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A Study on Error Analysis & Hedging Expressions of Medical Research Abstracts*

Eunpyo Lee
(Eulji University)

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Error analysis plays an important role because understanding the types of errors can give a better opportunity for both teachers and learners to recognize the nature of errors and ways of preventing them. This study looks into errors in the medical research abstracts written by 26 Koreans and also examines hedging expressions since hedging can be a necessary tactic in which the validity and objectivity of their claims is conveyed. The hedging expressions of these research abstracts are to be compared with those of Hyland (1996)'s study done on ENL academic writers of cell and molecular biology. The results of the study reveal that wrong word choice was the most commonly occurred errors, followed by prepositions, articles, adding and missing words. Many of these errors, except articles, seemed to derive from the native language interference. There were also run-on sentences, subject & verb agreement, tense, word order and minor errors. As for hedging, ESL medical writers seemed to use very limited hedging expressions and inappropriately strong modals. It is recommended to take variations of hedges using epistemic adverbials and adjectives to present their claims in a more valid and polite way. Limited verb choice was also noted. As for preventing or minimizing similar future errors, collocation practices in ESP focused on commonly used medical related words and expressions can be effective.

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[error analysis/interlingual errors/hedging strategies/collocation practices, 오류분석/국제언어적 오류/여지 표현/연어 연습]

I. INTRODUCTION

Korea had gone through quite a few political changes and economic reforms whenever a newly elected leader took over the regime. As a slogan of the government reformative measure a couple of decades ago, the term, globalization, swept the entire nation. With the term applied to almost every sector of the society, English proficiency has been strongly demanded as a prerequisite of globalization. In regards to the management of upper level institutions, some university presidents underwent reformative changes in managing their institutions the way CEOs would with their corporations. One of the wielding wands these top authorities waved was the so-called restructuring. And it has become a social phenomenon in business and academic institutions since the IMF era of 1997. For instance in academia, restructuring means unguaranteed renewal or dismissal of employment in case a faculty member does not meet the standards of that particular institution.

One specific standard has been emphasized on international publication of the journals. Such emphasis seemed to be greater in the medical field and the institution this researcher belongs to is no exception. In fact, international publication or SCI (science citation index) journal is one of the requirements for being promoted to a higher position. Consequently, a growing number of researchers seem to be striving with the language as these articles should be flawless. And it goes without saying that these professionals are in urgent need to acquire appropriate writing skills to compete in the international academic community. It is equally important for English writing teachers to provide adequate instruction so that the needs of the language learning can be fulfilled.

To give more effective English instruction to these learners, English for Specific Purposes (ESP) has become a major influence on the current practices in the English teaching. ESP approaches attempt to identify the commonly used rhetorical structures and linguistic features of academic or professional genres. In the fields of medicine, nursing and health, ESP in medicine is greatly

demanded by means of understanding medical terminology, hospital-related English, and situational medical English. Particularly in medical writing, understanding the nature of errors and coming up with ways to enhance writing is important. In addition, collocation practices and various hedging strategies are helpful concepts in academic writing.

The objectives of the study are: 1) to understand the types and nature of errors to minimize them from further medical writing, 2) to understand hedging expressions in Korean medical writing to give better ways to assert statements or make propositions in a more valid and polite way. With the result, it is 3) to provide better and efficient measures for medical writing that include collocation practices.

II. LITERATURE REVIEW

1. Error Analysis

In order to provide with the appropriate teaching instruction for ESL(English as Second Language) writing, it is essential to identify the types, classifications and frequencies of errors, according to Ellis (1985). There have been a number of studies on error analysis.

In identifying errors, Ellis states that it is important to consider whether sentences are 'overtly idiosyncratic' or 'covertly idiosyncratic.' And as for error classification, Dulay, Burt, and Krashen (1982) and Kim (1998) suggest that there are six domains: a noun phrase domain, a verb phrase domain, a clause and sentence domain, a prepositional domain, an adjective phrase domain, and other common error domains.

With respect to the sources of errors, Brown (2000) suggests four major factors: a) interlingual transfer; b) intralingual transfer; c) context of learning; d) communication strategies. Interlingual transfer involves the assumption that many errors result from native language interference. On the other hand, intralingual transfer largely involves overgeneralization within the target language itself. Errors can also be made because of misleading explanations by teachers and faulty presentation of structures in textbooks, which Brown (2000)

calls the 'context of learning.' In addition, communication strategies employed by learners themselves can become a source of error. While there can be many other sources, an error cannot always be ascribed to any one single source, nor can one claim to know precisely what causes a particular student to make a particular error.

