On the Use of Metadiscourse in EFL Undergraduate Student Writing

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Metadiscourse has been recognized as an important aspect of effective persuasive discourse. In this study, we explore how metadiscourse features are deployed by 34 EFL undergraduate students to make their non-discipline persuasive texts effective. We find that students grasp at least some of the metadiscourse resources available to them, but are relatively limited in rhetorical sophistication. In fact, transitions, frame markers, code glosses and hedges were found to be critical elements contributing to student writing quality. The findings also show that both frequency and diversity of frame markers are positive predictors of overall writing quality. We also investigate the linguistic forms of metadiscourse used by the students to project stance in their writing. The students were found to have difficulty handling the range of stance construction they could take, and this was unfortunately couched in single-word modal verbs. Teachers should make the metadiscourse features of persuasive writing explicit to students to assist them in making stronger arguments.

Key words: metadiscourse, stance, EFL students, persuasive writing, textual analysis

1. INTRODUCTION

Persuasive writing is expected to fulfill expectations characteristic of explicit textual organization and the writers’ stance toward the claims advanced (Uccelli, Dobbs & Scott, 2013). Therefore, in order to persuade and convince readers of their argument, it is vital that writers have good communication skills. Under the influence of communicative
language teaching (CLT) methodology, Korean EFL college students might be successful language users in some social contexts, yet they find it difficult to argue, or discuss persuasively (Grabe & Kaplan, 1996; Johns, 1993; Knudson, 1994) in their writing. In fact, persuasive writing would be a difficult task for EFL students (Reed, Burton, & Kelly, 1985), as persuasion involves making a rhetorical appeal to readers and expressing writers’ viewpoints (Charles, 2006).

For decades, metadiscourse has been recognized as an important aspect of effective persuasive writing (Hyland, 1998b; Thompson, 2001). Metadiscourse refers to the concept that writers must learn to “organize texts, engage readers and signal attitudes to the material and the audience” (Hyland, 2005a, p. ix). It provides “the ways that writers project themselves into their discourse to signal their attitude towards both the propositional content and the audience of the text” (Hyland & Tse, 2004, p. 156). Hyland (2005a) argues that metadiscourse is tied to interaction, to the way “we create the social interactions which make our text effective” (p. ix). Indeed, persuasive writing proficiency is conceived as the flexible use of resources to organize ideas and express a stance in texts (Crismore, 1989; Vande Kopple, 1985).

Some studies have examined metadiscourse use in second language (L2) writing (Cao & Hu, 2014; Choi & Ko, 2005; Khedri, Heng & Ebrahimi, 2013; Lee & Casal, 2014; Li & Wharton, 2012). This body of research has examined L2 writing in specific disciplinary discourse (e.g., applied linguistics, education, economics, psychology). Despite the prevalence of EFL writing classes in Korean universities, there have been few studies of metadiscourse in EFL writing, which may be more general skills writing than discipline-specific academic writing. There are likewise few studies that examine the linguistic forms of metadiscourse used by EFL students to express stance (cf. Jiang, 2015).

EFL college students, who are taking general writing courses, tend to practice non-discipline persuasive writing \(^1\) until they are assumed to transition into producing discipline-specific academic writing (cf. Aull & Lancaster, 2014; Wardle, 2009). Students in such a course are rarely asked to write a narrative or descriptive paper, but typically to write essays, which are analytic or persuasive in nature (Scott, 1995). Every successful persuasive text relies on metadiscourse to argue one’s idea convincingly (Hyland, 2005a). It is, therefore, important to investigate how EFL college students draw on metadiscourse features in their non-discipline persuasive writing to construct a valued text.

Accordingly, based on a textual analysis of the non-discipline persuasive writing produced by EFL undergraduate students, we explore how metadiscourse features are deployed by students to express not only ideas but also their stance in regard to what is

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\(^1\) We refer the non-discipline persuasive writing to general essay writing, in that the topic requires students to persuade readers with specific reasons and examples.
being said. In particular, we investigate the frequent or diverse use of metadiscourse and its association with overall writing quality. Morphosyntactically, metadiscourse can be represented by a range of different structures. It can take many different forms, ranging from single word and phrases to clauses (Ädel, 2006). In this sense, we also investigate the linguistic forms of metadiscourse used by the students to project a stance in their writing.

2. THEORETICAL FRAMEWORKS OF THE STUDY

In this section, we present an overview of Hyland’s (2005a) interpersonal model of metadiscourse and the grammatical expression of stance as presented in Biber, Johansson, Leech, Conrad and Finegan (1999) and other relevant research. The focus of this section is on conceptualizing our research and the research questions guiding it.

2.1. An Interpersonal Model of Metadiscourse

In Hyland’s (2005a) words, “metadiscourse is a cover term for self-reflective expressions used to negotiate interactional meanings in a text, assisting the writer (or speaker) to express a viewpoint and engage with readers as members of a particular community” (p. 37). While Hyland (2005a) argues that all metadiscourse is interpersonal because of the ongoing dialogue between the writer and the reader, he still distinguishes between the two dimensions of interaction: interactive and interactional. As Hyland and Tse (2004) explain,

Interactive resources ... are concerned with ways of organizing discourse, rather than experience, to anticipate readers’ knowledge and reflect the writer’s assessment of what needs to be made explicit to constrain and guide what can be recovered from the text ... Interactional resources, on the other hand, involve readers in the argument by alerting them to the author’s perspective towards both propositional information and readers themselves (p. 168).

