



OPEN ACCESS

EDITED BY

Mohammad H. Al-khresheh,
Northern Border University, Saudi Arabia

REVIEWED BY

Abdo Hasan AL-Qadri,
Xi'an Eurasia University, China
Yang Li,
Dalian Maritime University, China
Abdullahi Yusuf,
Sokoto State University, Nigeria
Tieu Thuy Chung,
Tra Vinh University, Vietnam

*CORRESPONDENCE

Muhammad Afzaal
✉ muhammad.afzaal1185@gmail.com

RECEIVED 02 April 2025

ACCEPTED 25 July 2025

PUBLISHED 05 September 2025

CITATION

Afzaal M, El-Dakhs DAS, Mardini N,
Ambreen F and Ismail H (2025) A
corpus-based analysis of stance markers in
upper and lower proficiency level
argumentative essays by Saudi learners.
Front. Educ. 10:1589004.
doi: 10.3389/feduc.2025.1589004

COPYRIGHT

© 2025 Afzaal, El-Dakhs, Mardini, Ambreen
and Ismail. This is an open-access article
distributed under the terms of the [Creative
Commons Attribution License \(CC BY\)](#). The
use, distribution or reproduction in other
forums is permitted, provided the original
author(s) and the copyright owner(s) are
credited and that the original publication in
this journal is cited, in accordance with
accepted academic practice. No use,
distribution or reproduction is permitted
which does not comply with these terms.

A corpus-based analysis of stance markers in upper and lower proficiency level argumentative essays by Saudi learners

Muhammad Afzaal^{1,2*}, Dina Abdel Salam El-Dakhs²,
Nahlah Mardini², Fatima Ambreen² and Hala Ismail²

¹Institute of Language Sciences, Shanghai International Studies University, Shanghai, China, ²The College of Sciences and Humanities, Prince Sultan University, Riyadh, Saudi Arabia

Strategic use of stance-taking devices in English language academic texts is a key indicator of the proficiency of any academic writer. While this is true of first language (L1) and second language (L2, ESL or EFL) writers alike, developing the ability to express authorial stance is far more challenging for the non-native writers who may lack the L1 cultural exposure to understand and express stance accurately in L2 writing. The present corpus-based study was designed to identify frequency and patterns of stance-taking devices in the writing of lower-proficiency (novice) and upper-intermediate Saudi EFL writers in comparison with native writers. The study found that lower-proficiency (novice) writers tended to use evidential verbs similar to native writers, with the use of stance markers varying considerably in the lower-proficiency (novice) and upper-intermediate writers' texts. Self-mention was overused by the lower-proficiency (novice) writers, whereas the upper-intermediate writers overused modal hedges in comparison with lower-proficiency (novice) and native writers. The lower-proficiency (novice) writers used approximate hedges to a greater extent. Unlike native speakers who used contrastive markers frequently, the lower-proficiency (novice) and upper-intermediate writers used these markers to a similar extent.

KEYWORDS

stance markers, EFL, academic writing, corpora, L2

Introduction

Defined as “the writer’s feeling, attitude, perspective, or position as enacted in discourse” (Strauss and Feiz, 2013), stance is realized through a variety of grammatical and lexical devices expressing epistemic knowledge (e.g., might, can, suggest, likely) and the author’s attitude toward propositions (e.g., surprisingly, interestingly) (Shen and Tao, 2021; Zhang and Zhang, 2023). Effective stance-taking is considered vital in academic writing because it expresses the communicator’s “attitudes, feelings, judgment, or commitment concerning the propositional content of messages” (Biber et al., 1999, p. 23). In addition, stance-taking enables writers to show credibility and depth when presenting their arguments or clearly articulating their stance on certain topics to demonstrate confidence with a view to persuading and engaging readers (Lee and Deakin, 2016; Min et al., 2019).

Due to its acknowledged importance, stance-taking has been examined extensively in research on different genres, ranging from research papers (Deng and He, 2023; Rezaei et al., 2021), theses (Wu and Paltridge, 2021; Xie et al., 2024) and abstracts (El-Dakhs, 2018a; El-Dakhs, 2018b; Alghazo et al., 2021) to book reviews (Jalilifar et al., 2018; Zou and Hyland, 2022). It has also been investigated from a variety of lens, including appraisal (Martin and

White, 2005), evidentiality (Chafe, 1986) and metadiscourse (Hyland, 2005). However, considerably less focus has been directed toward how incoming university students, who find academic writing quite challenging (Bailey and Almusharraf, 2022; Ozfidan and Mitchell, 2020; Ozfidan and Mitchell, 2022), manage to project an appropriate authoritative voice.

