Interaction in Research Discourse: A Comparative Study of the Use of Hedges and Boosters in PhD Theses by Australian and Saudi Writers

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Abstract

Like any other discourses, academic discourses are also not completely objective manuscripts and quite often overtly and/or covertly express their writers' intended stances. Hedges and boosters are significantly common rhetorical strategies employed frequently by writers to attenuate or reinforce the propositional intensity of the texts to establish an interactional rapport with the readers/receivers. These interactional features are referred to as metadiscourse by Hyland (2018), who systematically categorizes such rhetorical strategies in the form of a taxonomy. Utilizing this taxonomy, the current study focused on the comparative analysis of hedges and boosters in Ph.D. theses written by Saudi and Australian writers at Monash University, Australia. This specialized corpus-based analysis identified the cross-cultural differences in employing hedges and boosters within academic discourse. The findings suggest that there are significant differences in the use of hedges and boosters between native and non-native speakers of English. Non-native speakers tend to use more hedges than boosters, while native speakers use more boosters than hedges. Overall, the natives' discourse appears to be more interactional than the non-native writers based on the analysis of the statistical differences that emerged.

Keywords: interactional academic discourse, hedges and boosters, corpus-based comparative analysis

1. Introduction

1.1 Background

Academic discourse is always assessed based on the accuracy, objectivity, and clarity of its content. Therefore, writers employ a variety of language techniques to convey their position and the level of certainty or uncertainty of their claims in order to accomplish these goals. Hedges and boosters are two such tools that are used to convey uncertainty or assurance, respectively (Takimoto, 2015). Baker (2018) explains that hedges and boosters are used in a text to carry a writer's "commitment to text content and respect for readers" (p. 53). Hedges are expressions that mark a certain degree of tentativeness with regard to the propositional meaning of an utterance. The use of hedges purposively communicates "vagueness" to the audience (Slagar-Meyer, 1994). Mostly, hedges are realized in expressions like "I think", I understand", "I believe", etc., and they usually appear at the start of a sentence. On the other hand, boosters are used by the writer to express the degree of certainty in the text. These lexical resources help the writer to take different positions in an argument and express commitment to a particular point of view. Some typical examples of boosters are "certainly", "definitely", and "obviously" (Hyland, 2018).

Although these techniques are frequently employed in academic writing, how they should be used depends on the writer's background, gender, readership, and disciplinary setting (Hyland, 2010). When studied across disciplines, the analyses of the use of hedges and boosters yield significant insights such as the varying frequency, nature, and purposes of their usage (Farrokhi & Emami, 2008; Millan, 2008). Another topic of interest has been how native and non-native English speakers utilize hedges and boosters differently for different purposes (Farrokhi & Emami, 2008; Shirzadi et al., 2017).

Language use is an ever-changing phenomenon and comparative analysis of how speakers of the same language belonging to diverse socio-cultural backgrounds use that language within the same context offers imperative insights into how and for what purposes a certain language is used.

1.2 Purpose of the Study

The existing literature on the use of Hs & Bs in the academic discourse produced by native and non-native writers proposes diverse or even contradictory findings. This study aimed at contributing to the existing knowledge and debate by comparatively analyzing the PhD theses written by native Australian and non-native Saudi speakers by exploring the ways in which these writers use language to signal

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their stance and the degree of certainty or uncertainty associated with their claims. Also, the study focused on exploring the nature of the lexical resources the writers employed in their linguistic expression with reference to Hs & Bs.

1.3 Research Questions

In light of the stated objectives, the current research sought to answer the following questions:

- 1. How do Australian and Saudi writers mark their stances by using hedges and boosters in their PhD academic discourse?
- 2. What lexical resources of hedges and boosters are preferred by Saudi and Australian writers?

2. Brief Overview of Literature

The use of hedges and boosters has been well debated and explored in a number of studies in the past few decades. Scholars have studied the employment of hedges and boosters in a variety of contexts, including scientific writing, social science research, and humanities studies, garnering significant attention in the academic literature. Many research studies focused on exploring the role of gender and identity in the use of hedges and boosters (henceforth Hs & Bs) resulting in similar as well as contrasting findings. Some researchers claimed that there were no or very insignificant gender-based differences (Serholt, 2012; Pasaribu, 2017) whereas, others revealed that female writers appeared to use more Hs & Bs than their male counterparts (Alqahtani & Abdelhalim, 2020; Bacang et al., 2019). Some studies also identified that females tend to use more emotional expressions and uncertainty as compared to males who prefer logical appeal (Lakoff, 1975; Serholt, 2012).

