Research Article

Hedges and Boosters in Research Article Abstracts of Turkish and Chinese Scholars

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ABSTRACT

In the reviewed literature, many studies have compared the research articles written by L1 and L2 speakers of English. In this regard, comparing L2 speakers of English from two different linguistic backgrounds distinguishes this study from similar studies. While writing a research article abstract, writers need to calculate what weight to give to their arguments while showing credibility and authority at the same time. Given these reasons, the use of hedges and boosters in the research article abstract is a worthwhile topic to be searched. The goal of this study is to investigate the hedging and boosting strategies in research article abstracts of Turkish and Chinese scholars. They were identified and analyzed by Hyland's (2000a) hedging and boosting list. The results of this study showed that Turkish and Chinese academics didn't show much statistical difference in their frequency of hedges, but they preferred to choose different hedging strategies in some instances.

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Introduction

No matter what the method is, in Hyland's (2005a) terms, researchers interested in writing are looking for answers that "will best inform our views of what writing is" (p.177). Conceiving writing as interaction, metadiscourse analysts dig up texts to understand how writing is mediated by different linguistic, cultural, and disciplinary communities. As Hyland (2005a) elucidated, "Every act of writing is embedded in wider social and discursive practices that carry assumptions about participant relationships and how these should be structured and negotiated" (p.177). Metadiscourse "focuses our attention on the ways writers project themselves into their discourse to signal their attitude towards both the content and the audience of the text" (Hyland & Tse, 2004, p.156). Writers employ a variety of metadiscourse markers to organize their texts and interact with readers. Without metadiscourse markers which can be classified into two main categories (interactive and interactional metadiscourse markers), it would be very difficult to follow and understand texts. Interactive metadiscourse markers (transitions, frame markers, endophoric markers, evidentials, and code glosses) assist writers in organizing the information and making it flow while interactional metadiscourse markers (hedges, boosters, attitude markers, self-mentions, and engagement markers) allow writers to establish credibility and authorial stance in their interaction with readers. Writers use a variety of interactional metadiscourse markers to project their stance to readers. To achieve this aim, writers change the level of assertions in academic discourse and convey "appropriately collegial attitudes to readers" (Hyland, 2000a, p.179). As Hyland (2010) stated clearly, "removing these metadiscourse features would make the passage less personal, less interesting, and less easy to follow" (p.127). These devices help writers mitigate the certainty of statements, show detachment (Akbas & Hardman, 2018, p.835), and withhold their full commitment to having modest claims "as a product of social forces" (Crompton, 1997, p.275) are called hedges, and those expressing certainty, emphasizing shared information and group membership are called boosters (Hyland, 2000a, p. 97), both of which will be the focus of this study.

The use of metadiscourse markers have been investigated in different genres and contexts. As Hyland (1999) noted,

> the meaning of metadiscourse only becomes operative within a particular context, both invoking and reinforcing that context with regard to audience, purpose and situation. Its use therefore reflects differences in the various forms of organized cultural communication recognized and employed by distinct academic disciplines for particular purposes (p.6).

Cross-cultural studies have been conducted in thesis abstracts (Nugroho, 2019; Onder-Ozdemir & Longo, 2014) and postgraduate writings (Akbas & Hardman, 2018). In addition to cross-cultural studies, there are studies in which writings from various disciplinary communities including social sciences, and hard sciences have been examined (Akbas, 2012; Afshar et al., 2014; Ebrahimi & Chan, 2015; Ekoç, 2010; Hyland & Tse, 2004; Mkhitaryan & Tumanyan, 2015; Saeeaw & Tangkiengsirisin, 2014). In metadiscourse studies, it is also a question of whether the speakers' first language contributes to what extent metadiscourse markers are being used. The scholars interested in metadiscourse mostly compared L2 speakers' writings with L1 speakers of English from Anglophone countries (Çapar & Turan, 2020; Demir, 2018; Dontcheva-Navratilova, 2016; Gholamit & Ilghamit, 2016; Li and Wharton, 2012; Samaie et al., 2014; Yagız & Demir, 2014). Among those studies, for instance, Li and

