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Differential Use of Reporting Verbs in Academic Papers and Personal Blogs

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Appropriate use of reporting verbs plays an important role in building arguments in academic writing. Many studies have investigated the use of reporting verbs in academic writing, but little attention has been paid to the comparison of reporting verb use in academic writing with more informal writing. To address this research gap, this study aims to compare the use of reporting verbs in academic writing and in blog writing. Two comparable academic and blog corpora were prepared: the academic corpus with 150 articles of 1,219,659 tokens and the blog corpus with 379 blogs of 1,573,764 tokens. The frequency ratios of reporting verbs and their functions, based on Thompson's (1994) classification of reporting verbs, were examined. The blog corpus was found to have more reporting verbs by token frequency, but the normalized blog/academic ratio and academic/blog ratio indicates that many reporting verbs used in blog writing were not frequently used in academic writing. Furthermore, academic writers used reporting verbs to refer to the evidence of their claims while blog writers used them to describe the manner of speaking. The results of this study suggest that types and functions of reporting verb should be considered when integrating blog writing into academic writing.

[reporting verb/corpus/academic writing/blog]

I. INTRODUCTION

Reporting verbs are words that are used to deliver another author's work, and they denote the stance of the authors towards the issues involved (Bloch, 2010; Koh, 2020; Min, 2010; Oakey, 2009; Thompson, 1994). Appropriate use of reporting verbs is important in writing, especially in academic writing, because authors usually create their own ideas based on the findings of previous studies (Oakey, 2009). Many studies have investigated the uses of

reporting verbs in different academic fields (Bloch, 2010; Charles, 2006a, 2006b; Hyland, 1999; Shaw, 1992; Thomas & Hawes, 1994; Thompson, 1994; Thompson & Yiyun, 1991). Most of them focused on the patterns or the uses of reporting verbs in published journal articles (Bloch, 2010; Charles, 2006a). Bloch (2010) examined the uses of reporting verbs in scientific writing and provided the proper usage of reporting verbs for language learners. Charles (2006a) also reviewed reporting verbs and their types according to the genre of the writings. However, these studies aimed to analyze the use of reporting verbs only within academic contexts.

The use of reporting verbs is important not only in academic writing but also in informal writing, especially in blogging, because blogs, as well as academic writing, typically introduce the writers' opinion by referring to someone else's ideas. Even though blogs are maintained by individual writers and considered personal writing, the nature of blog writing is multidimensional communication (Murray, Hourigan, & Jeanneau, 2007). It is important to have a sound knowledge of reporting expressions to facilitate and continue blog communication. In addition, blog writing can benefit student writers in that they can easily practice writing and transit to more formal academic writing (Arslan & Sahin-Kizil, 2010; Williams & Jacobs, 2004). A clear understanding of the use of reporting verbs in blog writing compared to that in academic journal writing can lead to a better understanding of the ways that novice writers can apply what they learned about reporting verbs in blog writing into academic writing.

A comparative analysis of reporting verbs in journal articles would be beneficial for academic writers, but student writers would still need some scaffolding from their somewhat informal writing to more formal writing. Thus, the present study examines the different uses of reporting verbs in academic writing and blog writing and provides how student writers can apply what they learned about reporting verbs in blog writing into their journal article writing. In this vein, research questions for the current study are:

1) What are frequently used reporting verbs and their functions in academic writing and blog writing?
2) What are relatively prevalent reporting verbs and their functions used in academic writing and blog writing?

II. LITERATURE REVIEW

There have been a variety of studies regarding the use of reporting verbs in writing depending on their research foci: the tense of reporting verbs, the phraseological patterns and forms of reporting verbs, the functions of reporting verbs, the use of reporting verbs in

different disciplines, the use of reporting verbs by expert and novice writers or by native or non-native researchers.

The first line of studies has focused on the tense of reporting verbs (Chen, 2009; Malcolm, 1987; Shaw, 1992; Swales, 1990). Malcolm (1987) analyzed academic papers to find whether the rhetorical functions affect tense use of reporting verbs and found that the present tense in academic writing is mostly used for a general claim while past tense for describing what happened without any generality. Shaw (1992) investigated the tense, aspect, or voice of verbs in academic writing and found that the verb tense was related to degrees of generality. Chen (2009) also inspected how the tense of reporting verbs was used in dissertation literature reviews. The phraseological patterns and forms of reporting verbs have also been investigated. Charles (2006a) compared the use of reporting verbs in *finite* reporting clauses with *that*-clause in two corpora of politics and material science students' theses. Dubois (1988) also investigated how biomedical scientists used reporting verbs and citations in their journal articles. She investigated how researchers practiced citation and found that reporting verbs were mostly used for generalization and summary.

