Exploring the Use of Hedges and Stance Devices in Relation to Korean EFL Learners' Argumentative Writing Qualities

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In argumentative writing, writers are expected to use hedged expressions and stance devices through specific linguistic expressions to convince their proposition effectively. Yet little research attention has been paid to whether the inclusion of such devices is related to the overall quality of second or foreign language learners' argumentative writing. In this study, hedges and stance devices that are included in 28 advanced Korean EFL writers' argumentative writing were analyzed to identify their potential relation to the overall writing quality. Analyses demonstrated that although hedges and stance devices were related to argumentative writing quality in general, the specific linguistic forms that predicted two different aspects of writing quality – formal and content quality – were different. Specifically, hedges played a significant positive role in only content quality of writing, and the specific stance devices that significantly predicted formal quality did not contribute to the content quality, and vice versa. The findings from this study provides important pedagogical implications for EFL writing instruction.

Key words: hedges, stance devices, lexico-grammatical stance, argumentative writing, Korean EFL students, discourse analysis

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1. INTRODUCTION

Writing is a challenging task for second (L2) and foreign language (FL) learners, because it requires not only a demonstration of linguistic skills at the discourse level but also understanding of its social and communicative function in the target language. It is more so without appropriate writing instruction that familiarizes them with the expected discourse norms and styles. Although argumentative writing is one of the most common academic genres (Ädel, 2008; Connor, 1990; Hyland, 1990), it may be especially more challenging for English as a second language (ESL) and foreign language (EFL) writers, since it is considered a highly social practice which requires positioning ones' claims carefully for the readers in the community or expressing disagreement on previous views and voices (Swales, 1990). In addition, the writers are expected to include interpersonal and evaluative discourse features such as *evidentiality* (Chafe, 1986), *metadiscourse* (Crismore, 1989; Hyland, 2005), *stance* (Biber, 2006a; Biber & Zhang, 2018), and *voice* (Tompson, 1996) in conveying their arguments appropriately and effectively.

Among those discourse features, hedges, as part of metadiscourse features that assist the writer in conveying his/her perspective and engaging the readers (Hyland, 2005), play an important role in argumentative writing (Hyland, 1996, 1998, 2000). As words that convey the meaning of "text more or less fuzzy" (Lackoff, 1975), however, hedges are found to be a challenging discourse form for L2 or FL writers (Hinkel, 2005; Hyland, 1994; Kim, 2009). Likewise, lexico-grammatical stance devices which express the writer's certainty, attitude, generalization, and judgment of the content (Biber & Fineggan, 1988) have been identified as one of the discourse features with which L2 writers show different patterns of use compared to first language (L1) writers (Ağçam & Özkan, 2015; Allison, 1995; Chen, 2012; Hyland & Milton, 1997; Lee, 2007). Considering that hedges and stance devices enable effective and persuasive communication of arguments, it is essential to study how such differences might relate to L2 writers' writing qualities. However, most studies on these discourse features have focused on identifying the preferred devices by different groups of writers, merely comparing frequencies of devices included in writing (Biber, 2006a, 2006b; Chan, 2015; Fordyce, 2013; Oh, 2007), rather than analyzing how such uses may or may not be related to the overall writing quality. Moreover, despite the potential effects of language proficiency or writing fluency on the relations stance devices and hedges might have with writing qualities, most previous studies have not considered them. Thus, this study aims to explore how the use of hedges and stances devices might be related to advanced Korean EFL learners' argumentative writing while taking into account their English proficiency and writing fluency.

2. REVIEW OF THE LITERATURE

2.1. Metadiscourse

Metadiscourse features are one of the fundamental aspects in writing, because they help not only to build writers' ideas but also to organize their arguments to facilitate the readers' understanding and involvement in the text. Metadiscourse refers to "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 (Hyland, 2005, p. 37)." Metadiscourse comprises two dimensions: interactive dimension that helps the reader while reading the text, with the use of transitions, frame markers, endophoric markers, and code glosses and the interactional dimension which involves the reader in the text through the use of hedges, boosters, attitude markers, self-mentions, and engagement markers. Since the interactional dimension facilitates reader-writer connection and thus focuses on the communicative function of writing, it has received much research attention in L2 writing research (Çandarlı, Bayyurt & Martı, 2015; Cheng & Steffensen, 1996; Choi & Ko, 2005; Crismore, Markkanen, & Sterrensen, 1993; Hyland, 1996, 1998, 2000, 2005; Lancaster, 2016; Lee & Deakin, 2016; Park & Oh, 2018).