Wharton (2012) discovered that context has a stronger influence on students' use of metadiscourse. They claimed that UK students use metadiscourse more frequently than Chinese authors. Self-mentions are nearly nonexistent in the corpus of Chinese works while they are common in the essays of UK students. According to their study's findings, Chinese authors frequently utilize imperative phrases like "we must" and "you should" in their writing to compel readers to pay attention. More hedges are used by UK students, showing a willingness to show less commitment to ideas. Yet in this stream of research on interactional metadiscourse devices, there is relatively less research on the cross-cultural analysis of L2 speakers from different countries. Among the few studies, Lotfi et al. (2019) focused on two different EFL contexts in Asia to see whether there are significant differences between Iranian and Chinese university students' argumentative writings. Apart from the mentioned study, there is relatively very little research that investigates hedges and boosters in research articles (RAs) in two different L2 contexts. To fill this gap in the reviewed literature, this study focuses on hedges and boosters in the abstracts of RAs from two different linguistic backgrounds, the scholars of which are not from the countries in the Anglosphere (countries such as the USA, the UK, Australia) but are L2 speakers of English.

Literature review

In the metadiscourse studies, research on abstract has taken increasing attention as abstract is a genre in itself with its very own characteristics. An abstract can be defined as succinct research in a very limited space, such as 150-250 words that accompany RAs, a thesis, or conference proceedings. As Supatrahont (2012) underlined, "abstract is the first part of the paper for facilitating readers to quickly consider objectives and significance of the study before deciding whether to further read the full paper" (p.145). Supporting the reviewed literature (Piqué-Noguera, 2012), RA abstract writing should not be underscored in the literature. RA abstract has become under more scrutiny because writing articles and getting them published to act as a gatekeeper for academics to be part of the academic community. RA abstract has a convincing role in persuading editors that the study is worth sending for peer review, and therefore, RA abstract constitutes the first step to publishing a RA (Ebrahimi & Chan, 2015, p.382).

The interest in RA abstracts also lies in the fact that abstracts are accessible for free in national and international journals' databases after publication. To be able to access the entire article, journals can request individual or institutional subscriptions from readers, but the RA abstract is open to any reader interested in the study. Saving time for readers with its condensed information plays a significant role in its given importance in the scientific community (Ebrahimi & Chan, 2015, p.382). Their schematic structures and variations in different disciplines have been discussed extensively in genre and discourse studies (Pho, 2008; Samraj, 2005; Suntara & Usaha, 2013; Kaya & Yağız, 2020). As Gillaerts and Van de Velde (2010) put it, "abstracts are not just pale reflections of the full-length article, but rather have a specific make-up, which can plausibly be linked to their function" (p.128). While writing an RA abstract, writers are trying to establish an appropriate, well-balanced relationship with the presented data, propositions, and readers (Hyland & Tse, 2004, p.159). These attempts can be defined "as a case of interaction between individuals acting in a social, institutional context"

(Gillaerts & Van de Velde, 2010, p.129). To fulfill this interactional and interpersonal dimension, writers are benefiting from various metadiscourse markers to help readers encode the message in the expected way and find the content appropriate and convincing. As Hyland (2000a, p.87) pointed out, writers need to convince their readers to a certain extent but at the same time refrain from overstating their propositions, which may cause them to be rejected. RA abstracts may seem to be addressing academics, researchers, and teachers at first but students and interested people of the specific discipline also read RA abstracts. As it is the first part of RA which readers will find in the search list, scholars need to guard themselves against possible opposition from those readers and balance the level of certainty in their arguments. At this point, as a sub-category of interactional metadiscourse markers, the vitality of hedges and boosters come to the fore as "underuse of hedging may lead to overstatement, overuse of it may bring about suspicions on the credibility of the statement" (Demir, 2018, p.75). Thanks to hedges and boosters, writers "calculate what weight to give to an assertion" (Hyland, 2005b, p.179). In this competitive academic community, hedges and boosters help scholars "gain acceptance for their work by balancing conviction with caution" (Hyland, 2000b, p.179). Given these reasons, the use of hedges and boosters in the RA abstract is a worthwhile topic to be searched as "the discourse community expands, the need for acknowledging stances other than the author's becomes more urgent" (Gillaerts & Van de Velde, 2010, p.137). Authors feel the need to make readers feel that their stances are also welcome in the discourse community. As Gong, Liu and Cao (2021, p.2) emphasize, the frequency of interactional metadiscourse markers are affected by many factors such as "discipline", "linguistic/cultural background" or "writing expertise".