Kim (1998) analyzed errors made by Korean high school students and found that problems with determiners, in particular, articles, were the most common error type, followed by the category of awkward expression, which was in turn followed by incorrect verb complementation. A similar study was done by Cha (2004) in an analysis of university students' writing samples, and found that determiners and verbs were the most common error types.

Ryoo (1992) did error analysis focused on Wh-questions using university students. He learned from the data of sentence-level test that Korean students exhibited psychological learning processes such as overgeneralization, ignorance of rule restrictions, incomplete application of rules and the use of false hypotheses.

Park (2005), who also investigated article usages in her study with a questionnaire and a cloze test, found that article usages are particularly difficult for advanced Korean learners in terms of semantic types, semantic environments, and article types. Other studies on error analysis include a study done by Jung (2006) that dealt with a part-specific analysis of grammatical errors in the production of the English passive in writing and with the result of the study, made suggestions for effective and well-formed use of the passive sentence.

However important the error analysis, there have been views critical of error analysis. One major shortcoming, according to Brown (2000), is overemphasis on production data, which means that it disregards the learning process. Schachter (1974) and James (1998) point out another limitation that error analysis fails to account for the strategy of avoidance. Brown (2000) asserts that "the absence of errors does not necessarily reflect native-like competence because learners may be avoiding the very structures that pose difficulty for them."

Error analysis, though it has several drawbacks, is important for some reasons according to Corder (1967) and Laroche (1983). They assert that it helps the student to figure out how far towards the goal he/she has progressed

and, consequently, what remains for him/her to learn. It also provides the researcher and teacher with evidence of what strategies the learner is employing in his/her discovery of the language.

2. Hedging

Another concept to be reviewed in this study is hedging. Hedging is useful to give leeways to both writers and readers when newly found claims or statements are reported. Academic writers are expected to provide their claims and/or statements in an objective way that can persuade the readers of the validity of their claims. If their statements are presented too strong or too weak, readers may have some doubt on the validity of their statements. Therefore, hedging plays a suitable role to present their statements in an appropriate level of caution or uncertainty. Lakoff (1972) explains that hedging refers to linguistic expressions "whose job it is to make things fuzzier (p. 195)." Myers (1989) also argues that hedging in scientific writing could be a politeness strategy. And according to Crompton (1997), hedging is the speech act of "starting a proposition" in academic writing (p. 273). Crompton explains hedging with the following sentences:

(1) It's raining, *unfortunately*.
(2) *I'm afraid* it's raining.
(1a) It's raining, *probably*.
(2a) *I feel sure* it's raining. (Italicized by the researcher for the purpose of explaining hedging.)

Unfortunately in (1) and *I'm afraid* in (2) express attitude, but *probably* in (1a) and *I feel sure* in (2a) express more than attitude. They express the speaker's commitment to truth of the proposition. Crompton, therefore, classifies (1a) and (2a) as hedging.

Crompton also states that hedging "may be used to display not only or necessarily the degree of confidence speakers have in their propositions but also how much confidence they feel it is appropriate to display" (p. 281).

Hyland, in his 1996 study of *Nurturing hedges in the ESP curriculum,* found

more than one word for hedging in every 50 words in his contextual analysis of a 75,000 word corpus of 26 research articles in cell and molecular biology (p. 480). Hedging was most commonly signaled by lexical verbs (23.3% of the total, including *suggest, appear, confirm,* and *tend to*, as in *This would appear to be ..., I believe that*), epistemic adverbs (e.g., *Possibly*, phosophorylation of ACC ...), epistemic adjectives (e.g., ... *is likely to be* due primarily to ...), and modal verbs (e.g., These results *may have* ...) Commonly used modal verbs included *can, may, seem, should, could,* and *might*.

Choi and Ko (2005) did a hedging study in EFL academic writing of Korean postgraduates and agreed with Hyland (1996)'s suggestion that L2 academic writers may use certain types of activities using concordances or doing some text analysis to identify hedged expressions and gain some appreciation of their appropriate use of hedging.