In general, research on the use of metadiscourse features in L2 learners' writing have suggested their potential relation to the overall writing quality (Crosthwaite & Jiang, 2017; Dobbs, 2014; Ho & Li, 2018; Huh & Lee, 2016; Intaraprawat & Steffesen, 1995; Lee & Deakin, 2016). For example, comparison of persuasive essays by good and poor ESL undergraduate writers from diverse L1 backgrounds highlighted good writers' tendency to use metadiscourse features twice as much as the poor writers, thus suggesting their positive facilitative role in L2 learners' writing (Intaraprawat & Steffesen, 1995). This finding was supported by a similar study conducted by Lee and Deakin (2016), which demonstrated that successful argumentative essays by Chinese English learners included greater amount of metadiscourse features compared to the less-successful ones. Likewise, both frequency and diversity of metadiscourse features were identified as predictors of Korean college students' English persuasive writing (Huh & Lee, 2016). Although researchers have argued for the positive facilitative role of metadiscourse features in L2 writing, however, most previous studies did not include measures of writing quality to analyze the direct relationship or did not measure writing outcomes in reliable ways. That is, when highlighting more amount of and more kinds of metadiscourse features used by good writers, those studies were not able to demonstrate whether these features actually contributed to the writing qualities after all (Çandarlı et al., 2015; Crismore, Markkanen & Sterrensen, 1993; Park & Oh, 2018).

Among different types of metadiscourse features, hedges, defined as a linguistic device

indicating "that a statement is based on plausible reasoning rather than certain knowledge, and allow readers the freedom to dispute it" (Hyland, 1998, p. 4) and as markers limiting commitment to a proposition and withheld writer's full commitment to statements (e.g., *possible, in general, kind of*) (Hyland, 1996, 1998, 2000), have received much research attention in the past (Afshar, Asakereh & Rahimi, 2014; Back, 2011; Choi & Ko, 2005; Crompton, 1997; Hinkel, 2002; Hyland, 2005; Kim, 2009; Salager-Meyer, 1994). Hedges have been identified as the most frequently used metadiscourse device not only in science articles (Hyland, 1996), but especially in L2 and FL writing (Hinkel, 2002; Hyland, 1994, 2005). For example, Hyland (2005) reported that the most common metadiscourse feature EFL postgraduate students in Hong Kong relied on was hedges, which constituted as much as 41% of all interactional uses and highlighted the importance of hedges in academic writing as means of conveying indirectness and avoiding responsibility to the certainty of a proposition. Similarly, Hinkel (2002) found that Japanese, Korean, and Chinese students tended to overuse hedges and uncertainty words, possibly due to their L1 writing expectations, and Back (2011) identified overused hedges in Korean English learners' academic writing as reflection of their L1 culture. Therefore, one possible explanation for overuse of hedges in L2 writing might be L1 influence.

On the other hand, some researchers have observed that using hedges in English writing may be a challenge for L2 writers without learning how to effectively use them in instructional materials (Hinkel, 2005; Hyland, 1994). This observation has been supported by Kim's (2009) corpus-based research that compared the inclusions of metadiscourse features in argumentative writing of a British newspaper and Korean undergraduate EFL learners, which identified hedges as the metadiscourse feature that set the two corpora apart. More specifically, the British L1 English corpus included almost twice as many hedges compared to Korean English (L2) corpus. He explained that the differences may be related to the English proficiency of the Korean EFL learners, having to focus on the formal aspect of the text due to their limited linguistic competence. Yet, a firm conclusion could not be drawn, because the participants' English proficiency was not considered in his study. In fact, despite metadiscourse devices being linguistic ones, there has not been much consideration to control for language proficiency of the writers while studying L2 writers' use of metadiscourse devices, especially hedges. Moreover, while there have been discrepant speculations about the use of hedges by L2 writers, especially Korean writers, attributing their overuse to their L1 writing conventions vs. their limited use to their limited L2 proficiency, little attention has been paid to identifying the exact role the use of hedges play in their writing quality by discerning their relationship, rather than merely comparing groups of writers, while taking their L2 proficiency into account.

While metadiscourse features, including hedges, do seem to be related to the delivery of writer's arguments, their focus is mainly on the way of conveying messages. Since

argumentative essays are to show writer's assertion about a proposition, s/he is expected to convey their personal stance such as feelings, attitudes, judgements, or assessments. Through a stance, writers not only express their knowledge and perspectives but also engage their readers in the text, which is accomplished through effective use of appropriate stance devices (Hyland, 2005). These devices include different grammatical categories such as stance adjectives, stance adverbs, and stance verbs. Focusing on the linguistic choices writers make, researchers have found that writers prefer using particular linguistic expressions to indicate a proposition and that identifying a stance helps interpreting the deeper meaning of discourse (Hunston, 2007).