In the reviewed literature, the frequency and distribution of hedging and boosting strategies have been examined in different sections of RAs within different disciplines (Alia et al., 2020; Hyland, 2005b; Kurt-Taşpınar, 2017). They have started with the presumption that "all acts of communication carry the imprint of their contexts" (Hyland, 2000a, p.91). In addition to different disciplinary contexts, the use of hedges and boosters has started to be investigated in RAs written by scholars from different linguistic backgrounds. Most of the cross-cultural metadiscourse studies have set out with the goal of showing us the ways how Anglophone discourse conventions are accomplished through writers' choices in L2 contexts (Afshar et al., 2014; Çapar & Turan, 2020; Demir, 2018; Dontcheva-Navratilova, 2016; Gholamit & Ilghamit, 2016; Samaie et al., 2014; Yagız & Demir, 2014). As Flowerdew (2015, p. 13) noted, there is a "pressure on academic staff and their postgraduate students to publish research in prestigious high impact journals for which, by necessity, English is the language for dissemination of research findings to a global readership". Although some journals still stipulate authors to proofread their manuscripts by a "native" speaker of English and put non-native speakers at a disadvantaged position, we should realize that in today's world, the number of L2 speakers of English are more than L1 speakers of English. Bayyurt and Sifakis (2015) call this period "post-EFL" as "EFL is native-speaker oriented in its norms (Standard English), curricula, testing orientations, and attitudes resulting from the desire to emulate native speakers of English" (p.118). Thus, investigation of English as a *lingua franca* (ELF) settings can be fruitful. If academic writing addresses all those in ELF settings and L1 settings, it is questionable why one should take the choices of native speakers as the ideal target. In this

changing realm, one cannot talk about strict adherence to L1 speakers' norms. As Ceyhan-Bingöl and Özkan (2019) underpin, "ELF embraces non-native speakers and their various use of English instead of native-norm based English" (p.87). The number of writers publishing in English is dramatically increasing, so there is a need for new pedagogies in teaching academic writing. In this respect, Turkish and Chinese writers are no exception. In their study, Mu et al. (2015) highlighted that

> Chinese writers, especially applied linguists, have recently shown a strong tendency to publish RAs in international refereed journals in English in order to secure recruitment, reappointment, promotion or other employment-related benefits in China (p. 136).

Similarly, to gain more recognition from the international community, Turkish writers are also trying to get their articles published in high-ranking journals. Gong et al. (2021) underlined that "to ensure a successful publication, a good knowledge of the rhetorical and stylistic features of the English academic discourse is of greater importance than ever" (p.1). Thus, "acquiring the skills of writing an abstract is therefore important to novice writers to enter the discourse community of their discipline" (Pho, 2008, p.231). As Hatipoğlu and Algı (2018, p.958) suggest, each L2 learner group should be examined meticulously and the prevalent issues should be determined and solved while teaching academic writing. Starting from this point of view, as far as the author is aware, in the Turkish context, no study has compared two different groups of L2 speakers of English in terms of hedges and boosters, and there is very little overseas research, so there need to be more studies comparing writers' choices from different ELF settings. To contribute to the existing literature, this study aims to tackle the following research questions:

1. What hedges and boosters do Turkish and Chinese speakers of English use in their RA abstracts?
2. Is there any statistical difference in the frequency and distribution of hedges and boosters employed by Turkish and Chinese speakers of English?

Methodology

To ensure that RA abstracts represented two L2 contexts, they were compiled from the journals published by Elsevier, Taylor and Francis, Sage, and Wiley. They are all peer-reviewed journals. 20 Turkish scholars' abstracts and 20 Chinese scholars' abstracts between 2016-2021 were chosen randomly. Verification of the status of the author as Chinese and Turkish was realized through their name and nationality. If there were more than one author, the first and corresponding author's name and nationality were considered. The corpus of the abstracts was restricted to the field of English language teaching (ELT), so the discipline variant has been kept constant. Chinese scholars' abstracts had 3153 words and Turkish scholars' abstracts had 3137 words, making a total corpus of 6290 words. Hyland's (2000a, pp.188-189) list of hedges and boosters was used and some items that serve similar hedging functions from Demir's (2018) list were added. The abstracts were transferred to a Word document, and with the help of the "find feature", the abstracts were searched automatically

for each hedging and boosting item in the list. While classifying them, their meanings and functions were also considered for some items such as *can*, *and most*.