In addition to the tense and the forms of reporting verbs, the functions of reporting verbs have also been studied. Gilbert (1977) introduced how writers use references as a tool of persuasion by emphasizing the importance of their work. Petrić (2007) compared the differences of using reporting verbs in high- and low-rated master's theses. She found that low-rated theses used citation for more of description purposes rather than analysis, while high-rated theses used citation for a variety of rhetorical functions and purposes. Yeganeh and Boghayeri (2015) investigated the use of reporting verbs and their functions in the Introduction and Literature Review sections of research articles. They found that integral citation and reporting verbs in the argument-related group co-occurred with a human subject.

The use of reporting verbs in diverse disciplines was also investigated. Hyland (1999) compiled a corpus of 80 research articles in eight different disciplines and investigated the contextual variability of citations. His study found that writers in the humanities and social sciences tended to use more citations than those in hard sciences and used more integral structures and discourse reporting verbs. Thompson and Tribble (2001) also compiled a large-sized corpus that contained doctoral theses written in two departments: Agricultural Botany and Agricultural Economics. The study revealed that there were differences in citation practices between disciplines and among the sections of research articles.

The different uses of reporting verbs by writers were dealt with in the citation studies. Pickard (1995) investigated the different uses of reporting verbs between expert writers and language learners. The results of the study showed that novice writers, or language learners, overused the verb *say*. Manan and Noor (2014) investigated the use of reporting verbs by Master's students in their theses. In their study, the most frequently used reporting verbs were *found* in research acts, *states* in cognition acts, and *suggests* in discourse acts categories.

According to Hyland (2002), the research act reporting verbs are *analyze, establish, show, solve, find, identify, observe, obtain*, etc.; the cognitive act reporting verbs, *agree, concur, hold, know, think, believe, doubt, speculate, suppose, disagree, dispute, picture, conceive, reflect*, etc.; and the discourse act reporting verbs, *postulate, hypothesize, indicate, suggest, evade, state, describe, argue, report, answer*, etc. Mansourizadeh and Ahmad (2011) analyzed the citation pattern practiced by expert writers and novice academic writers. The findings revealed that novice writers used citations to attribute while expert writers used citations to support their claims. In the same vein, there were some studies that explored the differences in patterns and choice of reporting verbs between native writers and non-native writers. Jafarigohar and Mohammadkhani (2015) investigated the use of reporting verbs in applied linguistics research articles written by native and non-native speakers of English. The results showed that native writers used reporting verbs with more direct quotations.

Overall, the above studies have dealt with the use of reporting verbs in academic writing and many of them focused only on the use of reporting verbs in journal article writing.

III. METHODS

1. Design of Corpora

Previous studies on reporting verbs have shown that there exist discipline-specific structures and variations of words used (Charles, 2006a; Thomas & Hawes, 1994). Because the present study investigated formal academic writing in general and compared it with informal blog writing, two comparable academic and blog corpora were prepared. Even though it is not possible to compile bias-free samples in corpus linguistics (Atkins, Clear, & Ostler, 1992), several attempts were made to make the corpora not to be biased toward a certain group of data. First, the academic corpus was compiled by using an equal number of journal articles from five disciplines: 30 articles from biology and biometrics journals, 30 from education and educational measurement journals, 30 from psychology journals, 30 from history journals, and 30 from clinical research journals. The academic corpus consisted of 150 articles published in 2005, with 1,219,659 tokens and 55,889 types. The blog corpus was modified from Schler, Koppel, Argamon, and Pennebaker's (2006) original corpus, which included more than 37,000 blogs with 295,526,889 tokens. The blog corpus for the present study consisted of 379 personal blogs with 1,573,764 tokens and 46,004 types, which were published in 2004 by bloggers between 33 and 48 years of age. The size of the blog corpus and the age of the authors were prepared to have similar values, compared to those of journal articles, to reduce sampling error.

TABLE 1
Two Corpora of Academic Writing and Blog Writing

Features	Academic Corpus	Blog Corpus
Word Tokens	1,219,659	1,573,764
Word Types	55,889	46,004
Files	150 articles	379 blogs
Authorship	Scholarly writers	Bloggers