That is, interactive resources are used to organize text in ways that readers are likely to find coherent and convincing (Hyland, 2005a). Interactional metadiscourse is deployed to show the writer’s stance towards the information they are presenting and his/her attitude toward readers so as to engage them as participants in an ongoing dialogue (Hyland, 2005b). The interactive involves transitions, code glosses, frame markers, endophoric markers, and evidentials, while interactional resources include hedges, boosters, attitude markers, self-mentions and engagement markers.
Transitions express textual cohesion by signaling logical links between propositions (e.g. *in addition, but, thus*). With transitions, writers make semantic relations explicit so as to facilitate readers’ comprehension. Code glosses are used to explain or elaborate propositional meanings (e.g. *for example, namely, such as*). Writers can use these to explain difficult terms or concepts and also provide examples to illustrate their point. This can help readers follow arguments with ease. As a matter of fact, clarity is achieved through the use of transitions and code glosses (Cao & Hu, 2014).

Frame markers are “used primarily to organize texts for readers” (Cao & Hu, 2014, p. 19) and “signal the sequence of claims or contrastive positions in the argument” (Uccelli et al., 2013, p. 45) (e.g. first, second, to conclude, another reason is). Endophoric markers relate to expressions that signal the connection of information presented in different parts of the text (e.g. noted above, in section 1). These markers make additional propositional content to assist readers to better grasp writer’s meanings. Evidentials present information from other texts (e.g. A states, according to B). As Khedri et al. (2013) note, “[evidentials] help writers build up the authorial command of the subject and support their positioning, [thereby] contributing to the achieving of a persuasive goal” (p.323).

Hyland (2005b) discussed how the interactional dimension is managed in two ways, as stance and engagement. Stance “includes features which refer to the ways writers present themselves and convey their judgments, opinions, and commitments” (p. 176), that is, “writers relate to their readers with respect to the positions advanced in the text” (ibid.), which Hyland calls engagement. By engagement, Hyland refers to reader-oriented strategies whereby writers bring their readers explicitly into their texts. Engagement represents a writer’s efforts to actively engage readers along with the discussion, asking questions, making suggestions and addressing them directly (Hyland, 2005c). Examples are reader pronouns, directives, personal asides, shared knowledge and questions.

Hyland’s stance framework encompasses hedges, boosters, attitude markers, and self-mentions. Hedges represent “the writer’s decision to withhold complete commitment to a proposition” (Hyland, 2005b, p. 178) (e.g. possibly, might and to some extent). Boosters, on the other hand, allow writers to express their certainty in that proposition (e.g. definitely, of course, in fact and it is clear that). Hyland (2005b) claims that hedging and boosting are “communicative strategies for strategically manipulating the strength of commitment to claims to achieve interpersonal goals (p.175).

Attitude markers express the writer’s affective attitude to propositions rather than commitment. Attitude is most explicitly signaled by attitude verbs (e.g. agree, feel, prefer), adverbs (e.g. unfortunately, importantly), and adjectives (e.g. surprisingly, even worse, remarkable). Self-mentions refer to the use of first person pronouns (e.g. I, we, my, our) and explicit reference to the author in the text. In particular, Hyland (2001, 2002) has highlighted the importance of first person use, as it shows how writers position themselves...
In reality, metadiscourse is a vitally important topic in L2 writing research (Ådel, 2006; Hyland, 1998b), and this topic is also found in studies conducted in Korean EFL settings. Several studies have largely focused on a number of academic genres such as research papers (Choi & Ko, 2005; Ryoo, 2008; Uhm et al., 2009) and master’s theses (Jin, 2015). In addition to L1/L2 comparisons, other research has compared the use of metadiscourse among EFL college students from different disciplines (Kim & Lee, 2014). Yet despite many previous research in metadiscourse, as Hyland (2005a) points out, “metadiscourse studies have been suggestive rather than definitive” (p. 6). For this reason, more studies should be done with different genres on different topics in EFL contexts.

2.2. The Lexical and Grammatical Expression of Stance

In the previous section, Hyland (2005a, 2005b) had a more lexically focused perspective on stance devices. However, many other researchers have investigated lexicogrammatical features writers use to express stance. In the same vein, we now want to focus on linguistic expressions of stance. The linguistic expressions used by writers to express stance have become an increasingly attractive area of research in recent years, as a large number of studies have focused on the linguistic expression of stance in English (Ådel, 2006; Aull & Lancaster, 2014; Biber 2004, 2006; Biber & Finegan, 1988; Gray & Biber, 2012).

For example, Gray and Biber (2012) pointed out that “there are numerous optional linguistic features used” (p. 19) to express stance meanings. Jiang and Hyland (2015) also argue that “stance is not only a lexical feature of discourse, but is also very much a grammatical phenomenon too” (p. 548). In the Longman Grammar of Spoken and Written English (LGSWE), Biber and colleagues (1999) provided grammatical devices used to mark stance and distinguish three main structural levels: words, phrases, and clauses. The expression of stance can be signaled in the text by the use of one or more structural levels.