Results

Table 1. Frequency of Hedges in the Abstracts of Turkish and Chinese Scholars

Hedges	Abstracts of Turkish speakers of English		Abstracts of Chinese speakers of English	
	f	%	f	%
Epistemic adjectives	2	0.06	2	0.06
Epistemic adverbs	6	0.19	7	0.22
Epistemic nouns	8	0.25	9	0.28
Epistemic lexical verbs	27	0.86	26	0.82
Modal verbs	14	0.44	7	0.22
Passives	50	1.59	31	0.98
Inanimate subjects	48	1.53	57	1.807
Total	155	4.97	139	4.40

As illustrated in Table 1, Turkish (f=155) and Chinese speakers of English (f=139) used a roughly equivalent number of hedges with no significant difference. Similarly, in Lotfi et al.'s (2019) study, it was seen that Iranian and Chinese EFL students performed similarly in the use of hedges. Supporting the previous studies on RA abstracts, the results have showed that scholars employed hedges "even in highly condensed genres like RA abstracts" (Gillaerts & Van de Velde, 2010, p.138). In Liu and Huang's (2017) terms, both Turkish and Chinese scholars took advantage of hedges to "display the cautiousness and circumspection towards their arguments on the one hand, and to express humility and respect for the readers on the other hand" (p.38). Yet in some instances, they tended to differ in their hedging choices.

The analysis also revealed that Chinese scholars used the inanimate subject as a common practice for detachment and objectivity. Their high-frequency use of inanimate subjects may show that they wanted the data or evidence to be the focus of their studies and make the research "speak for itself" (Hyland, 2000a, p.95). They might have thought that opting for inanimate subjects would be likely to reduce the risk of opposition, and they did not want to hold personal accountability for their claims. While stating the aim of their studies, they employed inanimate subjects. The following examples show how Chinese writers showed detachment from the propositions:

(1) "The study reiterates the link…"(C-3).

(2) "This paper also offers discussions …"(C-2)

(3) "This article investigates how…" (C-13).

On the other hand, Turkish speakers of English benefitted from passives for claim-making and detachment. They also employed inanimate subjects.

(4) "In the light of relevant literature, the findings are discussed" (T-5).

(5) "Moreover, it was also found that …" (T-8).

For both sides, employing hedges for claim-making is of no surprise as Hyland (2005b) emphasizes that "claim-making is risky because it can contradict existing literature or challenge the research of one's readers, which means that arguments must accommodate readers' expectations" (p.179). It helps writers to avoid face-threatening acts by mitigating the strength of the proposition. In this study, it was seen that L2 writers from different linguistic backgrounds opted to use different hedging strategies to reduce their personal involvement. This finding is in line with Liu and Huang's (2017, p.31) study in which it was observed that Chinese writers preceded the hedging verbs with a research noun such as "the model", "this paper" and "concealed the authorial presence in constructing the claim". This may prompt a new understanding whether scholars in certain linguistic communities tend to show inclination towards some sort of hedges and make it as a common practice, which can be discussed in further research.

Table 2. The Hedges Used by Turkish and Chinese Scholars

	Epistemic adjectives	*Epistemic adverbs*	*Epistemic lexical verbs*	*Epistemic nouns*	*Modal verbs*
Turkish scholars	a certain X (1) possible (1)	almost (1) largely (1) mainly (2) most(ly) (1) partially (1)	appear (1) believe (1) indicate (8) propose (1) perceive (6) offer (2) recommend (1) report (3) suggest (4)	assumption (1) implication (6) tendency (1)	could (2) might (1) should (5) would (1) can (5)
Chinese scholars	possible (2)	to certain extent (2) most (1) often (1) rather (1) relatively (2)	appear (2) argue (1) indicate (1) infer (1) interpret (1) offer (3) perceive (6) predict (1) propose (1) report (3) suggest (4) tend (1) support (1)	implication (8) recommendation (1)	could (2) may (1) might (1) should (1) can (2)

In Table 2, it was also evident that most hedging markers such as epistemic adjectives and epistemic adverbs had a limited use in the abstracts. Still, with the help of some adverbs, scholars preferred to avoid preciseness and show academic modesty.