2. Functions of Reporting Verbs

The functions of the reporting verbs and their words list were adapted from Thompson (1994), as shown in Table 2, for the comparison of the two corpora: formal academic writing and informal blog writing. The functions were categorized into nine groups with 33 reporting verb sets. The nine groups of reporting verbs by their functions are as follows: First, reporting verbs are used to deliver what someone else had said without adding any extra information (e.g., *He wrote that 'he is truthful narrator, but he is not a scientific discoverer'.*). Second, reporting verbs are useful to show the speaker's purposes without saying them explicitly (e.g., *The Minister of Defense implied that the document was fake.*). Third, some reporting verbs show the manner of speaking (e.g., *'Shut up, Archie!' Anne shouted*). Fourth, some reporting verbs give some ideas of what was said or written (e.g., *It is strange for him to criticize a tribunal he created.*). Fifth, some reporting verbs are used to indicate how the message fits in with the rest of the language event (*e.g., He added that the team was doing badly*). Sixth, there are a few reporting verbs that draw attention to the words used (e.g., *FISA called the risk 'dangerous'*). Seventh, some other reporting verbs are used to show whether the writer/speaker believes the delivered message is true or not (e.g., *He would not admit that Rebecca was his wife.*). Eighth, some reporting verbs are used to show the effect of the delivered message (e.g., *He proved that we can never know everything with complete accuracy.*). Finally, reporting verbs also differentiate the mode of the message, either spoken or written (e.g., *'Thank you, Mrs. Fuller,' I sighed.*). The word lists in Table 2 are not mutually exclusive, but there are some overlaps among the word lists of each function.

TABLE 2
Functions of Reporting Verbs

Functions	Explanation
1. Neutral reporting verb	1-1. You are reporting what someone else has said or written without adding any extra information (e.g., say, tell, ask)
2. Show speaker's purpose	2-1. Reporting verb + that-clause (e.g., acknowledge, admit, advise)
	2-2. Not explicit (e.g., Hint, imply, insinuate)
	2-3. Reporting verb + to infinitive (e.g., admonish, advise, appeal)
	2-4. Reporting verb + -ing clause (e.g., admit, recommend)
	2-5. Show the speaker's purpose with a prepositional phrase giving a summary of the message (e.g., appeal for, argue for, complain about)

3. Show the manner of speaking	3-1. How quietly or loudly the speaker spoke (e.g., mumble, murmur, mutter)
	3-2. Speed of talking (e.g., babble, blurt, chatter)
	3-3. Speaker's general behavior as they spoke (e.g., smile, smirk, sniff)
	3-4. The noises made by animals (e.g., grunt, hiss, howl)
	3-5. Speaker's manner of speaking (e.g., chorus, croon, ejaculate, gush)
	3-6. Manner of speaking without a quote or a reported clause (summary of the message in a prepositional phrase) (e.g., prattle, rant, rave, scream)
	3-7. Followed by a summary of the message in a noun phrase functioning as object (e.g., scream, shout, shriek, sing)
4. Showing what was said	4-1. Say something bad about the target (e.g., abuse (for), accuse (of), attack (for))
	4-2. Say something good about the target (e.g., extol, flatter, laud (as/for))
	4-3. Give an idea of what was actually said or written (e.g., reprimand (for), scold (for), shush, soft-soap, taunt (with))
	4-4. The hearer is often mentioned in a prepositional phrase (e.g., apologize (to - for), argue (with - over/about), carp (at - about))
	4-5. Verbs which are sometimes used with separate information about the message or the target but which can also be used by themselves (e.g., brag, complain, confess)
5. Indicating how the message fits in	5-1. How what is being reported fits in with the rest of the language event (e.g., reply, repeat, add)
	5-2. A response of some kind to something that has already been said (e.g., reply, respond, retort)
	5-3. Using more or less the same words or simply reporting the general meaning (e.g., echo, reiterate, repeat)
	5-4. Progress of the language event - starting, continuing, interrupting, and stopping (e.g., begin, continue, end)
	5-5. What is being reported fitted in with the rest of what was said, often by the same speaker (e.g., elaborate, mention, qualify)
6. Drawing attention to the speaker's or writer's words	6-1. define (as), depict (as), describe (as)
7. Showing your attitude towards what you report (true, untrue)	7-1. Indicate or strongly imply that you believe that what the speaker says is true (e.g., foretell, forewarn, indicate)
	7-2. Indicate or strongly suggest that you believe that what the speaker says is untrue or at least open to doubt. (e.g., allege, lie, misinform)
8. Showing the effect of what is said	8-1. Report what happened as a result of a speaker's words (e.g., convince, dissuade (from), persuade)
	8-2. Report the effect of the speaker's words on someone else's action (cajole, coax, nag)
	8-3. Focus on the result of what someone says (facts) (e.g., demonstrate, establish, prove)
9. Of speech or of writing	9-1. Signal that the language event involved speaking (e.g., pronounce, radio, recite)
	9-2. Used to refer to writing (e.g., print, type, write)
	9-3. Written message is conveyed (e.g., cable, fax, telegraph)
	9-4. Refer to the type of written text (e.g., caption, document, draft)