Single-word stance markers can come from a wide range of word classes, including adverbs, lexical verbs, modals, adjectives, and nouns. Though modals and semi-modals are commonly used to express stance meaning, Gray and Biber (2012) argue that “they are less explicitly a grammatical marker of stance because the modal verb is incorporated into the matrix clause” (p. 20), as in She has to rent an apartment some place downtown. The present study, however, includes modals and semi-modals as single-word stance markers.

Along with single-words, phrases and clauses are also used to express a writer’s stance with respect to the proposition contained in the matrix clause. As shown in the following

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2 All example sentences given in this section are from Biber (2006), Biber et al. (1999), and Gray and Biber (2012).
examples, stance is expressed by a single-word (adverbs, like obviously) and prepositional phrases functioning as adverbials (in fact) (Biber et al., 1999):

*Obviously, it is not practical for accountants to measure business income ...*
*In fact, this process of creation almost never just happens magically and ...*

Complement clause constructions (especially that-clause) are by far the most structurally complex grammatical device used to express stance in English (Gray & Biber, 2012; Jiang, 2015; Jiang & Hyland, 2015). They are also powerful stance options “which affords writers opportunities to express their stance on the propositional information unfolded in the complement” (Jiang, 2015, p. 100). In that-complement clauses controlled by verbs, the matrix clause verb expresses a stance with respect to the proposition in the complement clause: *I doubt [that they’ve published this].* In a similar way, the main clause adjective or noun expresses the stance relative to the proposition in the complement clause. For example:

*I’m sure [that you’ve seen this too].*

*The fact that he will get away with attacking my daughter is obscene.*

In related research on stance expressions, Biber et al. (1999) specifically examine register differences in the marking of stance. They found that stance markers are surprisingly common in academic writing. In addition, prepositional phrases as stance markers are the most common by far in academic prose, while they are notably rare in conversation. Academic writing shows a heavy reliance on single adverbs as stance markers, “especially those indicating epistemic stance” (p. 983). In contrast, adverbial clauses as stance markers are the most frequent by far in conversation, while they occur with moderate frequencies in academic prose.

Jiang (2015) compares the use of noun complement structures in the argumentative writing of Chinese students (L2) with those of American students (L1) of similar age and educational level. Results show that the L2 university students use significantly fewer instances of this construction, especially in the lexical range of stance nouns, “which are bound up with the generic conventions of argumentative essays” (p. 90). However, the L2 students showed a strong tendency to invest personal affect in the stance nouns with pre-modifying attitudinal adjectives (strong) and self-mentions (I), as in *I have a strong belief that our environment will be better and better through all the efforts of all the human being.*

Metadiscourse as analyzed in this study builds on the theoretical framework proposed by Hyland (2005a). His analytical approach provides for ‘conformity of use’ (Price, 2008) in considering a range of linguistic items of interactive and stance resources. In addition, the
discussion of the grammatical marking of stance in Biber et al. (1999) provides important
guidelines for examining how EFL students encode stance devices in their texts.
Accordingly, the specific questions in this study are the following:

1) How do EFL undergraduate students use metadiscourse in order to express not only
ideas but also their stance regard to what is being said?
2) What is the relationship between frequency or diversity of metadiscourse elements
and quality of persuasive writing?
3) Is the frequency or diversity of metadiscourse elements predictive of overall writing
quality?
4) Which linguistic forms of metadiscourse are used by the students to project a stance
in their writing?

3. THE STUDY

3.1. Data Collection and Analysis

Data for this study was taken from writing samples gathered from thirty-four
undergraduate students of varying proficiency levels, studying at a Korean university. The
students, all juniors, were English language education majors enrolled in an elective course
related to the student's major focus. They had received university-level EFL writing
instruction during their sophomore year and were able to meet a number of practical
writing needs. Because we aimed to investigate the relationship between the use of
metadiscourse and writing quality, we did not control for the students’ language
proficiency.

The assigned topic for this study was from the TOEFL Test of Written English (TWE):
“Many people visit museums when they travel to new places. Why do you think people
visit museums?” Students were given 30 minutes to write persuasive (or opinion) essays,
as the Educational Testing service (ETS) currently limits the Test of Written English to 30
minutes. As part of the prompt, students were asked to take a stance on the statement, and
write a persuasive essay to convince readers that their opinion was best. The two
researchers evaluated the essays using the six-point scale developed by ETS for evaluating
TWE essays.

This holistic scoring instrument had a minimum score of 1 and a maximum score of 6.
For holistic scoring, we established common standards based on practice with the types of
writing samples. We then independently evaluated eight papers randomly selected from the
data, as it is recommended for the raters to code 15-20% of the whole data to check their
degree of agreement. We achieved an interrater reliability coefficient of .86, showing a high degree of agreement on the scores. The score for each paper was the average of the two scores from the raters.