2.2. Lexico-Grammatical Stance Devices

In general, previous research has demonstrated how the writer's stance is expressed through particular grammatical categories in various written genres (Ağçam & Özkan, 2015; Almeida, 2012; Aull & Lancaster, 2014; Biber, 2004, 2006a, 2006b; Biber & Zhang, 2018; Rhee, 2016; Staples & Reppen, 2016; Tapia & Biber, 2014). Most studies on L2 and FL writers' use of lexico-grammatical stance devices (hereafter, stance devices) have identified its challenging nature for such writers (Ağçam & Özkan, 2015; Allison, 1995; Chen, 2012; Hyland & Milton, 1997; Lee, 2007). That is, L2 writers have difficulty producing statements with a proper degree of stance which indicate their conviction or uncertainty in a way similar to the native speakers. Hyland and Milton (1997), for example, compared the corpora of English essays written by Hong Kong non-native high school students and native English-speaking British students and showed that although both groups were highly dependent on modal verbs and adverbs, most non-native writers did not use epistemic devices appropriately compared to the British L1 writers and only the proficient Hong Kong non-native English writers displayed competence in using stance devices. Focusing on different parts of speech, Ağçam and Özkan (2015) compared the use of stance adjectives included in doctoral dissertations written by Turkish and Spanish non-native speakers of English and native speakers of English and highlighted the significant underuse by the ESL writers. In contrast, Lee (2007) compared the use of evaluative adjectives that are a type of stance adjectives in English academic essays of native speakers of English and Korean EFL college writers and identified Korean EFL writers' overuse of such devices. The discrepant findings between the last two studies might be attributed to the writers' English proficiency or language learning contexts (second language vs. foreign language), yet neither study considered or provided such information to arrive at a firm conclusion.

There also have been some research attempts to compare the use of stance devices in different grammatical categories (Biber, 2006a, 2006b; Chan, 2015; Fordyce, 2013; Oh,

2007). Biber (2006a), for example, focused on common stance devices in TOEFL academic language corpus and demonstrated that the most commonly used ones were adverbials, predicative adjectives, and matrix clause verbs which express the attitude or judgment of the writer. In this sense, Biber's (2006b) taxonomies of stance devices that consider different semantic classes may provide systematic ways to examine their role in expressing writer's stance. Specifically, Biber (2006b) further classified stance adjectives, stance adverbs and stance verbs into several semantic categories, such as epistemic certainty (e.g., *certain, obvious* for adjectives; *actually, definitely* for adverbs; *conclude, find* for verbs), epistemic likelihood (e.g., *possible, probable* for adjectives; *perhaps, maybe* for adverbs; *assume, hypothesize* for verbs), attitude and emotion (e.g., *afraid, disappointed* for adjectives; *amazingly, hopefully* for adverbs; *complain, prefer* for verbs), evaluation (e.g., *appropriate, essential* for adjectives), ability or willingness (e.g., *able, willing* for adjectives), and ease or difficulty (e.g., *easy, hard* for adjectives). Based on these taxonomies, Chan (2015) documented Hong Kong graduate students' reliance on specific parts of speech in their dissertations in expressing their stance with modals, likelihood and attitudinal adverbs, stance adjectives, and specific grammatical constructions with the verbs that represented stance. In addition, their preferences for such stance devices were different depending on their disciplines. Although past research seems to agree on the usefulness of these specific taxonomies developed by Biber, Conrad, and Leech (2002), most research employing them have focused on identifying preferences and patterns of use, rather than on how such preferences may or may not relate to the overall writing quality.

Overall, although there have been numerous studies on the use of metadiscourse features and stance devices in L2 and FL writing, only a limited number of them have focused on what role these factors actually play in explaining their writing quality. That is, most previous studies have simply identified the specific devices favored by different groups of writers without relating such preferences to the overall writing qualities, thus often lacking a measure of writing proficiency in general. Since there have been acknowledgements regarding potential limitations in employing a single measure of writing qualities, either focusing only on the formal aspect (Powers, Burstein, Chodorow, Fowles, & Kukich, 2002; Quinlan, Higgins, & Wolff, 2009; Weigle, 2010) or content development (Eckes, 2008), it seems essential to include measures of writing proficiency that accounts for both linguistic or formal qualities as well as content qualities. This approach will enable thorough and accurate evaluations of one's writing in relation to the use of specific linguistic forms that function as metadiscourse features and stance devices. On the whole, in addition to the limited research attention paid to the specific role of metadiscourse features, especially hedges, and stance devices in relation to the actual evaluations of writing, the overview of previous studies show that there have been little considerations for L2 proficiency in examining the use of such features in their writing, albeit its potential effects. Also, despite

the nature of stance devices that serves to express one's opinions effectively, thus most appropriate for argumentative genre, much research has been conducted with other genres such as scientific article (Almeida, 2012), dissertations (Chan, 2015), expository essays (Aull & Lancaster, 2014), persuasive essays (Huh & Lee, 2016), and opinion and description genres (Fordyce, 2013). Thus, this study aims to examine how the use of hedges and stance devices, including stance adjectives, stance adverbs, and stance verbs, relate to the overall writing quality of advanced Korean EFL writers' argumentative essays while considering both formal and content qualities and while controlling for their English proficiency. More specifically, the current study was designed to answer the following questions:

1. Is the use of hedges and stance devices related to the overall quality of Korean EFL learners' argumentative writing?
2. Does the use of stance devices and hedges predict Korean EFL learners' argumentative writing quality when their English proficiency is controlled for?