Note. Full list of reporting verbs can be found in Appendix (Modified from Thompson (1994))

3. Analysis of the Corpora

The functions of the reporting verbs in the academic and blog corpora were analyzed with the following steps. First, 33 sets of 416 reporting verbs under nine categories of the functions were prepared, which were adapted from Thompson (1994). Second, word families of reporting verbs were built to compare them with given corpora. The frequency of reporting verbs in this study was based on the word family which consists of "a headword, its inflected forms, and its closely related derived forms" (Nation, 2001, p. 8). For example, the headword *associate* contains *associate*, *associations*, *association*, *associating*, *associates*, *associated*, *disassociate*, and *disassociated*. However, word forms other than verbs were excluded from the word family list because this study only focused on the use of reporting verbs. In the given example, *associations* and *association* were excluded. In addition, only the verbs in the given corpora were extracted from corpora by using UDPipe natural language processing text annotation package (Straka & Straková, 2017) in R. Third, the frequency of individual reporting verbs in each function category in Table 2 was counted by using Range program (Heatley, Nation, & Coxhead, 2002). Because the Range program processes word tokens based on the base word lists, which contain word families, 33 base word lists and 416 reporting verbs as in Appendix were prepared. Fourth, the frequency of each word was normalized per 10,000 tokens in each corpus, and the frequency ratio of the reporting verb in each corpus was investigated. Finally, the functions and the reporting word lists with high ratio differences were investigated and distinctive features of each corpus were presented.

IV. RESULTS AND DISCUSSIONS

The frequency ratio of reporting verbs in each function of the two corpora was examined and the functions and verbs that had the odds of two or more were selected for further analysis. Generally, the blog corpus was found to have more reporting verbs than the academic corpus by their token frequency, but there were several sets of reporting verbs that were found more in the academic corpus.

1. Frequently Used Reporting Verbs

Table 3 shows the frequently used reporting verbs in the academic corpus. The reporting verbs with more than three normalized frequencies in the academic corpus were extracted.

TABLE 3
Reporting Verbs in Academic Corpus with More than Normalized Frequency of Three

Function	Category	Reporting Verb	Frequency	Normalized Frequency (per 10,000)[1)]
8. Showing the effect of what is said	8-3	show[2)]	1567	12.85
2. Show speaker's purpose	2-1	state	985	8.08
7. Showing your attitude towards what you report (true, untrue)	7-1	point	933	7.65
9. Of speech or of writing	9-2	type	884	7.25
2. Show speaker's purpose	2-1	report	869	7.12
	2-1	predict	811	6.65
7. Showing your attitude towards what you report (true, untrue)	7-1	indicate	795	6.52
2. Show speaker's purpose	2-1	suggest	745	6.11
	2-1	observe	735	6.03
	2-1	order	726	5.95
6. Drawing attention to the speaker's or writer's words	6-1	describe	602	4.94
7. Showing your attitude towards what you report (true, untrue)	7-1	note	594	4.87
6. Drawing attention to the speaker's or writer's words	6-1	term	569	4.67
5. Indicating how the message fits in	5-4	begin	543	4.45
1. Neutral reporting verb	1-1	write	447	3.66
2. Show speaker's purpose	2-1	object	436	3.57
5. Indicating how the message fits in	5-4	end	423	3.47
3. Show the manner of speaking	3-7	read	403	3.30
1. Neutral reporting verb	1-1	say	386	3.16
	1-1	tell	374	3.07
	1-1	ask	372	3.05
2. Show speaker's purpose	2-1	explain	370	3.03

Note. 1) Normalized frequency was calculated by dividing reporting verb frequency with total token size and was multiplied by 10,000. 2) Underlined reporting verbs are included in Hyland's (1999) high-frequency academic reporting verb list.

The most prevalent reporting verbs in the academic corpus were *show, state, point, predict, indicate, suggest*, etc., and their example sentences are as follows:

(1) whereas negative control cells treated with heat-inactivated killer toxin did not show any DNA fragmentation […] (Reiter, Herker, Madeo, & Schmitt, 2005, p. 354)

(2) In evaluations at the end of [teacher education] pro-grams, some students state that they have to work through too much information during the first 4 weeks. (Brouwer & Korthagen, 2005, p. 171)

(3) More experience in center-type care predicted better language skills and performance on a memory task, but also more problem behaviors […] This work

suggests the intriguing possibility of "sleeper" effects. (NICHD Early Child Care Research Network, 2005, pp. 538-539)

The most noticeable type of the reporting verbs in academic corpus was to show the speaker's purposes with *reporting verb + that-clause* structure (category 2-1). Some of the most frequently used reporting verbs in the academic corpus overlapped with those of high-frequency reporting verbs from Hyland (1999), which were extracted from biology, physics, electrical engineering, mechanical engineering, marketing, applied linguistics, and sociology journal corpus. The underlined reporting verbs in Table 3 indicate that the words were also included in Hyland's (1999) most frequently used academic reporting verb list. It can be claimed that these reporting verbs are generally used in academic settings.