Political and journalistic discourses are usually marked with abundant rhetorical devices employed to achieve the objectives such as establishing rapport with the readers/receivers and gaining their trust and support. The use of model auxiliaries for certainty and reinforcement, engagement, and subjectivizing expressions for self-achievements are commonly employed in political discourses, as revealed in multiple studies (Al-Rashady, 2012; Fraser, 2010). Journalistic writings or media discourse aim to inform, educate, and persuade readers while maintaining presumable objectivity and neutrality. As revealed by previous studies (e.g. Angwah, 2019; Yazdani, 2014) writers frequently use Hs & Bs to represent the degree of certainty or uncertainty of a claim or highlight the significance of a particular event or issue.

The comparative exploration of the use of Hs & Bs across disciplines is another significant area of research. Multiple research studies have offered valuable insights into how linguistic expressions vary depending on their specific fields and disciplines such as fields of medicine and technology that appeared to be using more boosters being bearers of objective and factual stances than language-based disciplines such as applied linguistics (Millan, 2008). But, there is a dearth of studies that examine the use of selected rhetorical devices comparatively in written and spoken discourse which may offer interesting findings as in (Wang & Zeng) "unlike the distinct diversities in written discourse, the employment of hedges, boosters, self-mention and pronouns used to refer to speakers and audience are less diverse across disciplines in spoken discourse" (p.1, 2021).

However, the differential use of stance features in native and non-native academic writings has received considerable attention from researchers offering diversified findings. For instance, a group of scholars (Burneikaite, 2008; Hinkel 2005; Hyland & Milton, 1997; McEnry & Kifle, 2002) asserted that non-native writers make more use of stance features than native writers. On the other hand, other studies (e.g., Hyland, 2004; Menkabu, 2017; Vassileva, 2001) suggested that native writers use more interactional resources than non-native writers. These contradictory findings necessitate further exploration of the phenomenon under discussion to contribute to the existing debate.

3. Research Design

The current study applied a quantitative, corpus-based approach to the data collection and analysis. According to McEnery et al., (2006), "a corpus is a collection of (1) machine-readable, (2) authentic texts" (p. 5) which means that corpus refers to the collection of real-life language data that can be analyzed by machines or computers. The term 'corpus-based' approach was introduced in corpus linguistics by Tognini-Bonelli (2001), and is in contrast to the 'corpus-driven' approach. In a corpus-based approach, a researcher conducts a corpus analysis with the objective of collecting evidence for the verification of the research objectives (Tognini-Bonelli, 2001, p.10). In other words, corpus-based research aims to critically analyze the systematic patterns of variations and use of pre-existing linguistic features, theories, and hypotheses. In addition, corpus-based research is considered a useful approach as it adds to the validity and generalisability of the research (Biber, 2017, p.1).

3.1 Developing the Research Corpus

To achieve the research objective of the study, the researchers collected the PhD theses written by native Australian and non-native Saudi scholars from the Monash University Research Repository (https://www.monash.edu/library/collections/special/thesis). The collected theses were from the disciplines of Health Sciences, Linguistics, Education, and Psychology. The data distribution of the corpus across the native and the non-native writers is provided in Table 1.

Table 1. Distribution of native and non-native corpus

Types of Writers	No of Theses Texts	Tokens (No of words)	Types
Australian (Native)	16	964781	24268
Saudi (Non-native)	21	1868267	29995

It is important to mention here that researchers are not unanimous on the ideal size of the corpus, as Biber (1993) considers that it should be at least 100,000 words, but many other scholars avoid setting a fixed number of words as an appropriate size for the corpus (see Baker, 2010; McEnery et al, 2006). Considering the scope of the current study, the corpus size of the Australian and Saudi research corpora is reasonably large. Importantly, the comparison of the Australian and Saudi research corpus did require an equal number of theses texts or word tokens. In fact, it is quite common in corpus linguistics to normalize the collected data and report the frequency occurrences of the targeted resources per million words.