3. METHOD

3.1. Participants

The participants of this study were twenty-eight (13 males and 15 females) undergraduate students, who were seniors studying various disciplines including engineering and humanities in universities in Seoul, Korea. Since they were all preparing for either graduate school applications in English-speaking countries or searching for jobs that require demonstration of their English proficiency, all of the participants had taken *TOEFL iBT* and submitted official score reports issued by ETS (Educational Testing Service). These scores were used to control for the participants' overall English proficiency in this study. The mean *TOEFL iBT* score of 104.57 (*SD* = 9.17, minimum score = 84, maximum score = 119) identified them as advanced EFL learners. All of the participants reported not having prior experiences of living in English-speaking countries for more than three-month time periods and had received at least 10 years of English education in Korea.

3.2. Measures

3.2.1. Writing task and evaluation

The participants were asked to write a timed argumentative essay. They were given 30

minutes to write on a TOEFL writing prompt, "*Do you agree or disagree with the following statement? Smoking in public places should be prohibited.*" Each essay was transcribed to be evaluated for its overall quality by two separate evaluation approaches: 1) an ETS-developed e-rater program, *Criterion* and 2) Toulmin scoring. The *Criterion* evaluation is mainly on linguistic accuracy and textual features, thus focusing on the formal qualities of writing. The *Criterion* scores range from 1 to 6, score 6 being the highest possible score. The reported reliability estimate reported by the developers, weighted Kappa, is 0.72 (Enright & Quinlan, 2010). The Toulmin scoring, on the other hand, complements the limitations of *Criterion* by focusing on the content features and logical development of arguments (Weigle, 2011). Adopting Toulmin rubric developed by Connor and Lauer (1988), each essay was scored for each inclusion of Toulmin elements, including claim, data, warrant, and secondary elements (rebuttals, backing and qualifier), each receiving a score between 1 and 3, thus the maximum possible score being 12. The Toulmin sub-scores were further averaged and summed to generate a total Toulmin score. Two experienced researchers evaluated the essays independently, and the interrater reliability, Cohen's kappa, ranged from .80 to .89.

3.2.2. Categories of analysis

To identify the potential facilitative role the metadiscourse features might play in explaining the quality of Korean EFL learners' argumentative writing, the present study adopted the coding categories from relevant previous studies for stance devices (Biber, 2006b; Biber & Finegan, 1989; Biber et al., 2002) and hedges (Hyland, 2005; Hyland & Milton, 1997).

Each written argumentative essay was divided into T-units for further analyses, which Hunt (1970) defined it as "one main clause plus any subordinate clause or nonclausal structure that is attached to or embedded in it" (p. 4). Each T-unit was then coded for the categories of stance devices and hedges presented below. This study adopted a modified version of Biber's (2006b) taxonomy of stance devices to focus on three stance devices: stance adjectives, stance adverbs, and stance verbs. Added to these categories, among Hyland's (2005) categorization of metadiscourse, hedges were also included in the coding standards. The adopted categories included the following.

- ■ Stance adjectives refer the adjectives that express someone's stance, including the following subcategories:
  - • Epistemic certainty adjectives: Adjectives that show levels of certainty or doubt about the proposition (e.g., *apparent, certain, obvious*)
    It is <u>obvious</u> that in a modern society, everyone has an obligation to respect others'

right.

- Epistemic likelihood adjectives: Adjectives that imply probability of the idea (e.g., *likely, possible, probable*)

  It is <u>possible</u> to reduce indirect smoking if we ban smoking in public places.

- Attitude and emotion adjectives: Adjectives that indicate writers feeling about the proposition (e.g., *annoyed, disappointed, nervous*)

  I was so <u>nervous</u> about this tryout.

- Evaluation adjectives: Adjectives that represent writer's judgements about the idea (e.g., *appropriate, bad, important*)

  That was a <u>bad</u> decision, too.

- Ability or willingness adjectives: Adjectives that express the ability and readiness (e.g., *able, anxious, careful*)

  I won't be <u>able</u> to quit smoking.

- Ease or difficulty adjectives: Adjectives that show evaluation on the idea (e.g., *difficult, easy, hard*)

  In the past, especially about 20 or 30 years ago, it was not that <u>difficult</u> to find people smoking in public.