Table 4 shows the reporting verbs that were frequently used in the blog corpus. As was done with the academic corpus, the reporting verbs with more than certain normalized frequencies (three with the blog corpus) were extracted. The range of reporting verbs was not considered for the selection of the reporting verbs in the blog corpus, because each blog writing was shorter compared with academic writing and it was not meaningful to consider them as one of the selection criteria for the frequent reporting verbs. The most prevalent reporting verbs in the blog corpus were *say, tell, call, read, talk, ask*, etc., and their example sentences are as follows:

(4) I can't say that food preservation is a way to save money […] (Blogger A, aged 33)
(5) at least that was what his former owner told me to use to "control" him […] (Blogger A, aged 33)
(6) y'all that don't care about what's going on at my work can just read what's going on at home. (Blogger B, aged 33)

As shown in Table 4, the most noticeable type of the reporting verbs in the blog corpus was to deliver what someone else had said without adding any additional information (category 1-1). The other frequently used functions were to show the manner of speaking (category 3-1 and category 3-7) and to show how the message fits in the context (category 5-4) and the attitude towards the message delivered (category 7-1). Only three of the reporting verbs in the blog corpus were found in Hyland's (1999) most frequently used academic reporting verb list. This indicates that reporting verbs used in blog writing are somewhat different from those in academic writing.

TABLE 4
Reporting Verbs in Blog Corpus with More than Normalized Frequency of Three

Functions	Categories	Word Families	Frequency	Normalized Frequency (per 10,000)[1)]
1. Neutral reporting verb	1-1	say [2)]	4444	28.24
	1-1	tell	1928	12.25
3. Show the manner of speaking	3-1	call	1691	10.74
	3-7	read	1364	8.67
1. Neutral reporting verb	1-1	talk	1233	7.83
	1-1	ask	1182	7.51
8. Showing the effect of what is said	8-3	show	1130	7.18
1. Neutral reporting verb	1-1	write	1086	6.90
5. Indicating how the message fits in	5-4	end	998	6.34
7. Showing your attitude towards what you report (true, untrue)	7-1	point	977	6.21
2. Show speaker's purpose	2-1	state	904	5.74
	2-1	order	522	3.32
1. Neutral reporting verb	1-1	speak	492	3.13

Note. 1) Normalized frequency was calculated by dividing reporting verb frequency with total token size and was multiplied by 10,000. 2) Underlined reporting verbs are included in Hyland's (1999) high-frequency academic reporting verb list.

2. Relatively Prevalent Reporting Verbs and Their Functions

The relative frequency of reporting verbs and their functions were investigated to see if there were any differences in the use of reporting verbs depending on the genre of writing: academic and blog writing. Table 5 shows the prevalent sets of reporting verbs in academic writing, which had twice as many appearances as in blog writing. Those reporting verbs were more likely related to drawing attention to the writer's words (category 6-1), reporting the general meaning of the message (category 5-3), and showing the attitude towards the message and results (category 7-1 and category 8-3). Generally, academic research writers tended to use more reporting verbs that referred to the evidence of the claims that they made. It is likely that category 7-1 and category 8-3 were used more in academic writing than blog writing because academic writing usually referred to the previous studies and judged their truthfulness before applying them in a new study (Hyland, 2002; Hyland & Tse, 2004).

TABLE 5
Prevalent Functions of Reporting Verbs in Academic Writing

Reporting Verbs Sets	Frequency		Normalized Frequency (per 10,000)		Normalized Academic /Blog Ratio[1)]
	Academic	Blog	Academic	Blog	
6-1. Drawing attention to the speaker's or writer's words	2408	1298	19.74	8.25	2.39
5-3. Using more or less the same words or simply reporting the general meaning	517	286	4.24	1.82	2.33
7-1. To indicate or strongly imply that you believe that what the speaker says is true	2939	1715	24.10	10.90	2.21
8-3. Focus on the result of what someone says (facts)	2166	1395	17.76	8.86	2.00

Note. 1) Normalized Academic/Blog ratio was calculated by dividing normalized frequency of reporting verbs in academic corpus with that in blog corpus.

