Reporting Verbs in Applied Linguistics Research Articles by Native and Non-native Writers

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Abstract—This study investigated the differences between applied linguistics research articles written by non-native writers and their native counterparts in English, focusing on the use of reporting verbs in quoting other authors. The corpus consisted of 63 articles (about 200000 words) written by native and non-native writers of English published in three scholarly journals in the fields of language teaching and applied linguistics. The results showed significant differences in the choices writers made in using reporting verbs. The corpus was also analyzed to determine the degree to which writers quoted different authors directly or indirectly. The number of verbs was tallied and recorded and then classified on the basis of Thompson and Ye’s (1991) classification. Finally, the results of the analysis of reporting verbs used by native and non-native writers were compared. The findings showed higher use of direct quotations by native writers which might be interpreted to be the result of their linguistic capability in handling linguistic materials produced by other authors.

Index Terms—metadiscourse, reporting verbs, citation patterns, applied linguistics articles, non-native writers

I. INTRODUCTION

Although much of the research throughout the world is conducted by researchers whose native language is not English, their scientific findings are mostly reported in this language. As a result, English academic writing is a skill much needed by many researchers who are non-native English speakers (NNES). In order to succeed in their field, not only are non-English-speaking scholars demanded to deal with the challenge of new developments, but they also must be skillful in English writing (Manan & Noor, 2014). According to Paltridge (1993), non-English speaking scholars cope with vast difficulties to succeed in their scientific discourse through research articles. This is because academic writing follows certain conventions, and it requires techniques and style that are unique to this genre (Cullip & Carrol, 2003). Some studies revealed that writers exploit different patterns to form their materials. For example, Tenbrink and Wiener (2009) stated that writers benefit from some networks of options which provide them with a variety of linguistic choices that may be helpful in generating ideas. Thus, developing textual materials might be different among native speakers as well as between them and non-native ones. Accordingly, the researchers in applied linguistics and language teaching may face difficulty in adapting their prose like every other field of science, even though they are supposedly thought as competent English language users.

It is proposed that the research article and the language of science follow rhetorical, grammatical and stylistic patterns for developing the general semiotic system to have effective scientific discourse (e.g., Halliday & Martin, 1993; Swales, 1990, 2004). One of the challenging areas related to this issue is the citation of one’s own claims or the claims of others, which requires the correct choice of grammatical devices (Hyland, 1998). Sakita (2002) noted the important role that occurrence of reporting verbs have in this process, which reflects how writers and speakers present, criticize and question their claims as well as express their own related opinions. Hyland (1998) referred to reporting verbs as a grammatical device required to express the writer’s stance in an academic paper. Thompson and Ye (1991) discussed the idea that writers may utilize reporting verbs to refer to their own claims and opinions and also to reveal how writers view others’ claims. In order to become competent academic writers, it is required to know how to make correct grammatical choices while reporting claims. This issue can impact the credibility and rhetorical stance of the claim (Bloch, 2010).

Regarding the importance of citation process and academic writing conventions, some scholars studied the existing problems of NNSE in this area. For instance, Hyland (2008) mentioned that NNSE feel they must take “definite and self-assured” stance without the sense of “fuzziness” in their citing claims (p. 70); hence the rhetorical stance of their claims may be influenced by the inappropriate use of reporting verbs. Duszk (1994) proposed that the vagueness of non-native speakers’ academic prose to English audiences emanates from the use of those discourse features that are valued in their communication; hence, their papers might not be publishable. Myers (1996) argued that teachers can overemphasize directness in stating a claim, so students may not always recognize the importance that deliberate vagueness can play in negotiating the rhetorical purpose of that claim.
In sum, research articles are developed upon various voices in texts which, according to Silva and Matsuda (2001), can affect readers through the writer’s selection of an extensive range of factors. Hence, studying and comparing such effective discourse features as direct/indirect voice among different academic writing research might enhance non-native speakers’ knowledge towards keeping their own rhetorical stances.