3.2. Analytic Focus

The analytical framework used to investigate metadiscourse use was that of Hyland’s (2005a) *An Interpersonal Model of Metadiscourse*, which is captured diagrammatically in Figure 1. Subcategories include those of the interactive and interactional. From Hyland’s perspective, interactional macro-functions are modeled as working either as stance or engagement. In this study, we focused exclusively on stance, which are strategies students use to represent themselves rather than their readers. Engagement is thereby excluded from the analysis, and has been shaded in Figure 1. Next, we analyzed the linguistic options which the students have at their disposal to mark stance. Following Biber et al. (1999), the analysis here focuses on three major structural categories: words, phrases, and clauses.

We determined the frequency and diversity (how many different words are used) of five categories of interactive metadiscourse, including transitions, frame markers, evidential, code glosses, and endophoric, as well as interactional metadiscourse, including hedges, boosters, attitude markers, and self-mentions. The lexical items were derived from related studies (Ädel, 2006; Hyland, 1998b, 2005a, 2007; Hyland & Tse, 2004; Li & Wharton, 2012; Thompson, 2001; Vande Kopple, 1985).

![FIGURE 1](image-url)
For the search of metadiscourse features, we analyzed students’ writings using Wordsmith Tools 4 (Scott, 2007), a text analysis and concordance program. This was followed by an in-depth manual analysis because metadiscourse expressions are often context-dependent (Ädel, 2006; Hyland, 2005a). After the software quickly identified features, we manually identified and coded each instance of metadiscourse in context. These two methods of analysis complemented each other. For grammatical devices of stance, frequency counts and their classification as words, phrases, and clauses was carried out manually.

To assess the reliability of the data coding, five writings (15% of 34 writings) were independently coded by two researchers (cf. Neuendorf, 2002). For the coding of interactive and interactional markers, inter-rater agreement was assessed with Cohen’s kappa, with a mean of .90 for all types of markers combined. These kappa statistics indicated very good reliability. For the quantitative analyses, descriptive statistics were calculated for writing quality and the use of metadiscourse features. In addition, correlation analysis was used to investigate the relationships between the use of metadiscourse features and overall writing quality. A regression analysis was used to explore the predictive power of each feature on overall writing quality.

4. RESULTS

4.1. The Use of Metadiscourse in Student Writing

Table 1 shows the descriptive statistics for overall writing quality and all types of metadiscourse found in the 34 students’ writings. Student writing exhibited a wide range of quality scores, with an average score of 2.75 (SD = .78) and a range of 1.75 to 4.75 points. They displayed an average length of 201.9, with considerable variability across them. Table 1 also shows substantial variability for interactive and interactional resources. The students used many more interactional resources (M = 14.65, SD = 11.37) than interactive resources (M = 9.86, SD = 5.55).

Interactive resources occurred between 5 and 20 times, with an average of 9.86 markers, per essay. The diversity of such interactive resources ranged from 2 to 10 per essay, with an average of 6.47 distinct markers per essay. The frequency of stance markers, however, was much higher, with an average of 14.65 times per writing and a range of 3 to 36. The writings displayed between 3 and 16 distinct types, with an average of 8.94 distinct stance markers per writing. Overall, students exhibited a preference for the use of interactional metadiscourse rather than the interactive.
Table 1 displays interactive and interactional resources divided by sub-categories. Data for the subcategories also shows substantial differences. Looking at the interactive categories, the most frequent type of interactive features within and across essays was transitions (e.g., however, also, therefore). Indeed, transitions help create textual cohesion by signaling logical links between main clauses. The use of transitions can “ease the reader’s burden of making connections” (Cao & Hu, 2014, p. 19) in the discourse. Thus, a high use of transitions ($M = 7.12$, $SD = 2.94$) indicates the students’ awareness of their own writing as they organized their texts into coherent pieces. However, in spite of their importance in organizing texts for readers (Cao & Hu, 2014), frame markers occur with low frequency, accounting for 5.1% of all metadiscourse. Endophoric markers were used once by one essay.

Through the use of code glosses, students can clarify their statements by reformulating or providing examples where needed (Cuenca & Bach, 2007; Hyland, 2007). Indeed, they are able to organize their texts into easy-to-follow material by anticipating where readers might have problems understanding arguments. This is to help readers follow arguments with ease. However, as for the low frequency of code glosses ($M = 1.41$, $SD = 1.03$), the students in this study probably do not even recognize that “many kinds of code glosses are used to express meanings with finer degrees of precision” (Aull & Lancaster, 2014, p. 164).

Nevertheless, when employed in student writing, they are used to supply additional information by either providing examples or elaborating on a statement, as illustrated in (1) and (2):

(1) Examplifiers:

*For example, when people visit Seoul national museum in the center of Seoul city,*

*Museums are divided into several sections by reasonable standards such as artists, times, or origins the sections are organized to correspond with visitors to follow.*

(2) Reformulators:

*In other words, the reason you visit a museum has a lot to do with why you travel to a
new place.

To put it more simply, the more you know about it, the more valued in it you can see.