Specifically, as listed in Table 6, the ten most frequently used reporting verbs in academic writing compared to blog writing with normalized ratio were *indicate*, *observe*, *predict, characterize*, *demonstrate,* etc. Many of them were categorized as category 2-1, which shows the speaker's purpose by using *reporting verb + that-clause* structure. Five of the most frequently used reporting verbs, as shown in Table 6, were also included in the Academic Word List (Coxhead, 2000). This overlap of reporting verbs may indicate that reporting verbs used in academic writing are specific words that are usually used in academic situations.

TABLE 6
Ten Most Frequently Used Reporting Verbs in Academic Writing Compared with Blog Writing

Category	Reporting Verbs	Frequency		Normalized Frequency (per 10,000)		Normalized Academic /Blog Ratio[1)]
		Academic	Blog	Academic	Blog	
7-1	indicate[2)]	795	42	6.52	0.27	24.42
2-1	observe	735	50	6.03	0.32	18.97
2-1	predict	811	68	6.65	0.43	15.39
6-1	characterize	130	11	1.07	0.07	15.25
8-3	demonstrate	284	29	2.33	0.18	12.64
5-3	summary	278	41	2.28	0.26	8.75
2-1	object	436	73	3.57	0.46	7.71
2-1	emphasis	197	33	1.62	0.21	7.70
2-1	propose	276	48	2.26	0.31	7.42
2-1	suggest	745	154	6.11	0.98	6.6

Note. 1) Normalized Academic/Blog ratio was calculated by dividing normalized frequency of reporting verbs in academic corpus with that in blog corpus. 2) Underlined reporting verbs are included in Coxhead's (2000) Academic Word List.

Table 7 shows the prevalent sets of reporting verbs in blog writing, which had five times as many appearances as in academic writing. It seems that reporting verbs in blog writing tended to show the manner of speaking, for example, the speed or the volume of speaking, as in the following example:

(7) "I'll get around to it." "I have cancer," she blurts out […] (Blogger C, aged 41)
(8) "That is too bad!" cried he, and sprang up like a madman, and pushed his companion against the tree […] (Blogger D, aged 39)

TABLE 7
Prevalent Functions of Reporting Verbs in Blog Writing

Reporting Verbs Sets	Frequency		Normalized Frequency (per 10,000)		Normalized Blog/ Academic Ratio[1)]
	Blog	Academic	Blog	Academic	
3-3. Show the manner of speaking: Speaker's general behavior as they spoke	1044	39	6.63	0.32	20.75
3-5. Show the manner of speaking: Speaker's manner of speaking	420	19	2.67	0.16	17.13
3-2. Show the manner of speaking: Speed of talking	108	5	0.69	0.04	16.74
3-6. Show the manner of speaking: Summary of the message in a prepositional phrase	129	8	0.82	0.07	12.50
3-1. Show the manner of speaking: How quietly or loudly the speaker spoke	2666	321	16.94	2.63	6.44
5-5. Indicating how the message fits in: What is being reported fitted in with the rest of what was said, often by the same speaker	3320	416	21.10	3.41	6.19
4-4. Showing what was said: the hearer is often mentioned in a prepositional phrase	99	14	0.63	0.11	5.48

Note. 1) Normalized Academic/Blog ratio was calculated by dividing normalized frequency of reporting verbs in academic corpus with that in blog corpus.

The ten most frequently used reporting verbs in blog writing compared to academic writing with normalized ratio support the idea that reporting verbs in blog writing tend to describe the manner of speaking. As presented in table 8, nine reporting verbs, other than *pray*, were the words that describe the manner of speaking, such as *scream, laugh, yell, giggle*, etc. In addition, none of the most frequently used reporting verbs in blog writing were included in the Academic Word List (Coxhead, 2000). This difference may imply that the

main functions of reporting verbs in blog writing are different from those in academic writing, in that blog writing is informal and it concerns the persons involved in the reported messages than the trustworthiness, which is important in academic writing, of the messages.

TABLE 8
Ten Most Frequently Used Reporting Verbs in Blog Writing Compared with Academic Writing

Categories	Reporting Verbs Sets	Frequency		Normalized Frequency (per 10,000)		Normalized Blog /Academic Ratio[1)]
		Blog	Academic	Blog	Academic	
3-1	scream	159	1	1.01	0.01	123.2
3-3	laugh	407	3	2.59	0.02	105.1
2-1	pray	124	1	0.79	0.01	96.1
3-1	yell	93	1	0.59	0.01	72.1
2-1	swear	92	1	0.58	0.01	71.3
3-6	rant	85	1	0.54	0.01	65.9
3-1	breathe	70	1	0.44	0.01	54.2
3-3	smile	244	4	1.55	0.03	47.3
3-1	shout	60	1	0.38	0.01	46.5
3-3	giggle	58	1	0.37	0.01	44.9

Note. 1) Normalized Academic/Blog ratio was calculated by dividing normalized frequency of reporting verbs in academic corpus with that in blog corpus.