II. LITERATURE REVIEW

A. Theoretical Background

It is very important to use different means available to improve instructional tools at hand in order to develop researchers’ academic writing skills (Baleghizadeh, 2012). McEnery and Xiao (2011) stated that one way of developing such materials is to create language corpora from second language users. This course of action provides a bottom-up approach to language teaching that can be complemented by a top-down approach through collecting samples and creating corpora from native speakers. This type of data has proved to be of great aid in language teaching and second language acquisition research (see Keck, 2004; Myles, 2005; Pravec, 2002).

One issue that needs attention in this area is academic citation in general and the use of reporting verbs in particular. The appropriate use of reporting verbs impacts the citation process and strength of the claim made or reported for convincing readers. Hyland (2005) defined reporting verbs as a lexical device which benefits writers in displaying their stance as well as establishing a connection with readers. Hunston (2000) discussed the important role of reporting verbs in establishing the credibility of the claims and writers as well. Charles (2006) contended that correct use of reporting verbs enables writers to show the opinion and personality towards the idea they quote. Fairclough (1992) delicately pointed out that quotation patterns of reporting are a form of intertextuality which is defined as “the property texts have of being full of snatches of other texts” (p. 84). Many researchers have stated that it is necessary for learners to be competent in the use of citations and reporting verbs (Clagston, 2008; Davis, 2013; Swales, 2014). Bloch (2010) in his study mentioned that NNES have difficulty in using reporting verbs efficiently, Manan and Noor (2014) also believed that NNES may lack the ability in using reporting verbs judiciously.

B. Empirical Studies

There has been a large number of studies on the issue of citation from various disciplines such as social sciences (Zhang, 2008), medicine (Thomas & Hawes, 1994), chemistry (Gooden, 2001) information science, sociology of knowledge and of course English for specific and academic purposes (Swales, 2014). A host of reasons can be counted for this large number of studies. First, citations can act as a rhetorical booster for the claims and arguments presented in the text (Hyland, 2004). Another reason is the fact that citation by nature is an indicator that shows a text is indeed academic. It also enables writers to become part of an academic community in which they study by commenting on what other scholars and researchers have done. It is also a clear indication of intertextuality and dialogism in the text (Swales, 2014).

Among the studies done on the topic of citation, there are studies that particularly focused on reporting verbs and their use by different groups of writers. One such research on reporting verbs was conducted by de Oliveira and Pagano (2006), who examined two different genres, i.e. Portuguese research articles and science popularization articles in Portuguese magazines. The results showed that the occurrence of reporting verbs implying direct discourse representation was more frequent in science popularization articles than in research article indicating that journalists in texts about science exploited the quotation voices that signaled a discursive stance superior to their own. The employed reporting verbs signaling direct discourse in research articles, however, displayed less discursive position between writers and the authors being quoted. Furthermore, in science popularization articles most of the verbs used were in present tense showing the findings being reported were fresh; however, in research articles most of the verbs were in past tense.

In another study, Bloch (2010) intended to create instructional materials about the role of reporting verbs in academic writing using a technique called concordancing. He used a sample of articles from a scientific journal to create two small corpora. He chose 27 reporting verbs and drew a randomized sample of sentences for each. Based on this, he used writing samples from students and created another corpus to compare the reporting verbs used by students to those used by published authors. In the end, he concluded that by exposing students to authentic samples and showing the process of how a writer decides to write, we can familiarize learners with language use. He also used the findings to design an online database of sentences that enables teachers and material developers to form instructional materials for an academic writing course (Bloch, 2009).

In a more recent study, Kim (2012), using Swales’ (1990) classification of citations, examined the use of citations in introduction section of 40 research articles in the field of educational psychology, half of which were written by English and the other half by Chinese authors. His findings showed that English writers used citations five times more than Chinese writers, guiding him to conclude that knowledge of citation can improve academic writing skills of Chinese students.

In yet another study on a corpus from the field of biology, Swales (2014) explored citation practices of graduate and undergraduate students. He studied and analyzed the corpus to observe the distribution of integral and parenthetical citations, the choice of reporting verbs, the effect of citing system, and whether students used citee’s first name in their
writing. Findings did not show significant difference between the undergraduate and graduate papers in different aspects.