### TABLE 2
Frequency of Interactive and Interactional Features

<table>
<thead>
<tr>
<th>Category</th>
<th>Essays</th>
<th>M</th>
<th>SD</th>
<th>Min</th>
<th>Max</th>
<th>Percentage of Total Metadiscourse</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Interactive Resources</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Transitions</td>
<td>34</td>
<td>7.12</td>
<td>2.94</td>
<td>1</td>
<td>15</td>
<td>29.0%</td>
</tr>
<tr>
<td>Frame markers</td>
<td>23</td>
<td>1.26</td>
<td>1.18</td>
<td>0</td>
<td>4</td>
<td>5.1%</td>
</tr>
<tr>
<td>Endophoric markers</td>
<td>1</td>
<td>.03</td>
<td>.17</td>
<td>0</td>
<td>1</td>
<td>.1%</td>
</tr>
<tr>
<td>Evidentials</td>
<td>2</td>
<td>.06</td>
<td>.23</td>
<td>0</td>
<td>1</td>
<td>.2%</td>
</tr>
<tr>
<td>Code glosses</td>
<td>29</td>
<td>1.41</td>
<td>1.03</td>
<td>0</td>
<td>4</td>
<td>5.6%</td>
</tr>
<tr>
<td><strong>Interactional Resources</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hedges</td>
<td>34</td>
<td>8.09</td>
<td>4.19</td>
<td>2</td>
<td>20</td>
<td>32.9%</td>
</tr>
<tr>
<td>Boosters</td>
<td>27</td>
<td>1.74</td>
<td>1.56</td>
<td>0</td>
<td>6</td>
<td>7.0%</td>
</tr>
<tr>
<td>Attitude markers</td>
<td>24</td>
<td>1.82</td>
<td>1.81</td>
<td>0</td>
<td>6</td>
<td>7.4%</td>
</tr>
<tr>
<td>Self-mentions</td>
<td>22</td>
<td>3.00</td>
<td>3.81</td>
<td>0</td>
<td>15</td>
<td>12.2%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>100.00%</td>
</tr>
</tbody>
</table>

Since “interactional metadiscourse tends to be a features of overtly persuasive genres” (Hyland, 2005a, p. 163), it is not surprising to find that it makes up 59.5% of all metadiscourse in student writing. As Table 2 indicates, hedges constitute the majority of instances of interactional metadiscourse, accounting for 32.9% of all metadiscourse. They were followed by self-mentions (12.2%) and attitude markers (7.2%). It was found that amongst the interactional category, boosters (7.0%) have the lowest frequency of use.

Self-mentions are used fairly frequently, acting as the second leading markers in the interactional category. This may be because the writing task itself requires students to rely more on and give credit for their personal projection. However, for self-mentions ($M = 3.00$, $SD = 3.81$), the standard deviation is greater than the mean. Thus, we can make an inference from this information that only a few students come out boldly, overtly signaling their presence with first person pronouns. Through the use of $I$, they make themselves more or less visible in the text, projecting an appropriate degree of authority (Lorés-Sanz, 2011). For example, one student wrote: *In my experience, when I traveled to Washington D.C., the city was too small to enjoy trip enough, and I had nothing but go to see the museum.*

Figure 2 provides a visual representation of the total number of sub-categories. The figure shows that transitions dominated the interactive categories and hedges the interactional categories. Hedges in particular strongly stand out as the most frequently used category, for a total of 275 times. Thus, they seem to be a very important feature of stance-taking in student writing (Aull & Lancaster, 2014; Hyland, 2005a). In fact, *may, could, and would* were among the highest frequency items.
Arguably, with the more frequent use of hedges, these students want to give the impression that they are not fully committed to the truth of their claim (Hyland, 2005b). Nevertheless, the students’ use of hedges is a powerful strategic intention for gaining acceptance for their claims (Hyland, 1998a). To be persuasive, the students also make use of boosters. However, boosters were used more than four times less frequently than hedges, totaling a number of 59 times.

FIGURE 2
Total Number of Interactive and Stance Features

4.2. Correlation of Metadiscourse Features with Overall Writing Quality

A correlation analysis was conducted to investigate the relationship between writing quality and the use of interactive and stance features. Table 3 summarizes the correlations between each of the nine features and writing scores. As far as frequency is concerned, among interactive features, frame markers \((r = .427, p < .05)\) and transitions \((r = .412, p < .05)\) showed significant positive associations with writing quality. Code glosses showed a moderately positive correlation \((r = .347, p < .05)\). The students who included many examples in their persuasion produced better writing than those who did not. Among stance markers, hedges showed only a moderate correlation of .358 \((p < .05)\) with writing quality, while boosters, self-mentions, or attitude markers did not show a linear correlation with writing quality.

In terms of diversity, frame markers \((r = .427, p < .05)\) were strongly correlated with writing quality. As for frame markers, frequency and diversity were both associated with writing quality with the same value of \(r\). That is, a greater diversity of frame markers in a text means that a wider variety of words are used across the text, which is associated with better writing. Hedges \((r = .439, p < .01)\) were also significantly associated with writing
quality. For all other markers, the correlations were not significant.

While the frequency of hedges was found to be moderately correlated with writing quality, diversity showed a significant correlation with writing quality. This indicates that students who used more diverse types of hedges tended to achieve a higher writing score than those who merely included hedges frequently. As for transitions, frequency, but not diversity, was positively associated with overall writing quality. After all, by the frequent addition of transitions, the students showed their concern for “making internal cognitive connection in discourse” (Khedri et al., 2013, p. 325).