(6) "This issue is relatively under-explored…." (C-14).

(7) "The analyses indicate that lecturers are largely supportive of…" (T-1).

Both Turkish and Chinese speakers of English used a roughly equivalent number of discourse-oriented verbs like *indicate*, *suggest*, *and offer*, and they are often combined with inanimate subjects in Turkish and Chinese scholars' abstracts. While presenting the results of their studies, they did not prefer displaying confidence. While examining Chinese scholars' writing practices, Mu et al. (2015, p.142) highlight, "modesty and respect are considered to be virtues" in the discourse community. From the reviewed literature, Abdi (2002) found that hedges were more often used than boosters to represent the findings. In the following excerpts, this preference can also be noticed:

(8) "This study suggests that …" (T-14).

(9) "The analysis suggests that …" (C-20).

Perceive (f=6) was the highest frequency lexical hedging verb in both Turkish and Chinese writers' RA abstracts.

(10) "The study aimed to assess (…) as perceived by preservice teachers" (T-8).

(11) "Moreover, they perceived that… " (C-15).

In terms of modal verbs, *should* is the most frequent modal verb used by Turkish scholars.

(12) "University administrations should also have realistic expectations of lecturers" (T-7).

Via the modals *can*, *could*, writers mitigated the certainty of their arguments.

(13) "In light of the growing agreement on the critical impact that materials can have on teaching and learning, …" (C-8).

(14) "Exclusionary practices of ELT departments can be ascribed to Turkey's political regimes that…" (C-19).

(15) "...they believed the use of project-based learning could promote young learners' English language learning,.." (T-12).

As for epistemic nouns, *implication* has been detected in the last move of the abstracts as the most frequent hedging in both Turkish and Chinese scholars' abstracts.

(16) "The results offer practical implications for…" (T-1).

(17) "This article discusses the pedagogical implications of…" (C-3).

More scrutiny of the findings revealed that there is a far greater use of hedges in both Chinese and Turkish scholars' abstracts. As can be seen in Table 3, both Chinese and Turkish writers deployed boosters less than hedges. This is in line with Gillaerts and Van de Velde's (2010) study as in their study, similarly, they found out that interactional metadiscourse markers were more sparsely used in the recent abstracts in their corpus, and if they were used, there was a notable increase in the use of hedges.

Although Hyland (2000a) underlined the importance of boosters within the competitive nature of scientific communities and the persuasive function of RA abstract, in this study, it was seen that hedges were more frequent than boosters. This may be explained by different

dynamics. One possible explanation can be Gillaerts and Van de Velde's (2010) argument: "scholarly credibility is currently established by a deliberate, cautious expression of scientific claims" (pp.136-137). In Hu and Cao's (2011) study, the use of hedges was considered "a negative politeness strategy, a strategy intended to avoid or minimize impositions on the audience" (p.2084). This can be conceived as one of the possible reasons for Chinese and Turkish writers' tendency in terms of hedging strategies. Another possible reason is that one can see adherence to Anglo-based conventions in the reviewed literature as L1 writers of English show the inclination to use more hedges than boosters. Similarly, in her cross-cultural study between Anglophone and Czech linguists, Dontcheva-Navratilova (2016) found out that "Anglophone linguists tend to present their reasoning as plausible rather than certain, thus opening a dialogic space for readers to dispute their opinions or procedural decisions" (p.176). This finding is understandable as Chinese and Turkish writers show efforts to publish in high-ranking journals, and "the use of metadiscourse not only helps writers to advance their arguments but also serves to showcase their competence within the discourse community" (Mu et al., 2015, p.137).