■ Stance adverbs refer to the adverbs representing the writer's stance:

- Epistemic certainty adverbs: Adverbs that comment on the actuality of ideas (e.g., *actually, certainly, definitely*)

  If the government even bans this type of smoking, it is <u>certainly</u> restricting one's own right to behave as he or she wants.

- Epistemic likelihood adverbs: Adverbs that indicate the probability and likelihood of ideas (e.g., *apparently, perhaps, probably*)

  Destruction of the scenery is the direct and <u>probably</u> the most obvious repercussion of public smoking.

- Attitude adverbs: Adverbs that show the writer's emotional attitude about a proposition (e.g., *amazingly, essentially, fortunately*)

  <u>Fortunately</u>, they are very healthy.

- Style adverbs: Adverbs that express the writer's manner of speaking (e.g., *according to, generally, usually*)

  People who suggest that smoking should be banned in public <u>usually</u> pick public health for their reason.

■ Stance verbs include the particular verbs that show the writer's stance, including the following:

- Epistemic certainty verbs: Verbs that express conviction or *certainty* (e.g., *conclude, notice, prove*)

  It is <u>proven</u> that secondhand smoking is dangerous.

- Epistemic likelihood verbs: Verbs that imply questionable assertions (e.g., *assume, guess, seem*)
  I guess they don't mind if I smoke.
- Attitude verbs: Verbs that show the writer's personal attitudes (e.g., *agree, expect, feel*)
  For example, when I go to pc-rooms to use computers, I always smell smoke and it makes me feel awful.
- Desire and intention verbs: Verbs that express the writer's desire, decision, and intention about the idea (e.g., *decide, hope, want*)
  Let us all hope to see a change in the law regarding public smoking.
- Causation and effort verbs: Causation, modality, and effort verbs that indicate the facilitated action (e.g., *enable, mange, require*)
  However, such argument cannot be accepted as long as the right of a group of people requires sacrifice of others.
- Communication verbs: Verbs that describe speech acts, communicative activities and source of information about the proposition (e.g., *claim, insist, say*)
  The doctors insisted that I should stop smoking.
- ■ Hedges: Metadiscourse features that convey imprecision of a proposition (e.g., *in general, kind of, typical*)
  In general, preference takes a main role in consuming a product.

3.2.3. Reliability of coding

To establish the interrater reliability of the coding system, two independent experienced researchers coded the participants' essays, following the coding scheme outlined above. The interrater reliability measured by Cohen's kappa was all within an acceptable range, ranging from .85 to .94 across different categories of analysis.

4. RESULTS

To answer the research questions, quantitative analyses were conducted including descriptive statistics, correlation analyses, and hierarchical regression analyses. Table 1 displays the descriptive statistics of the analyzed variables. Of these variables, the participants' official *iBT* TOEFL score, the number of T-units, the number of words per T-unit, and total number of words served as control variables. While TOEFL score was used as an index for their overall English proficiency, the number of T-units and total number of words included in their essays were included to control for the variations in the length of

their essays, and the number of words per T-unit was included to control for linguistic complexity, thus the latter three controlling for the participants' writing fluency in general. For the TOEFL score, only the composite score for reading, listening, and speaking sections were used in order to eliminate the potential effects of covariance, especially since the collected essays were on a TOEFL prompt. Among the variables, the mean score of students' TOEFL reading, listening, and speaking composite score was 79.50 (SD = 7.08), out of the maximum possible score of 90, which points to their relatively advanced level of English proficiency. In addition, the participants commonly used stance verbs the most (M = 9.25, SD = 3.70) in their argumentative writings, followed by stance adjectives, hedges, and stance adverbs (M = 3.64, SD = 2.96; M = 3.11, SD = 2.41; M = 2.79, SD = 2.49; respectively). In other words, the advanced Korean EFL learners relied most heavily on the use of stance verbs in making their points.

TABLE 1

Descriptive Statistics (N=28)

