on the analysis of inappropriate use. The results reveal that the participants experienced difficulty in using conjunctions. Generally speaking, they employed conjunctions—such as additives (*moreover, and, furthermore*), adversatives (*on the other hand, but, in fact*) and causals (*so, because*)—inappropriately in their writing. Accordingly, the logical connectivity between sentences and paragraphs was weakened.

Of the four subcategories of conjunctions, the use of adversatives was the most problematic to the participants, followed by additives, and causals. With reference to the use of adversatives, the conjunction *on the other hand* was the most difficult for the participants, followed by *but* and *in fact*. Some of the participants wrongly used *on the other hand* to show additive relation rather contrastive relation between the discourse units. In addition to this, they inappropriately employed *on the other hand* instead of *however or but* to conjoin two different ideas, as the function of *on the other hand* is to contrast two aspects or qualities of a single subject. Regarding *but* and *in fact*, the latter has been inappropriately used to show contradictory relation between the sentences it links, rather than to signify an increase in the strength of an affirmation which has been previously mentioned. The former is also improperly employed, in that there was no adversative relation between the connected discourse units.

An inappropriate use of such conjunctions can be attributed to two reasons: 1) Overgeneralisation in the target language, which results from ignorance of rule restriction and incomplete application of rules, and 2) the practice of presenting conjunctions in lists in ESL/EFL textbooks without showing the subtle differences between them in
terms of semantic function. Since the above three conjunctions (on the other hand, but and in fact) fall under the same category—adversative—the participants apparently believe that the three conjunctions, on the other hand, but, in fact, can be used interchangeably. The participants thus employed such conjunctions inappropriately.

Among the use of additives, moreover was the most problematic conjunction for the Libyan EFL participants, followed by and and furthermore. Most of the participants used these conjunctions inappropriately in their writing, since they confused the semantic functions of the conjunctions. The participants demonstrated inability to use the conjunctions moreover and furthermore in their appropriate places (i.e., adding weight to, rather than presenting an equal point to, what has already been written). They also failed to establish additive relation with the use of and, instead using it to connect causal relation. Moreover, some of the participants employed and unnecessarily at the beginning of sentences. This is largely attributable to L1 (Arabic) negative transfer, where the participants tended to transfer the continuative function of the Arabic conjunction “wa” (and) into their English writing.

Of the causals, the use of so was the most problematic to the participants, followed by because. Some of the participants tended to confuse the semantic function of these conjunctions in that they used them to link sentences where there was no causal relation between the sentences, hence the inappropriate use of the conjunctions so and because. The improper application of such conjunctions can be attributed to the fact that English language teaching in Libya traditionally emphasises correct construction of sentences, or grammatically correct sentences, in both secondary and tertiary education. Focusing on teaching conjunctions grammatically in isolated sentences, rather than semantically in meaningful contexts, may have resulted in the improper use of such conjunctions.

Finally, the present study only categorised the usage errors of conjunctions and presumed some possible sources of errors, such as transfer error. These were merely assumptions based on students’ production of written text. These assumptions, to some extent, could be either right or wrong. Future studies are necessary to examine precisely the causes of inappropriate use of conjunctions in students’ writing. To gain more insights into student writers’ use of conjunctives, it is necessary to listen to the participants themselves. Thus, an interview with individual EFL learners should be used in further studies.

7. Pedagogical Implication

Identifying the conjunctive errors specific to Libyan EFL learners, in their second language writing, will help English language teachers take appropriate pedagogical actions to deal with such errors in students’ writing. Since the present study shows that the inappropriate use of conjunctions demonstrates serious problems in the Libyan EFL learners’ corpus, it is necessary for EFL teachers to place more emphasis on these conjunctions when teaching them. Useful exercises suggested by scholars, including combining sentences (Zamel, 1983) and sequencing scrambled sentences (Basturkmen, 2002), should be taken into consideration when teaching conjunctive devices. In the former exercise, students could be asked to combine sentences using a choice of conjunctions given in brackets. In the latter exercise, students can be asked to rearrange sets of jumbled sentences extracted from a harmonious text in the light of the signals of conjunctions contained. It is highly likely that these exercises would help the student writers to understand the semantic functions of conjunctions.

The conjunction errors made by the student writers may be related, to greater extent, to the neglect of teaching semantic distinction between conjunctions. Dealing with this would entail some changes in the teaching materials for English writing. The typical ESL/EFL textbooks often present lists of conjunctions according to their semantic functions, without showing the subtle differences between conjunctions located within the same grammatical category. It is recommended that EFL teachers should introduce the students to the semantic differentiation between conjunctions categorised under the same grammatical category. This research agrees with that of Crewe (1990) that misleading lists of so-called interchangeable conjunctions often found in textbooks should be avoided at all costs. By understanding the subtle differences between conjunctions, the student writers would overcome the difficulties they face in using conjunctions.

In addition to the above pedagogical implications, as reading and writing are considered to be two sides of a coin, conjunction devices should be taught in complete texts rather than as isolated words. Here, EFL teachers could usefully present in class some model texts with appropriately used conjunctives. When students are reading the model texts, the teacher could highlight some conjunctions that are perfectly matched with these texts in terms of their semantic function. This type of focused reading activity would help the students become sensitive to the appropriate use of conjunctions in English writing.
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