The normalized blog/academic ratio in Table 8 is much greater than the normalized academic/blog ratio in Table 6; which indicates that many of the reporting verbs used in blog writing were not frequently used in academic writing. Furthermore, academic research writers tended to use reporting verbs to refer to the evidence of their claims while blog writers tended to use reporting verbs generally to describe the manner of speaking. This imbalanced ratio of normalized reporting verb ratio and the different functions of reporting verbs in academic writing and blog writing implies that students' writing proficiency in blog writing would not necessarily transform to that in academic writing. Even though blog writing is generally adopted as a preliminary writing task for academic writing (Murray et al., 2007) and recommended for students to improve their academic writing skills (Asoodar, Atai, & Vaezi, 2016), blog writing tasks should be integrated into academic writing with consideration of the types and functions of reporting verbs used in both writing genres.

V. CONCLUSION

The main goal of this study was to examine the different uses of reporting verbs in formal academic writing and informal blog writing and to unfold the discourse patterns of reporting verbs in each genre of writing. Given the importance of the reporting verbs in advanced

writing, especially in academic writing, it is important to notice which reporting verbs are used and how they function in different genres of writing. The findings of the present study show that there are slight differences in the use of reporting verbs, depending on the formality of writing, in terms of their relative frequency and functions in a sentence. Reporting verbs in academic writing tend to focus more on the message that is delivered and the writer's interpretation thereof, while those in blog writing show the manner of writing or the way in which the message was written. It would be beneficial to have this difference emphasized when guiding English learners to learn different styles of writing.

The present study has a few limitations. First, because the academic corpus was compiled with journal articles from different disciplines, the results of this study may fail to provide any interdisciplinary differences in using reporting verbs. For an in-depth analysis of interdisciplinary differences, it is necessary to compile corpora that have separate sets of disciplines. Second, even though the age range of the blog writers was intentionally selected over 33 of age to match the age band of general academic writers, it is still not guaranteed that the authors of the academic corpus represent the same population of blog writers. If academic writers and blog writers are from different populations, there could be writer bias involved in the analysis of writing verb use. Third, the corpora used in this study were compiled with academic papers and blogs published in 2005 and 2004. There could be writing style changes within the last fifteen years, especially in blog writing. Finally, the relative frequency of reporting verbs does not tell how they are used in each corpus. More in-depth analysis should be conducted to apply the findings in this study into classroom teaching. Future studies should take these limitations into consideration to have more precise comparisons of reporting verbs in different writing contexts and to apply the findings into teaching contexts.