3.2 Corpus Analysis Instruments

There were two instruments used for the current study explained in the next section.

3.2.1 Corpus Analysis Tool: AntConc

A corpus analysis tool, AntConc 3.4.4, was used for the analysis of the data collected. AntConc 3.4.4 was developed by Laurence Anthony and can perform multiple textual analyses functions like Concordance, Word List, KWIC, N-Grams, and Collocation. For the current study, AntConc 3.4.4 was used to perform two functions: to measure the corpus size (i.e., numbers of types and tokens), and to identify frequency occurrences of the lexical resources of hedges and boosters in the research corpora.

3.2.2 List of Lexical Resources of Hedges and Boosters

To identify the instances of hedges and boosters in the corpus, the list of lexical resources of hedges and boosters as proposed by Hyland (2018) was used.

3.2.3 Data Analysis Procedure: Steps

The data analysis was conducted in a series of procedural steps. Firstly, PhD theses written by Australian and Saudi writers were downloaded from Monash University Research Repository. https://bridges.monash.edu/search. Then, the collected data converted from pdf format to text format to make it machine-readable. Next, the data cleaned and the initial pages, references, and appendices were removed from the thesis files. Data were then, loaded separately on AntConc 3.4.4 for the analysis of both corpora. After that, word lists were generated to identify the frequent occurrences of the lexical resources of hedges and boosters as given by Hyland (2018). Only those lexical resources that not only occurred in the text but also functioned as a hedge or a booster in the text were calculated. Frequency occurrences of the hedges and boosters were compared for both corpora and statistical analysis was conducted. Their ranking and frequency use of the top 20 lexical resources of hedges and boosters from both the corpora were compared.

4. Data Analysis and Discussion

This section is divided into two sub-sections. The first sub-section presents the statistical comparisons for the use of boosters and hedges in the Saudi and Australian research corpora. This comparison is explicated in the form of bar-charts and with the application of an independent samples t-test. The second sub-section lists the top 20 most frequently used boosters and hedges in the research corpora and compares their frequency of use.

4.1 Statistical Comparisons for Boosters and Hedges

The frequency occurrences of hedges and boosters in the PhD theses written by Saudi students and Australian students are given in Table 2.

Table 2. Frequency use of boosters and hedges by Saudi and Australian writers

	Total Boosters	Boosters (per ml)	Total Hedges	Hedges (per ml)
Saudi Writers	7880	4217	15689	8393
Australian Writers	3850	3990	10058	10425

The data in table 2, show that both Saudi and Australian writers used more hedges than boosters in their texts. Comparatively, Saudi writers are slightly more inclined to use boosters in their academic writing and Australian writers employ more hedges than Saudi writers in their research discourse. To find out if these differences are statistically significant, an independent samples t-test was applied to the data (see next section).

4.2 Interpretative Statistics: Independent Samples T-test

The independent samples t-test was applied to verify if the difference in the use of boosters and hedges is significantly different for both the corpus or not. For the independent samples t-test, of the total theses texts collected to develop the Australian and the Saudi research corpus, 15 randomly selected theses were analyzed (Table 3).

Table 3. T-test group analysis

		G	Froup Statistics		
	Corpus	N	Mean	Std. Deviation	Std. Error Mean
Hedges	Saudi	15	732.8667	49.66871	12.82441
	Australian	15	628.0667	35.13945	9.07297
Boosters	Saudi	15	354.2667	39.68711	10.24717

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Boosters	Saudi	15	354.2667	39.68711	10.24717
	Australian	15	358.5333	32.31069	8.34259

The group statistics show that the mean values for the use of boosters by the Saudi writers (M=354) and the Australian writers (M=358) are almost equivalent. However, there is a mean score difference for the use of hedges among the Australian writers (M=628) and the Saudi writers (M=732). The independent samples t-test shows that this difference in the use of hedges for both corpora is statistically significant (Table 4).