This notable gap in the literature has drawn attention in some recent studies (El-Dakhs, 2020; Papangkorn and Phoocharoensil, 2021; Yoon, 2021) because it has been observed that university students, particularly newcomers, find it difficult to express their positions, attitudes, and feelings in their writing (Huh and Lee, 2016). Within this context, most studies on how stance is realized in university students' writing have tended to focus on first language (L1) speakers (e.g., Afzaal and Xiang, 2020; Aull, 2019; Aull and Lancaster, 2014) or on East-Asian learners of English, including Chinese, Japanese, and Koreans (e.g., Huh and Lee, 2016; Min et al., 2019). As for the Saudi context, little research has been conducted in this area (e.g., Chintalapalli and Bahl, 2025; Al-otaibi and Hussain, 2024) which leaves room for additional studies to explore how Saudi learners of English employ stance markers to express their positions, attitudes and feelings in their writing.

The current study explores how stance is realized in the writing of Saudi learners of English as a foreign language (EFL) who are also incoming university students. More specifically, the present study focuses on the realization of stance by Saudi EFL learners in comparison with native speakers of English. The current study is significant for a number of reasons. First, we examine stance-taking in relation to Saudi EFL learners who represent an understudied population in the Arab world as mentioned earlier. Research on this population will help us to develop more comprehensive insights into how stance-taking transpires in the writing of L2 learners of different L1 backgrounds. Additionally, the findings of this study will inform language education in the Saudi context, which places great emphasis on mastering the English language for education and employment purposes. Second, we focus on incoming university students, a population that has again been examined insufficiently in the literature. Focusing on this group of students is important as the findings of the study can be drawn upon to help freshmen Saudi EFL learners articulate authorial presence in their writing, thus supporting them in their journey in the world of academia. Third, the current study examines the role of language proficiency in the use of stance markers. Understanding this role will help language educators support L2 learners to improve their academic writing and to develop a confident writing persona. Finally, the study will shed provide pedagogical implications on how stance-taking can be addressed in the EFL classroom for the benefit of students.

Review of literature

Research on the university students' use of metadiscourse markers in general and stance markers in particular has dramatically increased over the past two decades. A number of scholars have focused on the use of these markers by students at American universities. For example, Aull and Lancaster (2014) compared the use of stance markers in 4,000 argumentative essays by first-year university students with their deployment in 615 papers written by upper-intermediate late undergraduate and graduate students at an American university.

They found that first-year students used stance markers in similar ways, despite differences in their educational backgrounds. On the other hand, the results revealed distinct variations in the use of stance markers by first-year students and the more upper-intermediate writers. This was, for example, reflected in a strong tendency by first-year students to underuse approximative hedges, code glosses, and contrastive connectors, whereas the upper-intermediate writers used these devices more frequently in their writing. The first-year students also tended to overuse intensifying boosters and adversative connectors in comparison with the upper-intermediate writers. Hence, Aull and Lancaster (2014) suggested that the use of certain stance markers was likely to follow a developmental trajectory.

Following the corpus-based study by Aull and Lancaster (2014) and Aull (2019) examined the use of stance markers in two important curricular genre families, namely persuasive argumentative writing and analytic explanatory writing. The focus was on analyzing 247 pieces of argumentative writing (argumentative essays and critiques) in comparison with 501 pieces of explanatory writing (research papers and reports). The findings revealed some similarities between the two genres, particularly in terms of equal use of textual cues signaling reformulation. On the other hand, the findings also showed significant differences between the two genres. For example, argumentative writing included significantly more contrastive textual cues than explanatory writing, implying that these cues help writers to foreground one view or approach. Additionally, argumentative writing included more boosters than explanatory writing, suggesting that writers authoring argumentative texts exhibited a preference for closing the dialogic space more often.

The two above studies on L1 speakers show that the use of stance markers in university writing varies based on the genre and the students' year of study. These are important findings in the context of L1. However, it is also important to explore how stance markers are used in L2 contexts in which students may struggle in developing their L2 competence and L2 writing efficiency. The remainder studies listed in this section focus on stance-taking in L2 writing.

The majority of L2 studies were conducted in East Asia. For example, Huh and Lee (2016) examined the argumentative writing of 34 Korean EFL undergraduate students. They found that the students faced great difficulty handling the range of stance markers and were limited in their rhetorical sophistication. It was also found that the adequate use of transitions, frame markers, code glosses, and hedges greatly influenced the overall student writing quality. In a similar vein, Min et al. (2019) examined the argumentative writing of 28 upper-intermediate Korean EFL university students to assess the potential relation between their use of hedges and other stance markers and the overall writing quality. In line with Huh and Lee (2016), the study by Min et al. (2019) showed that hedges and stance markers influenced the students' overall writing quality. However, the use of hedges was significantly related to content quality while the use of other stance markers was more significantly related to formal quality.