3. Collocational Competence

As for improving writing abilities of Korean college students' English proficiency, Kim (2005) did a research on the effects of collocational competence on the college students' English proficiency and writing abilities. She asserts a correlation between collocational competence and English proficiency. Another study done on improving writing ability was Jung (2006)'s study asserting that the majority of lexical errors appear to be due to incomplete knowledge of the finer shades of meaning distinctions which lexical items have (p. 35). It indicates that, for example, learning *'strong coffee'* instead of *'powerful coffee'* or *'Unfortunate situation can harm him,'* rather than *'Unfortunate situation can injure him,'* or *'decreased vision'* rather than *'diminished vision'* (adopted from medical writing) helps the learners and may provide better opportunity to use appropriate words. The words like *strong/powerful, injure/harm,* and *decrease/diminish* are such similar meaning word pairs causing ESL learners confusion that distinctions and practices of accurately using them are conducive.

III. METHOD

Twenty six medical research abstracts were reviewed in order to learn the types of errors in English medical research abstract written by Korean medical professionals. It was in an attempt to minimize the same errors from further writing and to see the kind of hedging expressions most used by Korean writers compared with those of ENL(English as Native Language) writers of cell and molecular biology based on the study done by Hyland (1996). All 26 abstracts were written in 2006 by Korean medical, nursing, and health department professionals. They were proofread by their supervisors or other advisors and forwarded to the researcher for the final review prior to the publication.

Each abstract was carefully reviewed in terms of types, frequencies of errors and hedging expressions to see the types of common errors and the way these medical research claims were stated. They were then categorized and listed on a master sheet for statistical analysis.

Twenty six research abstracts were classified into 3 major fields: medical, nursing, and health department as listed in Table 1. Medical department included dermatology, thoracic surgery, emergency medicine, family medicine, obstetrics & gynecology, and pathology. There were geriatrics, emergency, and psychiatric nursing while physical therapy and optometry were grouped as health department.

TABLE 1
Number of Abstracts in Medical, Nursing, & Health Department

Field of Studies	Number of Abstract Reviewed	Percentage
Medical	9	35
Nursing	8	30
Health	9	35
Total	26	100

Each categorized error was then marked 'o' in case such errors were made for 26 abstracts with an indication of M for medical, N for nursing, and H for

health. Table 2 shows the categories of errors these 26 abstracts contained:

TABLE 2
Errors Each Abstract Contained

	w w	prep	art	a w	m w	r-o	s+v	w o	t	m e
1-N	o	o	o	o			o			o
2-N		o	o							
3-M	o	o	o						o	
4-M	o		o				o			
5-H	o	o	o		o	o				
6-H	o		o						o	
7-H	o		o	o				o		
8-N	o	o					o		o	
9-H	o	o								
10-H	o	o		o		o				o
11-H	o	o			o					o
12-M				o						
13-N	o				o	o		o		
14-H	o	o	o	o	o					
15-H	o			o	o	o			o	
16-H	o		o	o	o				o	
17-N	o	o	o			o		o		o
18-N	o	o	o	o	o		o			
19-N	o	o		o		o		o		
20-N	o	o	o	o		o	o	o	o	
21-M	o	o			o					o
22-M							o			o
23-M		o				o		o		
24-M		o	o		o					
25-M	o		o							
26-M		o	o	o						
T	20	17	15	11	9	8	6	6	6	6

w w: wrong word choice errors
prep: preposition errors
art: article errors
a w: adding unnecessary word errors
m w: missing word errors
r-o: run-on sentence errors
s+v: subject & verb agreement errors
w o: word order errors
t: tense errors
m e: minor errors

IV. RESULTS AND DISCUSSION

1. Errors

There were a few spelling and punctuation errors but these mechanical errors were not taken into consideration for the current study. Non-mechanical errors were classified into 10 categories: wrong word choice, prepositions, articles, adding and missing words, run-on sentences, subject & verb agreement, word order, tense, and minor errors in the order of the frequency. It was noted that the most commonly occurred errors in these abstracts were wrong word choice (76%, 20 out of 26). Each of the wrong word choice was then listed separately for further analysis. About a half of these errors were resulted from first language interference. On the other hand, some of them could have been avoided if collocation practices were done while learning to write in English. The next table shows a list of each type and frequency of errors in 10 categories in the order of frequency.

TABLE 3
Types and Frequencies of Errors in 10 Categorized Rank Order

Rank	Types of errors	Frequencies	Percentage
1	wrong word choice	20	76
2	prepositions	17	65
3	articles	15	46
4	adding unnecessary words	11	42
5	missing words	9	34
6	run-on sentences	8	30
7	subject & verb agreement	6	23
	word order	6	23
	tense	6	23
	minor errors	6	23

The descriptions of each type and examples of actual error occurrences are then further listed:

1) Wrong word choice

Using inappropriate word(s) including ungrammatical form was categorized as wrong word choice. Some of these errors, about a half of them were inevitably intertwined with Korean transfer errors as shown in the following sentences.