Finally, in a study in the field of English language studies, Manan and Noor (2014) conducted a study on the use of reporting verbs in Masters Theses. Using Hyland’s (2000) framework, they tried to determine the choice of reporting verbs by Masters students, their frequency of use, and the impact these verbs employed in the theses. The findings from six theses revealed that reporting verbs from the research acts category was used more frequently by students compared to verbs from cognition acts and discourse acts categories. Based on their findings, they suggested that instead of teaching different aspects of research in research methodology courses, knowledge of reporting verbs could be taught and it could be more beneficial for students.

Considering the role of reporting verbs in the citation process, Thompson and Ye (1991) made a specific contribution by scrutinizing reporting verbs used in academic settings which can guide writers to evaluate their choices and subsequently categorize it. Furthermore, they established a convention to differentiate the writer, the quoting voice who wrote a text, from the author, the quoted voice whose words are mentioned. With respect to the reporting verbs’ denotation, Thompson and Ye (1991) categorized them under two broad categories. The first one refers to those verbs which report the author of the text being quoted; hence it is labeled “author acts”. This category includes three subcategories, i.e. textual, mental, and research verbs. Textual verbs are the ones through which the author’s verbal expression is presented, e.g. “point out”, or “state”. The mental category, as it can be construed by its name, are verbs basically implying mental processes, e.g. “believe”, or “think”. Finally, the research verbs refer to physical and mental steps throughout the research process, e.g. “measure”, or “find”.

The second category, “writer acts”, which reveals the writer’s orientation towards the under-questioned issue through quoting someone else, contains fewer verbs and refers to verbs in two subcategories of “comparing” verbs and “theorizing” verbs. While comparing verbs such as “correspond to” and “contrast with” attribute the study of the author to a special viewpoint, theorizing ones such as “explain” and “support” benefit writers through providing them with gaining the advantage of the author’s study in developing their arguments.

As Bloch (2010) mentioned, in order to develop effective instructional materials related to academic writing skills in general, and reporting verbs in particular, corpora should be designed in a way that they reflect how these features are used in specific genres. Different corpora in studies reported above in the genre of academic research were collected from disciplines other than applied linguistics and language teaching (e.g., Bloch, 2010; Swales, 2014; Zhang, 2008). Moreover, in studies related to research articles in applied linguistics and language teaching, very limited linguistic backgrounds were observed (Kim, 2012), or no data were collected from NNES (Manan & Noor, 2014). In order to create the corpora with both top-down and bottom-up approach by collecting data from both NES and NNES (McEnery & Xiao, 2011), a comparison between the use of reporting verbs in research articles by NES and NNES from different linguistic backgrounds in the field of applied linguistics and language teaching seems to be needed. Based on this assumption, the present study was an attempt to compare the use of reporting verbs by native writers and non-native writers of English. More specifically, this study aimed to find out whether there is any significant difference between native writers of English and non-native writers in the use of reporting verbs in research articles in the field of language teaching and applied linguistics.

### III. Method

#### Corpus and Methodological Procedures

The corpus consisted of sixty three articles from three journals in the fields of language teaching and applied linguistics: “Modern Language Journal”, “Regional Language Center Journal”, and “System”. Thirty three of the articles were written by non-native writers from different linguistic background and the other thirty were all written by native speakers of English. In order to determine whether a writer was a native speaker of English or not, writers’ affiliations as well as their biodata provided in the websites of their universities were checked.

This corpus was later analyzed by the researchers to find any reporting verbs which were used to quote an author directly. This was done by using search parameter of Adobe Acrobat Reader’s program to find any quotation mark in the body of the paper. In order to find reporting verbs which quoted authors indirectly, researchers read the papers carefully to find reporting verbs used by writers throughout the texts. The verbs were tallied, recorded, and then classified on the basis of Thompson and Ye’s (1991) classification. An analytic comparison of the reporting verbs used by native and non-native writers is presented below.