### TABLE 3

<table>
<thead>
<tr>
<th>Metadiscourse Type</th>
<th>Subtype</th>
<th>Frequency</th>
<th>Diversity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interactive features</td>
<td>Transitions</td>
<td>.412*</td>
<td>.114</td>
</tr>
<tr>
<td></td>
<td>Frame markers</td>
<td>.427*</td>
<td>.427*</td>
</tr>
<tr>
<td></td>
<td>Evidentials</td>
<td>.078</td>
<td>.078</td>
</tr>
<tr>
<td></td>
<td>Code glosses</td>
<td>.347</td>
<td>.319</td>
</tr>
<tr>
<td></td>
<td>Endophoric</td>
<td>.54</td>
<td>.54</td>
</tr>
<tr>
<td>Stance markers</td>
<td>Hedges</td>
<td>.358*</td>
<td>.439**</td>
</tr>
<tr>
<td></td>
<td>Boosters</td>
<td>.316</td>
<td>.320</td>
</tr>
<tr>
<td></td>
<td>Attitude markers</td>
<td>.213</td>
<td>.224</td>
</tr>
<tr>
<td></td>
<td>Self-mentions</td>
<td>.126</td>
<td>-.057</td>
</tr>
</tbody>
</table>

*p < .05, **p < .01

Because transitions, frame markers, code glosses, and hedges correlated with writing quality, additional analysis was conducted to examine the relationship among them. For frequency, there is no relationship at all, as shown in Table 4. For diversity, hedges and code glosses are moderately correlated (r = .418, p < .05). In fact, the diverse use of both code glosses and hedges in student writing seems to have contributed to “the creation of coherent, reader-friendly prose while conveying the writer’s audience-sensitivity and relationship to the message” (Hyland, 2007, p. 266).

### TABLE 4

<table>
<thead>
<tr>
<th>Correlations Among Transitions, Frame markers, Code glosses, and Hedges</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
<tr>
<td>------------------</td>
</tr>
<tr>
<td>1. Transition</td>
</tr>
<tr>
<td>2. Frame Markers</td>
</tr>
<tr>
<td>3. Code Glosses</td>
</tr>
<tr>
<td>4. Hedges</td>
</tr>
</tbody>
</table>

*p < .05
The interrelation of code glosses and hedges reflects some of the unique qualities of the genre-specific features of EFL writing. Furthermore, if we consider some researchers’ views of code glosses as potentially overlapping with stance functions (e.g., Aull & Lancaster, 2014; Sancho Guinda, 2012), we then tend to see code glosses as contributing to one’s stance along with hedges in the student writing we analyzed.

4.3. Predictive Power of Metadiscourse Features on Writing Quality

In order to identify the specific markers that predict students’ overall writing quality, stepwise multiple regression analyses were conducted separately for frequency and diversity of interactive and stance markers. As Table 5 shows, regarding frequency of markers, hedges significantly predicted writing quality \( t = 4.42, p < .000 \), accounting for 31.4% of the variance in writing scores. Frame markers were also significant predictors \( t = 3.18, p < .003 \), adding as much as 15.3% of the variance. Together, these two markers accounted for 46.7% of the variance in the overall writing quality \( F (2, 31) = 15.449, p = .000 \).

Interestingly, frequent employment of hedges to indicate writer’s stance is the strongest predictor of higher writing quality among EFL students’ writing. It is also interesting that, in predicting writing quality, the frequent use of frame markers contributed a significant amount of variance beyond the effects of hedges. Perhaps not surprisingly, frequent use of frame markers contributes to higher writing quality, as such markers have long been acknowledged as elements of coherence and an essential criterion for good writing.

As shown in the following examples, frame markers were used to reduce readers’ processing effort by “sequencers” (e.g., firstly, finally) and “discourse-labels” (e.g., in short, to sum up) (Cao & Hu, 2014). These are different ways of framing taken from the student writing:

- *Firstly*, people may go to museums when they travel to new places.
- *Finally*, we can feel many differences through new places museum.
- *In short*, visiting a museum is not only helpful for travelers to make their travel more valuable,
- *To sum up*, travelers visit museums for two reasons.

**TABLE 5**

<table>
<thead>
<tr>
<th>Features</th>
<th>( \beta )</th>
<th>( R^2 )</th>
<th>( t )</th>
<th>( p )</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hedges</td>
<td>.143</td>
<td>.314</td>
<td>4.42</td>
<td>.000</td>
</tr>
<tr>
<td>Frame markers</td>
<td>.268</td>
<td>.467</td>
<td>3.18</td>
<td>.003</td>
</tr>
</tbody>
</table>

*Firstly* people may go to museums when they travel to new places.
*Finally*, we can feel many differences through new places museum.
*In short*, visiting a museum is not only helpful for travelers to make their travel more valuable.
*To sum up*, travelers visit museums for two reasons.
However, the overall predictive power of diversity was weaker than for the frequency of those markers ($F(2, 31) = 7.349, p = .002$) (see Table 6). The diversity of hedging expressions was a significant predictor ($t = 2.52, p < .009$) and accounted for 19.2% of the variance. Diversity of one type of interactive features, frame markers, was found to be the only significant predictor ($t = 2.43, p < .021$) and accounted for another 13% of the variance (see Table 7 for additional information). Thus, the two features together accounted for 32.2% of the variance in predicting writing quality. Both frequency and diversity of frame markers were predictive of writing quality, explaining a consistent yet rather small proportion of variance in writing quality.