Table 4. Independent samples T-test analysis

				Ind	epende	nt Samples	T-test			
		Levene's Test for Equality of Variances					T-test for I	Equality of Mea	ins	
									, , , , , , , , , , , , , , , , , , , ,	nce Interval of ference
		F S	ig.	t	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Hedges	Equal variances assumed	1.607 .2	215 6.0	571	28	.000	104.80000	15.70936	72.62083	136.97917
	Equal variances not assumed		6.0	571	25.207	.000	104.80000	15.70936	72.45943	137.14057
Boosters	s Equal variances assumed	.510 .4	3	323	28	.749	-4.26667	13.21375	-31.33381	22.80047
	Equal variances not assumed		3	323	26.894	.749	-4.26667	13.21375	-31.38404	22.85070

The independent samples t-test statistics show that Australian writers use more hedges (732 ± 49) than Saudi writers (628 ± 35) . Moreover, this difference is significant at t (28)=6.67, with the significance value as p=.001. This means that the use of hedges in Australian research discourse is significantly more than that of Saudi research discourse.

4.3 Discussion on Statistical Analysis

The descriptive statistics show that Saudi writers use boosters marginally more than Australian writers. Apparently, this finding appears to be in line with Hinkel (2005getting obtained similar findings and reported that in Arabic culture, "amplification is seen as a valid and eloquent rhetorical device to convey the writer's power of conviction and/or desirability" (p. 5). Nonetheless, the difference in the use of boosters in the current study was not very significant and therefore cannot endorse Hinkel's (2005) claim conclusively.

Similarly, the differential use of hedges by Australian and Saudi writers can be attributed to cultural differences. Grabe (1984) argues that linguistic choices are primarily determined by culture. As Saudi writers come from different socio-cultural settings, it may be argued that they are less inclined to use interactional markers in their research discourse of PhD theses compared with Australian writers. Nevertheless, such conclusions should be evaluated carefully as the notion of a macro-level, homogeneous culture has been challenged by discourse scholars in recent times (e.g., Holliday, 2010; Wenger, 2011). For instance, Atkinson (2004) referred to the term "intercultural" to focus on the "small cultures" in any institutional setting. There is a possibility that the interactive communicative practices of Saudi culture are not much different from that of Australian culture; however, Saudi writers within Australian academic settings may be expected over a period to develop an academic writing style that is less interactive, especially in terms of their use of hedges. Unfortunately, with the limited scope of the current study and due to its quantitative orientation, it is difficult to explore how at the institutional level the communicative practices of Saudi writers evolve in Australian academia. Hopefully, in the future, a mixed methods approach with a dominant ethnolinguistic inquiry will provide better insights into the use of interactional markers by Saudi and Australian writers.

4.4 Comparing the Top 20 Most Frequently Used Boosters and Hedges

The quantitative differences in the use of boosters and hedges provide a general outline of the use of interactional markers in the research discourse produced by Saudi and Australian writers. To gain a better understanding of the preferences of non-native and native writers in the use of hedges and boosters, it was considered more appropriate to compare the use of the top 20 most frequently used boosters and hedges employed in the selected corpora.

Table 5 provides the top 20 most frequently used boosters in the Australian and Saudi research corpora. Boosters that are present in both corpora are highlighted in grey.

Table 5. Comparison of the top 20 boosters in Saudi and Australian PhD theses

Rank	Saudi Research Corpus	Frequency	Australian Research	Frequency
		(per million)	Corpus	(per million)
1.	Think	444	Found	742
2.	Indisputably	388	Thought	229
3.	Shown	239	Demonstrated	199
4.	Believe	224	Always	196
5.	Finds	223	Actually	178
6.	Shows	217	Finds	159
7.	Showed	184	Certain	153
8.	Evidently	183	Evident	149
9.	Always	156	Clear	145
10.	Really	154	Think	142
11.	Show	154	Know	136
12.	Demonstrate	147	Established	134
13.	Certain	144	Showed	124
14.	Believed	140	Known	110
15.	Establish	135	Shown	100
16.	Know	117	Sure	90
17.	Clear	102	in fact	83
18.	Thought	90	Really	83
19.	must (possibility)	77	Demonstrate	78
20.	Actually	71	Believe	75

The table shows that 13 of the top 20 boosters are commonly used by Saudi and Australian writers, which indicates that Saudi and Australian writers both make use of similar boosters in their research discourse. However, the frequency of the shared boosters and their types differ significantly. In Table 5, the most frequently used booster in the Saudi research corpus is *think* (444), which ranks 10th for the Australian research corpus. On the other hand, the most frequently used booster in the Australian research corpus is *found* (742), which is not present among the top 20 most frequently used boosters in the Saudi research corpus.