Category	Subcategory	Min	Max	Mean	SD
Control Variable	iBT TOEFL Score	64.00	90.00	79.50	7.08
	The Number of T-unit	9.00	42.00	25.96	8.54
	# Words per T-unit	9.55	17.89	12.98	2.24
	Total # of Words	161.00	588.00	330.86	101.56
Outcome Variable	Criterion scores	2	6	4.64	1.06
	Toulmin scores	5	9	7.18	1.06
Question Variable	SA Epistemic Certainty	0.00	3.00	0.64	0.78
	SA Epistemic Likelihood	0.00	1.00	0.14	0.36
	SA Attitude and Emotion	0.00	7.00	1.46	1.86
	SA Evaluation	0.00	3.00	0.82	0.95
	SA Ability or Willingness	0.00	3.00	0.18	0.61
	SA Ease or Difficulty	0.00	2.00	0.39	0.63
	SA Total	0.00	14.00	3.64	2.96
	SAdv Epistemic Certainty	0.00	3.00	0.89	0.99
	SAdv Epistemic Likelihood	0.00	4.00	0.68	1.06
	SAdv Attitude	0.00	5.00	0.43	1.03
	SAdv Style	0.00	2.00	0.79	0.88
	SAdv Total	0.00	9.00	2.79	2.49
	SV Epistemic Certainty	0.00	5.00	1.57	1.14
	SV Epistemic Likelihood	0.00	7.00	1.57	1.55
	SV Attitude	0.00	2.00	0.21	0.50
	SV Desire and Intention	0.00	7.00	2.46	1.92
	SV Causation and Effort	0.00	4.00	1.04	1.26
	SV Communication	0.00	5.00	2.39	1.52
	SV Total	3.00	19.00	9.25	3.70
	Metadiscourse Hedges	0.00	10.00	3.11	2.41

Note. SA = Stance adjectives, SAdv = Stance adverbs, SV = Stance verbs

In general, the Korean EFL participants tended to use certain stance devices and hedges in their argumentative writing. More specifically, they used attitude and emotion stance

adjectives the most (M = 1.46, SD = 1.86). While they used epistemic certainty adverbs the most (M = 0.89, SD = 0.99) among the stance adverbs, they relied most heavily on stance verbs that convey the message of desire and intention among different stance verbs (M = 2.46, SD = 1.92).

To identify the relationships between writing quality and the examined variables, correlation analyses were conducted next. Although correlation analyses were conducted for every coded variable, only those which showed significant correlations and were thus included in the next sets of analyses are presented in Table 2, along with the control and two major outcome variables.

Among the control variables that represented the participants' overall writing fluency, only total number of words were significantly associated with both writing scores (r = .418, p < .05; r = .425, p < .05, respectively), while the number of T-unit and the number of words per T-unit were not (r = .288, p = .137; r = .173, p = .378 for *Criterion*; r = .259, p = .183; r = .099, p = .618 for Toulmin). In addition, their' English proficiency measured by TOEFL scores had a statistically significant relationship with both *Criterion* and Toulmin scores (r = .453, p < .05; r = .463, p < .05, respectively). The weak correlation between *Criterion* and Toulmin scores, as they measure different aspects of writing (form and content, respectively), reconfirms the need to consider both in measuring overall writing qualities, as many previous studies have suggested (Connor, 1990; Crammond, 1998; Nussbaum & Kardash, 2005; Paek & Kang, 2017).

Interestingly, variables that demonstrated significant correlations were different for *Criterion* and Toulmin scores. In particular, epistemic certainty adjectives (r = .466, p < .05) and evaluation adjectives (r = .488, p < .01) were positively related to writing quality measured by *Criterion*, while different stance adjectives, such as adjectives that represented epistemic likelihood, attitude and emotion, ability or willingness, ease and difficulty, did not (r = -.154, p = .434; r = -.181, p = .356; r = -.045, p = .821; r = -.218, p = .265, respectively). The total of all the stance adjectives showed significant relationship with *Criterion* scores (r = .429, p < .05). On the other hand, none of the stance adjectives showed a significant relationship with Toulmin scores.

In addition, none of the stance adverbs such as epistemic certainty adverbs, epistemic likelihood adverbs, attitude adverbs, style adverbs, and even the total number of stance adverbs, displayed significant relations with *Criterion* score (r = -.143, p = .468; r = .092, p = .641; r = -.024, p = .903; r = .114, p = .564; r = .012, p = .952, respectively). Unlike the *Criterion* scores, however, the use of epistemic likelihood adverbs and the total number of epistemic adverbs were significantly related with the Toulmin scores (r = .552, p < .01; r = .489, p < .01, respectively), while other stance adverbs such as epistemic certainty adverbs, attitude adverbs, style adverbs, and the total number of stance adverbs were not (r = .266, p = .171; r = -.242, p = .214; r = .083, p = .675; r = -.269, p = .166, respectively).