### Table 6

<table>
<thead>
<tr>
<th>Features</th>
<th>$\beta$</th>
<th>$R^2$</th>
<th>$t$</th>
<th>$p$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hedge</td>
<td>.159</td>
<td>.192</td>
<td>2.52</td>
<td>.009</td>
</tr>
<tr>
<td>Frame markers</td>
<td>.241</td>
<td>.322</td>
<td>2.43</td>
<td>.021</td>
</tr>
</tbody>
</table>

#### 4.4. Linguistic Options Used to Express Stance in Student Writing

Our final question concerns the variability in the structural types of stance devices students use to express stance. Table 7 presents the frequency of structural types of stance markers. Model verbs are counted separately from other single-word stance markers because modal verbs (e.g. *may*, *would*, *might*) are by far the most common word class used in student writing ($M = 3.03, SD = 3.11$). In addition to modal verbs, *that*-complement clauses headed by adjectives, nouns or verbs are also employed ($M = 2.00, SD = 1.57$).

Complement clause constructions, especially *that*-clauses, are “an important way in which writers can grammatically mark their stance by foregrounding their attitude to accompanying propositions” (Jiang & Hyland, 2015, p. 532). Jiang and Hyland (2015) thus claim that this structure “offers writers a powerful way of ... claiming credit for their ideas” (p. 548). In fact, Jiang (2015) points out that “[it] is associated with students' advanced academic literacy” (p. 90). Fortunately, 29 out of 34 students made use of this construction, with a total of 64 cases, as seen in Table 7.

Overall, models and *that*-complement clauses are more frequent proportionally, comprising almost 97% of all structural types. However, only one student used a single adverb, *definitely*, which indicates a high degree of certainty towards a proposition: *Although Eiffel tower definitely symbolizes the romantic view of Paris, it is not ...* Only 4 cases came from the phrase level. They were all prepositional phrases as stance adverbials. Here are some examples taken from student writing:
In fact, we cannot keep time from going by changing the scene of the cities, but the history still survives.

In my opinion, there are two reasons as follows for people to visit museums.

<table>
<thead>
<tr>
<th>Structural Types</th>
<th>Linguistic Realizations</th>
<th>Essays</th>
<th>M</th>
<th>SD</th>
<th>Min</th>
<th>Max</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single words</td>
<td>Adverbs</td>
<td>1</td>
<td>.03</td>
<td>.17</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>.57%</td>
</tr>
<tr>
<td></td>
<td>Modals</td>
<td>28</td>
<td>3.03</td>
<td>3.11</td>
<td>0</td>
<td>11</td>
<td>103</td>
<td>58.52%</td>
</tr>
<tr>
<td>Phrases</td>
<td>Phrases</td>
<td>4</td>
<td>.12</td>
<td>.32</td>
<td>0</td>
<td>1</td>
<td>4</td>
<td>2.27%</td>
</tr>
<tr>
<td>Clauses</td>
<td>That -complement clauses</td>
<td>29</td>
<td>2.00</td>
<td>1.57</td>
<td>0</td>
<td>7</td>
<td>68</td>
<td>38.64%</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>100.00%</td>
</tr>
</tbody>
</table>

In student writing, stance nouns controlling that-complement clauses (stance noun + that-complement clause) occur with nouns like fact or doubt, as in There is no doubt that most travelers include museum visits in their schedules. Although almost all students used that-complement clauses at least twice in their writing (see Table 7), they typically convey undue personal involvement (see Table 2 and Figure 2 for the heavy use of first person pronouns). This result supports the study by Schleppegrell (2004) to the extent that the second language writers tend to rely on subjective stance options with I (e.g. I did not expect) in their writing of lab reports.

In addition, when turning to the lexical diversity of stance adjectives and verbs that control that-complement clauses, students tend to rely on certain high frequency words, the so called “lexical teddy bears” (Hasselgren, 1994), like sure, clear, and seem. For example:

I am sure that people enjoy understanding other culture and art works and this attract people to visit museums.

It is clear that just through sightseeing, we would have limit on gauging the city.

It seems that visiting museums is mandatory for most people.

Another correlation analysis was conducted to investigate the relationship between structural types of stance markers and writing quality. In terms of stance construction specifically, it was observed that the correlation between modals and writing quality was significant ($r = .579, p < .01$). However, there was a much weaker linear relationship between the use of that-complement clauses and writing quality ($r = .360, p < .05$).
In this study, we posed four questions. For the first question, transitions and hedges were ranked among the most frequent sub-categories of interpersonal resources. One explanation for the high use of transitions and hedges can be found “in the rhetorical function of the metadiscourse categories themselves” (Intaraprawat & Steffensen, 1995, p. 266). Indeed, the high use of transitions, making internal connections in writing, is clearly an important feature of persuasive writing. Higher use of hedges implies that students seem to take care against making overstatements when expressing claims. In doing so, students indicated that “information is presented as opinion rather than accredited fact” (Hyland, 1998a, p. 351). In general, students’ frequent use of transitions and hedges demonstrates a concern with the “rhetorical purposes of writers and their sensitivity to readers” (Hyland, 2005c, p. 371).