Table 6. Comparison of the top 20 hedges in Saudi and Australian PhD theses

Rank	Saudi Research Corpus	Frequency (per million)	Australian Research Corpus	Frequency (per million)
1.	About	1602	May	1357
2.	May	1041	Would	1026
3.	Would	617	Could	963
4.	Could	506	About	789
5.	Indicated	314	Should	594
6.	Feel	257	Often	481
7.	Might	255	Indicated	387
8.	Often	249	Might	377
9.	Suggested	248	Feel	291
10.	Possible	223	Suggested	275
11.	Should	214	Around	237
12.	Around	172	Possible	237
13.	Likely	161	Likely	197
14.	Indicates	158	Sometimes	185
15.	Usually	148	Suggests	182
16.	Argued	142	Argued	166
17.	Felt	142	Felt	164
18.	Suggests	136	Suggest	162
19.	in general	117	Argues	157
20.	Mainly	108	Appeared	147

Table 6 shows the top 20 most frequently occurring hedges in the Australian and Saudi research corpus. The most frequently used hedge in the Saudi research corpus is *about* (1602) and in the Australian research corpus is *may* (1357). Among the top 20 most frequently used hedges, 16 hedges are commonly used in the Saudi and Australian research corpora. It is remarkable that among the top 20 most frequently used hedges, almost 80% of hedges are used by both Saudi and Australian writers.

4.5 Discussion on Top 20 Hedges and Boosters

The statistical analysis indicates that there is no significant difference in the mean score for the use of boosters in the Saudi and Australian research corpora. However, it is important to note that in PhD theses, although the Saudi writers use boosters marginally more than the Australian writers, the Australian writers use a wider range of boosters (n=59) compared to the Saudi writers (n=52) (see Appendix B). One reason for this could be that Australian writers are native speakers of English and hence have more boosters in their linguistic repertoire than

Saudi writers. On the other hand, it also gives the impression that in spite of having a less broad range of available boosters, Saudi writers overuse the lexical resources of boosters. This premise is further substantiated by the fact that in Table 5, other than the top most frequently used booster *found* in the Australian corpus, all other commonly occurring boosters are more frequently used by Saudi writers than Australian writers.

There is not much difference in the variety or range of use of hedges in the Saudi (n=86) and Australian (n=89) corpora; however, it is the quantitative difference in their use that makes the Australian research corpus more interactive than the Saudi research corpus. This was reflected in the mean score differences for the hedges when the independent samples t-test was applied to the data. The statistical representation shows that other than the top two most frequently used hedges in both corpora, every instance of a hedge is more frequently used in the Australian research corpus than the Saudi research corpus.

5. Conclusion

The current study explored the differential use of hedges and boosters in Saudi and Australian research discourse of PhD theses. The corpus-based research approach reveals that there is no significant difference in the use of boosters among Saudi and Australian writers, but hedges are significantly more frequently used by Australian writers compared with Saudi writers. The comparison of the top 20 hedges and boosters shows that the Australian writers have a wider range of boosters in their linguistic repertoire but the Saudi writers appear to overuse their relatively limited lexical resources of boosters. For the use of hedges, the list of the top 20 most frequently used hedges shows that both the Australian and Saudi writers prefer similar types of hedges in their academic discourse but their use is more frequent among the Australian writers than the Saudi writers. Therefore, it may be concluded that the academic discourse of PhD theses produced by Australian writers is more interactional than that of Saudi writers.

One of the limitations of the study was the small size of the data, which meant not a single instance of many lexical resources of boosters and hedges as given in Hyland's (2018) list was found. Another limitation of the study was its dependence on the quantitative approach only. Although the quantitative analysis generates objective statistical findings, a mixed methods approach involving interviews of the writers could have provided a better picture of the socio-cultural and academic reasons for determining the use of interactional resources in the analyzed PhD theses. Also, though the corpus included theses from four different disciplines, the analysis did not focus on analyzing discipline-based variations in the use of hedges and boosters.