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APPENDIX

Full List of Reporting Verbs Used in the Study

Categories	Reporting Verbs
1-1	say, tell, ask, write, speak, talk
2-1	acknowledge, admit, advise, affirm, allege, announce, argue, assert, assure, avow, bet, boast, brag, caution, certify, claim, comment, complain, concede, confess, confide, confirm, contend, counsel, declare, decree, demand, disclose, divulge, emphasize, explain, foretell, grumble, guarantee, inform, insist, joke, lament, maintain, moan, notify, object, observe, ordain, order, plead, pledge, postulate, pray, preach, predicate, predict, proclaim, promise, prophesy, propose, protest, reassure, recommend, record, remark, remind, report, request, reveal, rule, specify, state, stipulate, stress, suggest, swear, teach, testify, threaten, vow, warn
2-2	hint, imply, insinuate, intimate
2-3	admonish, advise, appeal, beg, beseech, caution, challenge, claim, coax, command, counsel, direct, encourage, enjoin, entreat, exhort, forbid, implore, incite, instruct, invite, offer, order, plead, promise, propose, recommend, remind, request, threaten, urge, vow, warn
2-4	admit, recommend, suggest, propose, report
2-5	admit to, advise against, appeal for, argue for, argue against, beg for, boast about, boast of, brag about, brag of, caution against, comment on, complain about, complain of, confess to, enquire about, explain about, grumble about, hint at, inform about, inform of, inquire about, insist on, joke about, moan about, object to, plead for, pray for, protest against, remark on, remind about, remind of, report on, testify to, warn about, warn against
3-1	bawl, bellow, boom, breathe, call, cry, declaim, exclaim, holler, mumble, murmur, mutter, rave, scream, screech, shout, shriek, shrill, storm, trumpet, whisper, yell
3-2	babble, blurt, chatter, drawl, falter, gabble, gibber, quaver, snap, stammer, stutter, burst out, prattle on
3-3	beam, blaze, blush, bluster, bristle, chortle, chuckle, explode, exult, fume, gasp, giggle, gloat, grin, groan, guffaw, gulp, gurgle, hum, laugh, moan, sigh, simper, smile, smirk, sniff, snigger, sob, splutter, sputter, titter, wail, whimper
3-4	bark, bleat, bray, cackle, chirp, cluck, coo, croak, growl, grunt, hiss, howl, purr, roar, snarl, snort, squawk, squeak, squeal, trill, twitter, whine
3-5	burble, chant, chorus, croon, ejaculate, gush, huff, intone, lisp, pipe, pontificate, rasp, sing, witter, drone on, jerk out, pipe out, spit out
3-6	babble, blether, chatter, clamour for, crow over, fulminate against, gab, gabble, gossip, grizzle, mumble, mutter, prattle, rant, rave, scream, shout, shriek, whisper, rattle
3-7	bellow, breathe, chant, enunciate, gabble, intone, lisp, mumble, murmur, mutter, scream, shout, shriek, sing, stammer, whisper, yell, bawl out, belt out, blast out, blurt out, call out, cry out, gasp out, let slip, rattle off, read out, reel off, shout out, spout out, stammer out
4-1	abuse for, accuse of, attack for, belittle, bemoan, besmirch, bewail, blame for, castigate for, censure for, charge with, condemn as, condemn for, criticize as, criticize for, curse for, decry as, defame, denigrate as, denounce as, denounce for, deplore as, deprecate, dismiss as, disparage as, insult, lampoon as, lampoon for, libel, malign, mock for, pillory for, rebuke for, reproach for, reproach with, reprove for, revile for, revile as, ridicule as, ridicule for, satirize, slam for, slander, slate for, upbraid for, vilify as, vilify for, call names, pour scorn on, run down, slag off

4-2	acclaim as, acclaim for, applaud as, applaud for, bless for, commend for, compliment on, congratulate on, endorse, eulogize as, extol, flatter, laud as, laud for, praise for
4-3	admonish for, berate for, cheek, chide for, greet, hail, heckle, jeer, nag about, reprimand for, scold for, shush, soft-soap, taunt with, tease about, toast, answer back, bawl out, tell off, tick off
4-4	apologize to, apologize for, argue with, argue over, argue about, carp at, carp about, commiserate with, commiserate over, commiserate about, commiserate on, expostulate with, expostulate against, jeer at, jeer for, quarrel with, quarrel over, quarrel about, remonstrate with, remonstrate over, remonstrate about, scoff at, scoff for
4-5	apologize, argue, bellyache, bicker, bitch, blaspheme, boast, brag, complain, confess, equivocate, flannel, gripe, grouch, grouse, grumble, haggle, heckle, jeer, joke, nag, object, pray, preach, protest, quarrel, quibble, squabble, swear, waffle, wheedle, whine, whinge, yammer, answer back, talk back
5-1	reply, repeat, add
5-2	agree, answer, concur, counter, deny, disagree, rejoin, reply, respond, retort, contradict, rebut, refute
5-3	echo, reiterate, repeat, abridge, paraphrase, parrot, quote, recap, recapitulate, regurgitate, rehash, restate, retell, summarize, sum up
5-4	begin, continue, end, finish, interject, interpolate, interrupt, persist, chip in, get in, go on, put in, cut in, hesitate, pause, stop, break off, butt in, carry on
5-5	add, digress, elaborate, mention, qualify, withdraw, tag on, take back, touch on
6-1	address as, brand, call, characterize as, define as, depict as, describe as, designate as, dub, entitle, label, name, nickname, refer as, term
7-1	acknowledge, admit, concede, confess, disclose, divulge, foretell, forewarn, indicate, mention, note, recall, reveal, let on, let slip, make clear, point out
7-2	allege, lie, misinform, purport, claim, bluff, distort, exaggerate, fabricate, fib, misquote
8-1	convince, dissuade from, persuade, prevail on, prevail upon
8-2	cajole, coax, nag, talk, wheedle
8-3	demonstrate, establish, prove, show
9-1	chat, converse, dictate, heckle, lecture, natter, phone, pronounce, radio, recite, telephone, utter, answer back, read out
9-2	inscribe, pen, pencil, print, type, write, jot down, note down, put down, scribble down, set down, take down, write down, scrawl
9-3	cable, fax, telegraph, telex, wire
9-4	annotate, autograph, caption, document, draft, entitle, sign, subtitle, transcribe

Note. This list of reporting verbs is from Thompson (1994)

Examples in: English

Applicable Languages: English

Applicable Levels: Tertiary

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