As seen in their limited use of endophoric and evidential markers, these students were far less willing to use information in other parts of the text or from other texts, perhaps anxious to create a clear statement of ideas by logical and cohesive sequencing within the limited time of 30 minutes. The writing task was an opinion-based type of writing, and thus, it would not be surprising that the students would rely more on their personal projection in providing specific reasons for why people visit museums. This also explains why evidential markers were rarely observed in these student writings.

Accordingly, students at least used some of the metadiscourse markers available to them, but were relatively limited in rhetorical dynamics. Basically, if the markers helped students organize the text (transitions), or were necessary as a way of presenting claims as opinion rather than fact (hedges), they occurred frequently. On the other hand, if the features were “largely redundant or rest on insight into reader needs and beliefs” (Intaraprawat & Steffensen, 1995, p. 268) (e.g., code glosses, frame markers), they occurred infrequently.

On the second question, several different resources were significantly associated with writing quality. In fact, transitions, frame markers, code glosses and hedges were found to be critical elements with regard to student writing quality. Both the frequency and diversity
of hedges showed associations with writing quality, with the latter exhibiting a somewhat stronger relationship than the former. Because of the high personal involvement of the writing topic, students seemed to favor a more cautious and considerable tentativeness when expressing opinions. This in turn affected their heavy use of hedges.

If we limit the correlation result to hedges alone, it is fairly consistent with previous research on the use of hedges, and its relation to writing proficiency (Aull & Lancaster, 2014; Lancaster, 2014; Uccelli et al., 2013). For example, Aull and Lancaster (2014) examined linguistic expressions of stance in argumentative essays written by first-year university students in comparison with the writing of more advanced upper-level students. Their findings showed that first-year students tended to underuse hedges, while their more advanced students tended to draw on hedges more frequently. In addition, this finding supports the study by both Hyland (2005b), and Hyland and Milton (1997), demonstrating that more advanced writers hedge more than they boost.

It is worth noting that both frequency and diversity of frame markers showed significant associations with writing quality. Although frame markers only account for 5.1% of the total number of types of metadiscourse used, writings with a higher frequency or variety of frame markers exhibit higher quality writing scores. The findings also convincingly show that both frequency and diversity of frame markers are positive predictors of overall writing quality. Related to Question 3, then, it can be understood that the skilled persuasive writers in this study are those who can flexibly use frame markers to explicitly mark the organization of their argument (e.g. first, second; to conclude, in sum) for readers (Cao & Hu, 2014; Khedri et al., 2013).

In the students’ repertoire of linguistic forms of metadiscourse used to project a stance, the students were found to have difficulty handling the range of linguistic options they could take to express stance (Jiang, 2015). That is, stance construction was unfortunately couched in single-word modal verbs. This could be due to the fact they rely on familiar lexical items such as modal verbs. As noted earlier, the students commonly expressed stance meaning overtly with the use of modal verbs. This result supports the previous research (Choi & Ko, 2005; Hyland & Milton, 1997; Schleppegrell, 2002), in that the L2 students were found to have difficulty handling stance expressions, with significant reliance on the limited lexical options of modal verbs and adverbs.

Their high use of modal verbs can be explained at both the syntactic and semantic levels. Syntactically, it is possible that EFL students easily construct the structures with modals “as part of verb phrase” (Biber et al., 1999), as in Every people might have their own reasons to visit museums. Semantically, modal verbs are understood as providing stance meanings for the entire clause as they are incorporated into the main clause (Biber et al., 1999). Thus, the students in this study may regard modals as “easy forms, where the form-function relationship is transparent” (Fordyce, 2013, p. 8).
On the basis of these findings, then, to teach EFL students to use metadiscourse effectively, teachers should help EFL students develop the norms and expectations as to the appropriate use of metadiscourse in different discourse contexts (Hyland, 2005a). Teachers should not “focus [only] on surface forms” (Hyland & Tse, 2004, p. 174) lest students misunderstand “metadiscourse as an independent stylistic device which authors can vary at will” (ibid. 174-5). At the same time, teachers should make the linguistic expectations of persuasive writing explicit to students to assist them in making stronger arguments. Teachers also need to equip students with a wider, more general vocabulary to present arguments effectively.

This in turn suggests that further research from a variety of EFL students across English proficiency levels, and methodologically, more corpus-based studies would be necessary for an “empirical description” (Price, 2008), of how EFL students use metadiscourse in practice. We can then create EFL writing courses “which arise from principled reasons derived from through investigations” (Kroll, 2001, p. 231). In this sense, we hope that this study can advance our understanding of the metadiscourse features Korean EFL college students “deploy in securing their claims” (Hyland & Tse, 2004, p.175), with carryover benefit to EFL writing instruction.

REFERENCES


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