#### IV. Results

Table 1 contains information on the total number of instances of reported materials in the papers by NES and NNES. As it is seen, there was no significant difference between the number of citations that occurred in both groups although in sheer numbers NNES had more instances of citations in their papers. This was also true about the number of reporting verbs used by each group of writers. NES and NNES respectively used 183 and 185 different reporting verbs to quote works of other authors in their works.
In the case of total number of reporting verbs found in the corpus (Table 2), 254 different reporting verbs in five subcategories were used. Based on our expectations of Thompson and Ye’s (1991) classification, the number of reporting verbs used in author’s act category was far higher than the number of the ones used in writer’s act category. This distribution was not only true for the total number of verbs, but also for all three groups of verbs. The ratio of author’s act reporting verbs to writer’s act reporting verbs used by both NES and NNES were similar to the total number of the verbs. This observation was also true about the verbs used only by NES and the ones used only by NNES.

In the case of distribution of reporting verbs in different subcategories, the highest number of verbs used belonged to textual subcategory excluding the group of verbs used only by NNES in which writers used more mental verbs compared to other types of reporting verbs. In the case of reporting verbs referring to a mental activity the group of verbs shared by NES and NNES had the lowest number indicating that writers of each group tended to use a specific range of verbs that did not overlap in a large degree. Table 2 also shows that overall 46 research reporting verbs were used, and this is the lowest number of verbs used in author’s act category. Moreover, its distribution among NES and NNES showed that they shared a high number of these verbs.

Writer’s act reporting verbs constituted a smaller portion of the total number of verbs found in the corpus, and most of the verbs belonged to the subcategory of theorizing which in all cases except the verbs used only by NNES was more than the number of the verbs used in research subcategory. Comparing verbs formed the group consisting of the lowest number with only four verbs used only 25 times in the whole corpus.

Overall, the largest number in each category belonged to the verbs that were used by both groups of writers except mental verbs, indicating that to some extent writers of both groups had similar choices of verbs in creating their patterns of citation. Of course, this can only be stated about the choice of verbs, whereas, in the case of type of quotations they used, substantial differences existed.

Table 3 contains the total number of instances of citations that were observed in the corpus, a total of 1490 citations including both direct and indirect quotations of materials by NES and NNES, out of which, 1282 cases occurred by using reporting verb under the category of author’s act compared to 208 instances which were reported by verbs of writer’s act category. In the case of total number of direct quotations and indirect quotations, indirect quotation was used 924 times compared to 556 times of direct quotations.

### Table 1

<table>
<thead>
<tr>
<th>Number of instances of reporting verbs used by</th>
<th>NES</th>
<th>NNES</th>
<th>Number of reporting verbs used</th>
<th>NES</th>
<th>NNES</th>
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<tbody>
<tr>
<td>Total</td>
<td>763</td>
<td>727</td>
<td>183</td>
<td>185</td>
<td>185</td>
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### Table 2

<table>
<thead>
<tr>
<th>Reporting verbs in the corpus</th>
<th>Reporting verbs only used by</th>
<th>Reporting verbs only used by</th>
<th>Reporting verbs used by both</th>
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<tbody>
<tr>
<td>Total</td>
<td>254</td>
<td>73</td>
<td>66</td>
</tr>
<tr>
<td>Author’s act</td>
<td>197</td>
<td>55</td>
<td>55</td>
</tr>
<tr>
<td>Textual</td>
<td>89</td>
<td>27</td>
<td>18</td>
</tr>
<tr>
<td>Mental</td>
<td>62</td>
<td>21</td>
<td>23</td>
</tr>
<tr>
<td>Research</td>
<td>46</td>
<td>7</td>
<td>14</td>
</tr>
<tr>
<td>Writer’s act</td>
<td>57</td>
<td>18</td>
<td>11</td>
</tr>
<tr>
<td>Comparing</td>
<td>4</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Theorizing</td>
<td>53</td>
<td>17</td>
<td>10</td>
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### Table 3