Table 3. Frequency of Boosters in the Abstracts of Turkish and Chinese Scholars

Boosters	Abstracts of Turkish speakers of English		Abstracts of Chinese speakers of English	
	f	%	f	%
Epistemic adjectives	2	0.06	3	0.09
Epistemic adverbs	8	0.25	5	0.15
Epistemic nouns	1	0.03	1	0.03
Epistemic lexical verbs	12	0.38	18	0.57
Modal verbs	1	0.03	-	-
Total	24	0.76	27	0.85

Table 4. The Boosters Used by Turkish and Chinese Scholars

	Epistemic adjectives	Epistemic adverbs	Epistemic lexical verbs	Epistemic nouns	Modal verbs
Turkish scholars	clear(1), essential (1)	more than (6), particularly (1), in particular (1)	establish (1), demonstrate (1), manifest (1) perceive (6), show (3)	evidence (1)	couldn't (1)

| Chinese scholars | clear (1), essential (1), reliable (1) | more than (5) | conclude (3), known (1), perceive (6), prove (1), show (6), establish (1) | evidence (1) | - |

With verbs such as *show*, Chinese and Turkish writers suggested the strength of the relationship between data and claims. They preferred to use boosters to highlight the findings which support their initial hypotheses. This finding is in accordance with Mu et al.'s (2015) study. Here are some excerpts from the RA abstracts:

(18) "The results showed that EFL students' language mindsets, four aspects of engagement, perceived instrumentality…" (T-13).

(19) "Findings show that they have constructed a range of hybrid identities…" (C-2).

As for the adjectives, *more than* is the most frequently used adjective by Turkish and Chinese scholars in the corpus.

Overall, the contrastive analysis of RA abstracts by Turkish and Chinese researchers has shown that there are similarities in the way they use hedging and boosting strategies. The reasons for this seem to result from the intended readers, the nature of the discourse community, and the use of English as a lingua franca. As for a comparison of findings of similar studies, it was also noticed in Lotfi et al.'s (2019) study that as L2 speakers of English, Iranian and Chinese students performed in the use of hedges similarly.

Conclusion

This article intended to shed light on cross-cultural variations of hedges and boosters in RA abstracts written by Turkish and Chinese researchers. Making overt conclusions about writers from different linguistic backgrounds is not within the scope of this study. Yet it was seen that both Turkish and Chinese scholars used hedges in their abstracts. This can show their reservation rather than commitment. On the other hand, boosters ranked behind the frequency of hedges. Both groups of writers seem to be exercising similar frequency of hedges and boosters as they are in the same disciplinary community, and writing a good succinct abstract is the goal of researchers. The finding that boosters were not as common as hedges requires further investigation. Different linguistic backgrounds may exert some influence on writers' lexical choices, but the corpus from a single discipline may not provide sufficient findings to allow generalizations about the metadiscourse choices in Turkish and Chinese RA abstracts. This study has been restricted to a single discipline and a restricted choice of metadiscourse markers. Differences between two linguistic backgrounds can be traced in different disciplines. As the abstracts are from the field of ELT, writers' consciousness and proficiency in English can also be effective in their choices. Further research from different disciplines and linguistic backgrounds can give us a new perspective on the role of hedges and boosters in different cultures and genres. In further research, more studies should be conducted about the cross-cultural variation of hedges and boosters exploring different disciplines in ELF settings as there are still very few studies comparing two non-native groups of writers. It is also advised that

additional research should be done on metadiscourse in other academic writing genres that bridge disciplinary and linguistic boundaries. This can comprise different sections of research articles, encyclopedias, theses, dissertations, and book reviews from several academic fields.

As for the implications of this study, the results of metadiscourse studies necessitate that undergraduate and graduate students should be given special attention to foster their conscious noticing of metadiscourse markers so that they can make informed choices in terms of metadiscourse markers. Additionally, textbook authors can design coursebooks so that students learn enough about the various kinds of metadiscourse components and how they are used in texts. Students can be given a tentative list of hedges and boosters with examples from the literature. In this way, students can be prepared better for their future writings to balance the strength of their arguments and consider possible reader expectations and opposition. Supporting Kaya and Yagız's (2020) argument, "with no or little awareness of writing conventions and norms, the construction of a research article becomes difficult" (p.391). In addition, as a separate genre, RA abstract writing can be part of academic writing courses.

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