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Appendix A
List of Boosters and Hedges in the Saudi Corpus Data

Rank	Boosters		Hedges	
1.	think	830	About	2994
2.	indisputably	726	May	1946
3.	shown	447	Would	1153
4.	believe	418	Could	945
5.	finds	417	Indicated	587
6.	shows	405	Feel	480
7.	showed	343	Might	477
8.	evidently	342	Often	465
9.	always	291	Suggested	463
10.	really	288	Possible	417
11.	show	287	Should	400

10	1	1 075	A 1	221
12.	demonstrate	275	Around	321
13. 14.	certain	269	Likely Indicates	300
15.	believed establish	262 253	Usually	296 276
16.	know	233	Argued	266
17.		190	Felt	266
18.	clear thought	168	Suggests	255
19.	must (possibility]	144	in general	219
20.	actually	132	Mainly	201
20.	·	120	Suggest	196
22.	sure TRUE	119	Generally	138
23.	known	116	Seems	137
24.	doubtless	108	Argues	127
25.	found	101	Almost	124
26.	definitely	65	Sometimes	117
27.	incontrovertibly	62	Appears	116
28.	obviously	53	Mostly	112
29.	definite	41	Approximately	111
30.	believes	38	Approximatery Appear	97
31.	demonstrated	36	Claimed	95
32.	obvious	36	Argue	93
33.	established	30	Claim	90
34.	decidedly	29	Somewhat	84
35.	certainly	26	Indicate	83
36.	proved	25	Estimated	81
37.	thinks	22	Frequently	74
38.	never	19	Maybe	66
39.	find	16	Quite	65
40.	prove	16	Assumed	63
41.	realize	14	Appeared	61
42.	no doubt	13	Claims	57
43.	realized	13	Perhaps	55
44.	truly	12	tended to	52
45.	of course	11	Supposed	47
46.	evident	10	Typically	46
47.	surely	10	Possibly	43
48.	undoubtedly	6	Estimate	40
49.	without doubt	3	Doubt	37
50.	proves	2	Assume	35
51.	realizes	1	Largely	35
52.	undeniably	1	Uncertain	30
53.	beyond doubt	0	Probably	26
54.	clearly	0	Relatively	26
55.	conclusively	0	tend to	24
56.	demonstrates	0	Unlikely	24
57.	in fact	0	in my opinion	22
58.	incontestable	0	Unclear	20
59.	incontestably	0	Fairly	19
60.	incontrovertible	0	Essentially	18
61.	indeed	0	in most cases	18
62.	indisputable	0	Apparently	15
63.	undeniable	0	Feels	15
64.	undisputedly	0	Apparent	14
65.			Ought	12
66.			Typical	11
67.			Plausible	10
68.			Presumably	10
69.			Roughly	10
70.			certain level	7
71.			Probable	7
72.			couldn't	6
73.			Guess	6
74.			in my view	6

76. from this p 77. tend 78. Sup 79. certain 80. Dou	adly 5 perspective 5 ds to 5 pose 3 a extent 2 btful 2 nowledge 2 whole 1
77. tend 78. Supp 79. certain 80. Dou	ds to 5 pose 3 extent 2 btful 2 nowledge 2
78. Sup 79. certain 80. Dou	pose 3 n extent 2 btful 2 nowledge 2
79. certain 80. Dou	btful 2 nowledge 2
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	nowledge 2
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82. on the	wnoie
83. Postu	ılated 1
84. Sus	pect 1
85. Uncer	rtainly 1
	ıldn't 1
87. certain	amount 0
88. from my p	perspective 0
89. from our p	perspective 0
90. in most i	instances 0
91. in this	s view 0
92. in our o	opinion 0
93. in our	r view 0
94. Plau	sibly 0
	ulate 0
96. Postu	ulates 0
97. Presu:	mable 0
98. rath	ner x 0
99. Supp	ooses 0
100. Susp	pects 0
	learly 0
102. in our	r view 0
	sibly 0
	ulate 0
105. Postu	ulates 0
106. Presu:	mable 0
107. rath	ner x 0
108. Supr	ooses 0
	pects 0
	learly 0