<table>
<thead>
<tr>
<th>Number of instances of citation</th>
<th>Total number of citations</th>
<th>Direct quotation</th>
<th>Indirect quotation</th>
</tr>
</thead>
<tbody>
<tr>
<td>All the verbs</td>
<td>1490</td>
<td>556</td>
<td>924</td>
</tr>
<tr>
<td>Author’s act</td>
<td>1282</td>
<td>426</td>
<td>856</td>
</tr>
<tr>
<td>Writer’s act</td>
<td>208</td>
<td>140</td>
<td>68</td>
</tr>
</tbody>
</table>
reported that journalists in the science popularization articles followed such patterns and researchers in academic
de Oliveira and Pagano (2006). This could be controversial to some extent since in their study, de Oliveira and Pagano (2006)
tried to convey that material being quoted comes from a superior discursive stance compared to their own (de 
1992). This willingness to use more direct quotations than indirect ones can be allocated to the fact that managing

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the verbs under such classifications does not change. However, one interesting point which is worth mentioning and

whether the effect of the number of citations in present study. In the case of number of verbs used in each category, the situation was very similar. NES used a more diverse range of reporting verbs to quote other researchers’ materials directly. The same applies for number of reporting verbs NNES used to report other researchers indirectly.

Finally, Table 4 presents detailed information about different types of reporting verbs used in different instances of 
direct and indirect quotations of materials. NES used 389 instances of direct speech, a number far more than 177 
instances used by NNES. On the contrary, NNES had 550 instances of citation of materials indirectly, which was far 
higher than 374 instances used by NES. In the case of number of verbs used in each category, the situation was very similar. NES used a more diverse range of reporting verbs to quote other researchers’ materials directly. The same applies for number of reporting verbs NNES used to report other researchers indirectly.

V. DISCUSSION

Based on the findings, the overall number of reporting verbs used by native and non-native writers and the frequency of occurrence of these verbs were equal. Such results were somehow expected considering the fact that the size of the corpus for each group was almost the same. Such finding contrasts sharply with the result of Kim’s (2012) study in which NES used citation five times more than Chinese writers, indicating that writers’ linguistic background had affected the findings. It also explains that the diversity in linguistic background in the corpus at hand had no particular effect on the number of citations in present study.

In the case of number of verbs found in the corpus, this high number of verbs indicates the vast variation writers have in their citation patterns. Also the high number of verbs not shared by both groups of writers shows that NES and NNES followed different patterns and choices in citing materials by other authors. This situation could be caused by lack of judicious use of such verbs by NNES (Manan & Noor, 2014), inefficiency in using the verbs (Bloch, 2010), or their difficulty in creating successful academic discourse (Paltridge, 1993). These points being mentioned, we should not forget that linguistic possibilities in academic writing are not very limited and different styles and choices of verbs in discourses produced by NES and NNES may stem from choices based on their personality and understanding of the issue they intended to discuss. Therefore, this difference in the pattern of citation and choice of verbs might not be an indicator of incapability of NNES but of their idiosyncratic choice. This is specifically evident in the high number of mental verbs used only by either group, showing that different writers take different instances in relation to a particular material. This point is supported by Hyland’s (2008) claim that NNES insist on having more certainty about the claims they make leading them to use reporting verbs that he considers to be inappropriate.

Another finding of the study was that more than 80 per cent of the 1490 instances of citations in the corpus occurred using verbs under the category of author’s act, showing that writers tried to objectively report the author of the text being quoted (Thompson & Ye, 1991) rather than taking an orientation towards the quotation. In total number of quotations, this ratio does not change in the case of direct quotations and indirect ones, showing that the distribution of the verbs under such classifications does not change. However, one interesting point which is worth mentioning and elaborating is the equal and even a little more frequent use of reporting verbs by NES in their direct quotations compared to the number of their indirect quotations. Moreover, in direct quotations NES used very few words, and it was rarely observed that discourse chunks with more than 40 words were used. This could simply show that NES are capable of putting other authors’ ideas in the form of words and phrases in their developing argument (Fairclough, 1992). This willingness to use more direct quotations than indirect ones can be allocated to the fact that managing someone else’s linguistic products is easier for NES compared to NNES. It can also be hypothesized that NES attempted to convey that material being quoted comes from a superior discursive stance compared to their own (de Oliveira & Pagano, 2006). This could be controversial to some extent since in their study, de Oliveira and Pagano (2006) reported that journalists in the science popularization articles followed such patterns and researchers in academic
articles used fewer direct quotations, which can be attributed to the fact that articles were chosen from disciplines such as agriculture in which creating fuzziness in reporting claims is not very recommended.