TABLE 2
Correlation Analysis of Stance Devices and Hedges

	1	2	3	4	5	6	7	8	9	10
1. *iBT* TOEFL										
2. # of T-unit	.467*									
3. # of words per T-unit	.137	-.470*								
4. Total # of words	.658**	.851**	.000							
5. SA Epistemic Certainty	.308	.270	.095	.316						
6. SA Evaluation	.158	-.024	.042	-.027	.162					
7. SAdv Likelihood	.349	.352	.003	.392*	.395*	-.134				
8. SV Epistemic Certainty	.253	.033	.216	.183	.072	.340	.220			
9. Metadiscourse Hedges	.646**	.470*	.137	.610**	.100	-.170	.305	.112		
10. *Criterion*	.453*	.288	.173	.418*	.466*	.488**	.092	.390*	.160	
11. Toulmin	.463*	.259	.099	.425*	.215	-.190	.552**	.282	.516**	.059

Note. SA = Stance adjectives, SAdv= Stance adverbs, SV = Stance verbs
*p < 0.05, **p < 0.01

As for the use of stance verbs, only epistemic certainty verbs (r = .390, p < .05) was significantly correlated with *Criterion* score, and other stance verbs such as epistemic likelihood verbs, attitude verbs, verbs that convey desire and intention, verbs of causation and effort, and communication verbs were not (r = .151, p = .443; r = .220, p = .261; r = -.116, p = .557; r = .148, p = .452; r = -.002, p = .993, respectively). None of the stance verbs examined were significantly related to the Toulmin scores. Hedges, on the other hand, did not correlate with *Criterion* score (r = .160, p = .415), while it did with the Toulmin score (r = .516, p < .01).

In sum, while the participants' overall English proficiency and writing ability were significantly correlated with both *Criterion* and Toulmin scores, the specific stance devices that were correlated to these two measures of writing qualities were different, with no overlaps. In case of *Criterion*, the measure of formal qualities of writing, stance adjectives that represented epistemic certainty and evaluation, and the overall use of stance adjectives were correlated, while epistemic likelihood stance adverbs and hedges were the ones significantly related to Toulmin score that reflects the content quality of writing.

In order to identify the specific stance features that contribute to the Korean EFL learners' overall writing quality, two sets of hierarchical regression analyses were conducted separately, for *Criterion* and Toulmin evaluation, by controlling for the participants' English proficiency measured by their TOEFL scores and their writing fluency reflected in the number of T-units, number of words per T-units, and total number of words included in their writing. Table 3 displays hierarchical regression analysis explaining the variance in the participants' *Criterion* score. The control variables, TOEFL

scores, the number of T-unit, words per T-unit, and total number of total words, were entered in the first step to control for the effects of overall English proficiency and writing fluency, and they did not show any significant contribution ($F = 1.994$, $p = .129$). Then, epistemic likelihood stance adverbs and hedges, the two variables that showed significant correlation with the content quality of their writing, were entered in Step 2, in order to control for the effects of content-related devices. These did not make a significant contribution to the formal qualities of writing measured by *Criterion* ($F = 1.391$, $p = .271$). For Step 3, epistemic certainty verbs, which was one of the two stance devices that showed significant correlations with *Criterion* score, were entered to see whether it makes any additional contribution. However, it turned out that the epistemic certainty verbs did not explain any additional variance in the *Criterion* score beyond that explained by the control variables and content-related devices ($F = 2.416$, $p = .136$). Finally, the total number of stance adjectives entered at Step 4 made significant unique contribution in explaining the variance in the *Criterion* scores ($F = 4.610$, $p < .05$), above and beyond the effects of their English proficiency, writing fluency, content-related devices such as epistemic likelihood stance adverbs and hedges, and epistemic certainty verbs. This model explained about 53% of the variance in the formal qualities of the Korean EFL learners' argumentative writing.

TABLE 3
Hierarchical Regression Analysis Predicting Formal Writing Qualities

Steps	Variables	R^2	ΔR^2	ΔF	*Sig*
1	TOEFL Score, # of T-units, # of Words per T-unit, Total # of Words	.258	.258	1.994	.129
2	Epistemic Likelihood Stance Adverbs, Hedges	.344	.087	1.391	.271
3	Epistemic Certainty Stance Verbs	.415	.071	2.416	.136
4	Stance Adjectives Total	.529	.114	4.610	.045

Another set of hierarchical regression analysis was conducted to identify which variables contributed to the variance in Toulmin scores, the measures of content qualities of the participants' writing (see Table 4).

TABLE 4
Hierarchical Regression Analysis Predicting the Content Qualities of Writing

Steps	Variables	R^2	ΔR^2	ΔF	*Sig*
1	TOEFL Score, # of T-units, # of Words per T-unit, Total #of Words	.285	.285	2.290	.091
2	Epistemic Certainty Stance Verbs, Stance Adjectives Total	.344	.059	.941	.406
3	Hedges	.432	.088	3.101	.094
4	Epistemic Likelihood Stance Adverbs	.566	.134	5.873	.026