Appendix B
List of Boosters and Hedges in the Australian Corpus Data

Rank	Boosters A		Hedges A	
1.	found	713	May	1304
2.	thought	220	Would	986
3.	demonstrated	191	Could	925
4.	always	188	About	758
5.	actually	171	Should	571
6.	find	153	Often	462
7.	certain	147	indicated	372
8.	evident	143	Might	362
9.	clear	139	Feel	280
10.	think	136	suggested	264
11.	know	131	Around	228
12.	established	129	Possible	228
13.	showed	119	Likely	189
14.	known	106	sometimes	178
15.	shown	96	Suggests	175
16.	sure	86	Argued	159
17.	in fact	80	Felt	158
18.	really	80	Suggest	156
19.	demonstrate	75	Argues	151
20.	believe	72	appeared	141
21.	demonstrates	61	Argue	138
22.	indeed	61	Mainly	120

23.	shows	60	Quite	119
24.	establish	57	indicates	117
25.	believed	56	Usually	99
26.	TRUE	49	generally	89
27.	never	36	Maybe	85
28.	definitely	35	Almost	84
29.	clearly	25	Seems	81
30.	must (possibility]	25	Claims	76
31.	show	23	Typically	66
32.	truly	23	probably	65
33.	certainly	20	Mostly	50
34.	thinks	17	approximately	49
35.	proved	16	Appear	47
36.	of course	14	frequently	44
37.	prove	14	Typical	44
38.	obviously	13	Claim	41
39.	believes	12	Assumed	39
40.	definite	11	somewhat	38
41.	evidently	6	Claimed	34
42.	obvious	6	apparent	32
43.	realized	6	Broadly	31
44.	finds	5	Feels	31
45.	surely	4	Unclear	31
46.	indisputably	3	Perhaps	29
47.	undoubtedly	3	in general	27
48.	proves	2	Possibly	27
49.	without doubt	2	estimated	26
50.	beyond doubt	1	Estimate	25
51.	decidedly	1	Indicate	24
52.	doubtless	1	Doubt	22
53.	incontestable	1	Guess	21
54.	incontestably	1	Assume	17
55.	incontrovertibly	1	tend to	17
56.	indisputable	1	supposed	15
57.	no doubt	1	Fairly	10
58.	realizes	1	Suppose	8
59.	undeniable	1	in my opinion	7
60.	conclusively	0	Largely	7
61.	incontrovertible	0	certain amount	6
62.	realize	0	couldn't	6
63.	undeniably	0	from this perspective	6
64.	undisputedly	0	Roughly	6
65.			in most cases	5
66.			uncertain	5
67.			apparently	4
68.			certain level	4
69.			tends to	4
70.			wouldn't	4
71.			doubtful	3
72.			tended to	3
73.			certain extent	2
74.			in my view	2
			Ought	2
75.				
76.			postulated	2
76. 77.			postulated postulates	2
76.			postulates Suspects	
76. 77. 78. 79.			postulates Suspects from my perspective	2
76. 77. 78.			postulates Suspects	2 2 1 1
76. 77. 78. 79.			postulates Suspects from my perspective	2 2 1
76. 77. 78. 79.			postulates Suspects from my perspective in this view	2 2 1 1
76. 77. 78. 79. 80. 81.			postulates Suspects from my perspective in this view in our opinion	2 2 1 1 1
76. 77. 78. 79. 80. 81.			postulates Suspects from my perspective in this view in our opinion in our view	2 2 1 1 1 1

86.	Suspect	1
87.	uncertainly	1
88.	unclearly	1
89.	Unlikely	1
90.	Appears	0
91.	essentially	0
92.	from our perspective	0
93.	in most instances	0
94.	on the whole	0
95.	plausible	0
96.	postulate	0
97.	presumable	0
98.	presumably	0
99.	rather x	0
100.	relatively	0
101.	to my knowledge	0
102.	in most instances	0
103.	on the whole	0
104.	plausible	0
105.	postulate	0
106.	presumable	0
107.	presumably	0
108.	rather x	0
109.	relatively	0
110.	to my knowledge	0

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