As it was mentioned above, NES used more direct quotations in their citations, a phenomenon that was observed far fewer times in NNES quotations. NNES preferred to use more indirect quotations rather than to quote materials directly. This is evident in the results in such a way that the instances of using indirect quotations are three times higher than direct ones. The reason that can be given for this finding is that NNES have difficulty using other authors’ linguistic products in their arguments and developing discourse. This is completely evident in all subcategories of reporting verbs. Besides, most uses of direct quotations by NNES were comprised of long chunks of language, normally more than 40 words, which causes NNES to be able to use fewer instances of direct speech. Such a finding supports Myers’ (1996) argument about the fact that second language learners may not be able to create the required vagueness of claims necessary for building the rhetorical purpose of a claim in academic context.

In the case of different subcategories of author’s act, findings suggested that NNES overall used more mental verbs. The findings also showed that in case of indirect quotations they have used more mental verbs. On the contrary, NES used more research verbs in both direct and indirect speech. This fact could be ascribed to Hyland’s (2005) claim that reporting verbs facilitates the creation and maintenance of connection between writers and readers and they also enable writers to display their stance toward the quoted material. This might signal that in quoting other researchers NES preferred to remain more objective by using research verbs, which refer to employed physical and mental steps throughout the research process rather than mental verbs, which refer to unobservable processes they were absent at the time of their occurrence.

Although the findings may suggest that researchers in each group followed a specific and to some extent conscious pattern of citation, it can also be argued that some writers may have used their verbs semi-automatically and no specific purpose is behind them (Swales, 2014), a claim that cannot be verified without interviewing authors of the texts which was not feasible for the researchers. Nevertheless, not in all cases of such interviews could be helpful and revealing (Harwood, 2008, 2009).

With such findings and interpretations, this study tried to investigate the difference in the use of reporting verbs by NES and NNES in applied linguistics articles in English. The findings showed contrasting result in the use of reporting verbs by two groups of writers, which the researchers believe this to be the result of strategies used in order to report materials objectively. There are some concluding remarks and suggestions for further research that are mentioned in last section of this paper.

VI. CONCLUSION

This study was an investigation about the difference between the use of reporting verbs and citation patterns by NES and NNES in applied linguistics articles. The researcher used a 200000-word corpus written by native and non-native writers of English and the results showed significant difference in the use of reporting verbs by writers. The main difference was the higher use of direct quotations by native writers which the researchers believed to be the result of their linguistic capability in handling linguistic materials produced by other authors. Such findings could be helpful in teaching academic writing skills using a bottom-up approach (McEnery & Xiao, 2011). The importance of reporting verbs and the effect they may have on how writers are perceived makes teaching of these verbs and how they are used a necessary component in research methodology and academic writing courses (Manan & Noor, 2014).

There are a few points that other researchers can address in this area. First, using a larger corpus may help material developers and researchers to come up with a clearer picture on the differences between NES and NNES. The second suggestion of the researchers is that since non-native writers were from different linguistic backgrounds, this factor may have influenced the findings. Therefore, studies which control the native language of the writers could be so revealing. Speculations that have been made on the basis of findings can be strengthened by interviews with writers of articles. Researchers can also try to design studies to track specific pieces of discourse and see how they are reported by different writers. Researchers can also try to receive more insights from such corpora by examining each section of articles separately to see what types of verbs are used in each section.

REFERENCES

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