Additional studies in East Asia were conducted, but with a focus on comparing the writing of L2 learners with that of L1 speakers. For example, Lee and Deakin (2016) compared the use of stance markers by low- and high-rated Chinese learners of English as a second language (ESL) with that of high-rated L1 university students. The findings showed that ESL students were notably reluctant to establish an authorial identity in their writing which was most evident when their writing was compared with that of the L1 students. Lee and Deakin (2016) also reported that while less successful essays by ESL

students included significantly fewer hedges than the more successful ones, the two types of essays exhibited a similar use of other interpersonal resources, such as boosters and attitude markers. Along similar lines, [El-Dakhs \(2020\)](#) examined 180 argumentative essays written by American L1 students, Japanese EFL learners, and Chinese ESL learners with a view to exploring how language learners' use of metadiscourse markers could vary due to the learners' learning context (EFL vs. ESL) and language proficiency. The results showed significant differences in the use of metadiscourse markers by the three groups of participants, suggesting that the significant influence of the writers' learning context and cultural background on their choice of metadiscourse markers. However, the influence of language proficiency was limited to the increased use of transitions, frame markers, and interactive markers by learners at lower levels of language proficiency.

In the same vein, [Yoon \(2021\)](#) found that the essay topic and the L1 background of the EFL learners influenced the use of metadiscourse markers. He also revealed that compared to the native speaker counterparts, the EFL learners underused hedges and overused reader pronouns in their essays. However, in line with the results reported by [El-Dakhs \(2020\)](#) and [Yoon \(2021\)](#) found that the influence of the EFL learners' L2 proficiency level on the use of the metadiscourse markers was minimal. In a more recent corpora-based study by [Wing et al. \(2024\)](#), the use of stance markers by L2 engineering students from Hong Kong was compared with that of US native speaker engineering students. While the results revealed that the student writers from Hong Kong and US generally expressed stance through approximative hedges, boosters, code glosses, and adversative and contrast connectors, significant differences in the use of stance markers were also observed in both corpora. Most notably, non-native students tended to employ a significantly small number of approximative, self-mention, and evidential verb hedges in comparison with native students. Additionally, non-native students used a significantly higher number of modal hedges than native students. It was also found that they underused boosters, contrastive connectors, and counter-expectancy markers.

The above studies on the L2 context reveal some interesting findings. First, L2 learners generally face difficulty using a range of stance markers and expressing their stance with the necessary rhetorical sophistication. Second, the use of stance markers by L2 learners is influenced by a number of factors, including learning context, L1 background, topic of writing and cultural differences. Third, the use of stance markers influences the quality of L2 learners' writing. These significant findings call for further research on stance-taking among L2 learners in other contexts apart from East-Asia.

While Chinese and Korean studies offer valuable insights into academic writing, significant contextual differences must be considered when applying these findings to the Saudi context. Saudi learners face considerable challenges, including a reliance on memorization, limited exposure to English outside the classroom, and a curriculum that differs substantially from those in Korean and Chinese educational systems. Therefore, although prior research in the development of stance markers is informative, its relevance to Saudi learners warrants careful examination.

In the Saudi context, which is the focus of the current study, only a few recent studies have explored the use of stance markers by university EFL students. One relevant study in this regard was conducted by [Al-otaibi and Hussain \(2024\)](#) who explored the use of stance markers in argumentative writing by Saudi university students. Using a corpus of argumentative essays written by 144 Saudi EFL

undergraduates, [Al-otaibi and Hussain \(2024\)](#) examined how the participants employed relevant metadiscourse markers in their writing. The results revealed some interesting gender differences in the use of relevant metadiscourse markers when sensitive topics were discussed. For example, female writers employed a significantly higher number of attitudinal lexis, hedges, self-mentions and boosters than male writers. The authors concluded that sensitive topics may cause a difference in the distribution of metadiscourse markers by gender.

Another relevant study in the Saudi context was conducted by [Chintalapalli and Bahl \(2025\)](#). In their study, the researchers explored how lower-proficiency (novice) Saudi EFL writers express stance in essay writing. A corpus of 532 essays were collected from the essays written by incoming university students in a Saudi university, and the use of hedges, boosters, attitudinal markers and self-mentions was closely examined. The results indicated that the writers overused certain markers, such as boosters, while underusing others, such as attitudinal markers. The results also showed that Saudi EFL undergraduates find great difficulty using a range of stance markers adequately. The participants primarily relied on a few recurrent patterns to express stance in their writing.