The same control variables that control for their English proficiency and writing fluency were entered in Step 1, and they explained about 29% of the variance ($F = 2.290$, $p = .091$). In Step 2, certainty stance verbs and the total number of stance adjectives, the two stance devices that were significantly correlated to the formal qualities of their argumentative writing, were entered in order to control for their effects. They did not show any unique contribution to the content qualities of their writing ($F = .941$, $p = .406$). In Step 3, hedges, one of the two variables that were significantly correlated with their Toulmin score, was entered and did not contribute any additional significant amount of variance at .05 level of significance, although it did at .10 level of significance ($F = 3.101$, $p = .094$). The epistemic likelihood stance adverbs entered at Step 4 contributed significant additional variance in their Toulmin scores, above and beyond the effects of their English proficiency, writing fluency, formal quality-related stance devices, and hedges ($F = 5.873$, $p < .05$). This model explained about 57% of the variance in the content qualities of Korean EFL learners' argumentative writing. In short, results from the analyses demonstrate that when controlling for their English proficiency and writing fluency, different specific linguistic devices predict the formal and content qualities of advanced Korean EFL learners' argumentative writing.

5. DISCUSSION AND CONCLUSION

This study was conducted to investigate whether hedges, as part of metadiscourse features, and stance devices are related to the overall qualities of Korean EFL learner's argumentative writing. In doing so, the writers' general English proficiency was accounted for, and their argumentative writing was evaluated both for its formal and content qualities. The analyses revealed that in general, 1) the use of hedges and stance devices, specifically the total use of stance adjectives, epistemic certainty adjectives, evaluative adjectives, and epistemic stance verbs were related to the formal qualities of the writing, while the total epistemic adverbs used, epistemic likelihood stance adverbs, and hedges were related to the content qualities of argumentative writing, and 2) hedges and certain stance devices did predict either the formal or content qualities of argumentative essays above and beyond the effects of their English proficiency and writing fluency. Interesting to note is that such relations and contributions of the specific devices were different for formal and content qualities of the writing. More specifically, the use of hedges was significantly related to the content qualities, but not formal qualities, of the Korean EFL learners' argumentative writing. Similarly, the specific stance devices that were significantly related to the content qualities were not significantly related to the formal qualities, and vice versa. This highlights the importance of considering both aspects of writing qualities and cautions

against relying on a single measure of writing quality in a study. Since no previous studies have assessed writing for both forms and content, no direct comparison can be made. But in general, the findings of this study coincide with those from previous research that demonstrated how hedges (Crosthwaite & Jiang, 2017; Ho & Li, 2018; Huh & Lee, 2016; Intaraprawat & Steffesen, 1995; Lee & Deakin, 2016) and stance devices (Huh & Lee, 2016) were related to the overall writing qualities. In contrast, the significant relationship between hedges and stance devices and either formal or content quality measure of writing found in this study contradicts a few previous findings that reported lack of such relationship for specific stance devices (Dobbs, 2014). The discrepancies could be attributed to the differences in the writing evaluation approaches, which further highlights the importance of thorough writing quality measurement all together.

Similar to our finding regarding the relationship the inclusion of hedges and stance devices have with overall writing qualities of Korean EFL learners' argumentative essays, the specific linguistic forms that predicted their writing qualities when controlling for their English proficiency and writing fluency were different for the formal and content quality measures of writing. Specifically, it was the overall use of stance adjectives that explained the formal qualities, while it was epistemic likelihood stance adverbs that contributed to the content qualities of their argumentative essays, above and beyond the effects of their English proficiency and writing fluency. Again, this particular finding contradicts those from the few studies that attempted to explore the predictive role of stance devices. In addition to the presence/absence of control for target language proficiency and/or adequate measurement of writing to serve as an outcome variable, the discrepancies in the research findings might be related to the language learning contexts (SL vs. FL) and thus the amount of exposure to target language (Dobb, 2014), or to the genres of writing studied.

By showing that the inclusion of hedges and stance devices was related to higher scores in formal and content qualities of Korean EFL learners' argumentative writing, even when their English proficiency and writing fluency were accounted for, this study yields pedagogical implications for EFL writing instruction by showing the positive significant contribution of using hedges and stance devices to the overall writing quality. Thus, instruction on how to use these features effectively and appropriately for different aspects of writing qualities is suggested and research on the effectiveness of such instruction is also called for.

This study, however, focused on only a small number of highly advanced EFL learners, and thus future research with larger number of participants and more diverse L2 learners are certainly needed in order to fully understand the specific roles hedges and different stance devices play in explaining their writing performance. Also, future studies with qualitative approaches that analyze the actual use of stance devices in relation to writing qualities are warranted. Despite such limitations, this study complemented previous

research in that it pointed out the specific linguistic forms that contribute to the writing qualities by directly assessing the relations rather than merely identifying the patterns of use preferred by different types of writers, employed more thorough evaluation approaches in measuring writing competence and considered the potential effects of target language proficiency in discerning such relationship. Overall, this study demonstrated that regardless of one's language proficiency, the length of writing and complexity of sentences, appropriate use of hedges and stance devices does contribute to the overall writing qualities of advanced Korean EFL writers.

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