(1)*The rates *became scored*. (*Became scored* was translated from '기록되었다' meaning 'the rates were recorded.')
(2)*education *state* (*State* was translated from '교육상태')
(3)*7~8 students were *made* in each group. (It was translated from '각 조는 7, 8 명으로 만들어졌다' meaning grouped in one.)
(4)*The data *gathering period* was about 2 months from ... (The data were collected for two months from ... This sentence was directly translated from '자료를 수집한 기간은' ....)
(5)**After* 5 to 10 minutes, *it had tendency toward* recovery. *(In* 5 to 10 minutes, the patient was recovered. It was translated from '5분 내지 10분 후에 회복하는 추세였다.')
(6)*Only 22 subjects participated in the study *until the completion*. (*Until the completion* was translated from '완성될 때까지' meaning throughout the study.)
(7)**whether to hope* to transfer ... (It was translated from '부서를 옮기고 싶은지' meaning undecided to transfer.)

More examples of wrong word choice are listed below and these errors could have been prevented if the correct usages and distinctions of commonly misused synonyms were taught with collocation practices in college English course.

(8)*feeding rate is a *chief* issue (*A chief* issue was translated from '주관심사'. Correct usage of *chief* and *major* needs to be practiced.)
(9)*The more the grade of students will *ascent*, the more ... (The better the students' grades get, the more ... Here the word *ascent,* misused for the verb *ascend*, meaning '올라가다' in Korean is often likely to be confused with *go up, rise, raise*, and *increase*.)
(10)*Another 4 patients survived. (Four other patients survived. *Another* and

other are one of the tricky pairs that greatly confuse L2 writers.) Some of these intralingual errors occurred due to overgeneralization and/or lack of grammar knowledge as listed below:

(11)*... before *performed* this study ... (... before *performing* (or *starting*) this study, ... *Do* and *perform* were also a confusing pair.)

(12)*The results were as *following*. (The results were as *follows*.)

(13)*... limited surgery was undertaken *concerning* with plastic tube insertion of ... (The word *concerning* was translated from '고려하여.')

(14)*It will be a *safety therapeutics* way to used in clinical field. (It will be a safe therapeutic way to use in the clinical field.) Part of speech is often misused in these abstracts showing incorrect choice of nouns for adjectives or vice versa as well as confusion of present participle with past participle.

2) Prepositions

Deletion, addition, and/or misuse of a preposition seemed inevitable in two thirds of the research abstract. One of the typical preposition errors was *different with* instead of *different from*. This also derived from Korean interference since it is translated from '~와 다르다.' Another commonly misused preposition was *during* instead of *for* as in '*during* 3 weeks.' These errors can be minimized if such commonly misused prepositions are emphasized and practiced in the early stage of English learning. The examples of common preposition errors are as follows:

(15)*The sucking speed of neonate in the experimental group was significantly *different with than* control group. (The sucking speed of the neonate in the experimental group was significantly *different from that of* the control group. Using *that of* was often deleted causing another typical error in the research abstract.)

(16)*The study proved a variety of muscle activity which maintains stability of knees depending types of exercise. (... depending *on* the types of ...)

(17)*The research was performed *for* 368 adults. (The research was done *on* 368 adults.)

(18)*Combined IFN group was ... *2 times of* a week. (... *twice* a week.)

(19)*... four hours *ago* before the surgery, ... (... four hours before the surgery, ...)

3) Articles

Addition, deletion, and/or mixed use of articles commonly occurred in about a half of these abstracts (46%). Similar to many other studies previously done stating determiners, especially articles, are one of the most commonly occurred errors, article errors in the medical research abstract accounted for the third most common errors. The examples are as follows:

(20)*Adopting an elastic thera band would be beneficial and effective way to the OA patients. (Adopting an ... would be *a* beneficial and effective way ...)
(21)*as *the* form of ... (as *a* form of ...)
(22)*the muscle activation of *the* each muscle ... (the muscle activation of each muscle ...)
(23)*After 5 days later, left great toe showed marked improvement at following visit. (Five days later, *the* left great toe showed marked improvement at *the* following visit.)
(24)*Medical conservative treatment was performed. (*The* medical conservative treatment was performed.)
(25)*Follow up CT showed... (*The* follow up CT showed...)

4) Adding unnecessary words

Adding unnecessary words was noted in approximately a half of the abstract. And some of the examples showed that they had resulted from native language transfer. The example sentences are as follows:

(26)*ADHD can be *made* better by the improvement and clinical treatment. (*Made* was unnecessarily added.)
(27)*This study was *planned to* investigate the effects of the ... (This study investigated the effects of the ... Unnecessary words *planned to* were added.)
(28)*151 elderly persons were initially picked *up as* for the sample survey.

(Unnecessary words *up* and *as* were added.)

(29)*_over_ the _last one_ year ... (_during_ the _past_ year ...)

(30)*_Revealed as_ result of this study were ... (The results were as follows. It was translated from '연구결과에 나타난 것은.')

(31)*_There were_ decrease in low back pain. (Low back pain was decreased.)

(32)*The outcome of the study is _like_ as follows: (The results were as follows.)

(33)*The prevention of metabolic syndrome can prevent occurrence of cardiovascular diseases or diabetes, and includes detecting abnormality of blood vessel functions and active management of it before the disease _makes_ any further progress. (... before the disease further _progresses_.)

5) Missing words

In some cases, subject, verb and/or other words were missing. The examples are listed below.

(34)*The breast milk pH in the experimental group was significantly higher than the control group. (The breast milk pH in the experimental group was significantly higher than _that of_ the control group. This also has to do with Korean translation error because _that of_ is not needed for Korean statement.)

(35)*... who have failed previous corticosteroid injections. (... who have _a history of_ previously failed corticosteroid injections. It contains another error, word order.)

(36)*All subjects were instructed _how to_ the co-contraction of trunk while performing exercise ... (A verb is missing after _how to_.)

(37)*... and it _tended_ toward recovery gradually. (To-infinitive is missing after _tended_.)

6) Run-on sentences

Run-on sentences occurred in 8 out of 26 abstracts, 30% of the total abstracts reviewed in which the results of the medical study were presented.

(38)*In comparison of myopia progression between non-myopic group and

myopic group, myopic group showed higher myopia progression significantly than non-myopic group, the increase in mean corneal radius showed no significant difference between both groups. (Two separate sentences are desirable.)

(39)*Emotional support and materialistic support scored 3.68, and 3.64 respectively, sympathetic support score was the highest. (Conjunction *and* is missing.)

(40)*The survey was done from April 1 to 30, 2006 and based on the data collected from two nursing home residents elderly in D city area, were staying in nursing home one month or longer, over 65 years old and being able to respond verbally. (This sentence has more than one error.)

7) Subject-verb agreement

(41)**These finding indicate* that ... (These findings indicated that ...)

(42)**Research instrument were* stress response scale and multi-dimensional coping scale. (Research instrument *was* ...)

(43)*The average response *score* of subjects' stress *were* 1.01. (The average response score of subjects' stress *was* 1.01.)

(44)*... a *72-years*-old senior who *were* ... (... a 72-*year*-old senior who *was* ...)

(45)*The data *was* collected ... (The data *were* collected.)

8) Word order

(46)*There was no *significant difference statistically*. (There was no statistically significant difference.)

(47)*Two *nursing home residents elderly* ... (Two elderly nursing home residents ...)

(48)*Among them, *metabolic syndrome was 40*. (Among them, 40 patients had metabolic syndrome. The word order in this sentence reveals wrong subject.))

(49)*... 81.4% had *elementary education below*. (... 81.4% had below elementary education.)

9) Tense

Tense errors mostly occurred where the results of the study were listed. Present tense was used instead of past tense.

10) Minor errors

Errors like deletion of plural suffix *-(e)s* and mixed-up usage of *and* with *or* were categorized as minor errors. Since tense and these minor errors did not affect on conveying the main idea of their claims or statements these so-called local errors were not elaborated.

2. Hedging

As for hedging, the most common hedging words ESL medical researchers used in their abstract were *can be, contribute, suggest, will be,* and *show*. About one (1.26) hedging was used in each abstract, a total of 33 in 26 abstracts. The maximum hedging used in one abstract was three. However, Hyland (1996)'s study shows that the most frequent items expressing hedges throughout the entire articles were *can, may, seem, should, could, might, suggest, appear, confirm,* and *tend to.* Table 4 shows expressing hedges by ENL and ESL when reporting a proposition.

TABLE 4
Itemized Frequencies of Expressing Hedges Reporting Proposition

Expressing Hedges	No. of occurrences(ESL)	Exp Hedges	No. (ENL)
can be	5	tend to	4
contribute	3	confirm	3
suggest	3	lead to	3
will be	3	describe	3
show	3	illustrate	2
would	2	consider	2
could	2	be in line with	2
be considered	2	lend support	1
indicate	2	provide support	1

be needed	1	presume	1
be expected	1	assume	1
be observed	1	propose	1
must instruct	1	stress	1
have to	1	make claims	1
may be	1	present	1
should	1	reflect	1
appear	1	be indicative of	1
		under-represent	1
		represent	1
totals	33		31

As shown above, these ESL medical writers used a limited range of modal and lexical verbs compared with L1 writers of Hyland (1996)'s study. ENL writers used epistemic adjectives such as *is likely to* and epistemic adverbs like *possibly* but these were not used by ESL medical writers. Some ESL writers used strong modal verbs like *must, have to,* and *should* when reporting propositions. On the other hand, three abstracts did not contain any hedging markers. Among them, one abstract had a very strong statement for conclusion as 'excessively effective.'

Among the three groups, medical professionals made the least, average of 2.8 categorized errors whereas health researchers, 4.2 and nursing staff, 5.1 errors respectively. This study showed slight discrepancies compared to the previous error analysis studies in a way that wrong word choice accounted for major errors in the medical research abstract. Approximately a half of such errors resulted from native language transfer while the other could be ascribed to overgeneralization in which writers misused proper word form or adequate agent and patient. Some of these errors were also due to incomplete knowledge of the finer shades of meaning distinctions which lexical items have as Jung (2006) asserted. It was confirmed that prepositions and articles were undoubtedly troublesome areas. Misusage of article, already noted difficult even among highly proficient L2 students in Park (2005)'s study, was evident in this study. As for prepositions, there were limited sets of prepositions misused in these abstracts such as using *to* for *from, for* for *on, during* for *for*, *after* for *in,* etc.

V. CONCLUSION

Since international journals are expected to be error-free, major errors, or global errors as other linguists called, that deter conveying the clear message of the propositions and confuse readers should be emphasized for early correction. It was pointed out by Chaudron (1988) that global error should be corrected much earlier than local errors.

According to the result of this research, it can be concluded that teaching the correct use of synonyms that cause difficulties in the medical papers need to be taught and practiced. Certain patterns of prepositional phrases need to be drilled in college level writing classes. At the same time, collocation practices in ESP focused on medical writing can help acquire better writing skills.

It was learned that medical writers use relatively far less hedging expressions, only about one in each abstract, that was, one word for hedging in every 330 words, than those of American writers of cell and molecular biology in Hyland (1996)'s study showing one word for hedging in every 50 words. This huge discrepancy might be due to the comparison of abstract-only ESL writing with entire ENL article. Unlike ENL writers who used sentence adverbials such as *clearly, obviously, undoubtedly, in fact, generally*, and *overall*, Korean medical writers rarely used them. Most favored verbs were *can be, contribute, suggest, will be*, and *show* when reporting propositions On the other hand, ENL writers showed a variety of verbs such as *tend to, confirm, lead to, describe, illustrate, consider, in line with, lend support, presume, assume, propose, stress, make claims, present, reflect, be indicative of*, and *under represent.* A variety of hedging expressions need to be introduced to help ESL writers of academic papers.

Along with errors, hedging strategies especially the accurate functions of each epistemic modals and epistemic verbs should be understood. Hyland (1994, 1996) and Hyland and Milton (1997) pointed out that hedging is a crucial area of pragmatic competence that academic writers acquire to create appropriate interaction with the target discourse community as well as to indicate the precise extent of their commitments to the truth of the proposition. It is desirable to develop a text including the types and sources of common errors as well as collocation and hedging practices in medical writing course at college

level.

There is a limitation of the study, however, that the samples were restricted to abstract-only whereas Hyland (1996)'s study was done on the entire articles. Also categorizing the errors was difficult in some cases as they could be ascribed to more than a single error, and analyzing the source or the factor largely depended on intuition. A large sample sized study may remedy the limitation and render a better comprehensive view of error analysis and hedging strategies.

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Examples in: English
Applicable Languages: English
Applicable Levels: University

이은표
을지대학교 의과대학 의예과
301-832 대전광역시 중구 용두2동 143-5
Tel: (042) 259-1613

Fax: (042) 259-1709
Email: elee@eulji.ac.kr

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