The above studies in the Saudi context underscore the finding in earlier studies in the EFL context that EFL learners struggle to express their positions and attitudes adequately in English. This recurrent finding in the literature calls for further research in the Saudi context since little research on stance-taking has addressed the Saudi EFL context. Additionally, the above studies in the Saudi context did not include data from L1 speakers to serve as an important baseline for comparison, which is a major limitation in these studies. The current study addresses this gap in the literature through exploring how Saudi EFL writers at two levels of L2 proficiency express stance in writing in comparison with L1 speakers. It is important to note that the significance of this study does not only lie in the fact that it addresses an important gap in the literature, but it will also provide important pedagogical implications for EFL writing instruction in Saudi Arabia.

Research questions

The current study addresses the following research questions:

- 1 What are the most frequent patterns in stance features within argumentative essays authored by lower-proficiency (novice) college writers and upper-intermediate student writers?
- 2 Which stance features are more frequent use or less frequent use by lower-proficiency (novice) college writers compared to their more proficient counterparts?
- 3 What variations, if any, are identifiable in the use of stance markers within the argumentative essays written by native and non-native speakers?
- 4 Which of these variations presents challenges for lower-proficiency (novice) writers in the university writing context?

Materials and methods

Corpora of study

The current study made use of a corpus of argumentative essays written by American undergraduate students and another corpus of

argumentative essays by Saudi EFL learners as shown in Table 1. The essays written by American undergraduates ($N = 60$) were obtained from the International Corpus Network of Asian Learners of English (ICNALE). This corpus is a collection of 1.3 million words of controlled L1 and L2 essays in English. ICNALE was compiled by Dr. Shin'inchiro Ishikawa from Kobe University, Japan, and represents an appropriate corpus for contrastive studies because it controls for several variables, including the essay genre, topic and length. The collected argumentative essays that were used in the current study were all written in response for the following prompt: It is important for college students to have a part-time job; and the choice of the essays was based on a random selection across all the available essays by American undergraduates in ICNALE. Although we used the ICNALE corpus, which does not represent the writing of upper-level academic English speakers, this limitation should be taken into account when interpreting the contrastive results, as the observed differences may reflect genre and proficiency disparities. This study has several limitations that should be acknowledged. First, while the ICNALE corpus was used as a native speaker baseline, it consists solely of first-year undergraduate students. This level is appropriate for comparison with beginner-level Saudi EFL learners, but the study also includes an advanced EFL group without a corresponding advanced native group.

For the purpose of this investigation, we have chosen to adopt a specific definition of “stance markers” that encompasses four sub-categories of metadiscourse. These sub-categories are hedges, boosters, exemplifiers, and adversative connectors. This selection is founded on previous research that establishes a connection between these components and the growth of writer expertise and rhetorical positioning in academic writing. Some traditional stance elements, such as self-mentions and attitude markers, are typically included in more comprehensive stance taxonomies (Hyland, 2005). The scope of this study makes it possible to conduct a more focused investigation into the ways in which writers negotiate certainty, contrast, and exemplification in academic discourse, particularly in the context of the development of writing in a second language.

As for the corpus of Saudi EFL students' argumentative essays, they were collected from two groups of undergraduates who were all first-year students at a private Saudi university employing stratified random sampling procedure. A mandatory ethics review and approval by Prince Sutan University's IRB committee was completed before the commencement of research data collection. A total of 100 essays were collected from students whose English language proficiency was at B1 level according to a university admission test. These essays represented the writing of students with lower proficiency levels. Additionally, a total of 63 argumentative essays were collected from students whose proficiency level was above B2 according to the same university admission assessment. This latter group represented the students with a higher proficiency level.

We have categorized the participants into three groups: upper-intermediate learners, novice learners (lower proficiency), and native English speakers. Upper-intermediate learners have acquired a moderate level of English proficiency, although they may still exhibit L1 interference and inconsistent use of stance markers. Similarly, native English speakers may also show signs of L1 influence and variability in stance marker usage, depending on contextual and individual factors. Essays were initially categorized based on the students' English proficiency levels (B1 and B2+), as determined by Prince Sultan University's assessments. From each group, essays were randomly selected using a random number generator, resulting in 100 B1 essays and 63 B2 + essays. The Saudi EFL students' argumentative essays all addressed the same topic that was written by the American native speakers. It must also be noted that Saudi students were instructed to write essays of a similar length to the ones by native speakers (i.e., 200–300 words). All the Saudi students wrote the argumentative essays voluntarily in one session in approximately 30–45 min.

Analysis procedure

Adopting a methodology merging quantitative and qualitative data analysis techniques, the study combined quantitative, statistical and corpus-based analyses by utilizing Sketch Engine and Python version 3.10 along with a contextual examination of specific examples of stances list markers are attached in the Appendix. Numerous studies have deployed the Python programming language to identify stance elements within academic texts and narratives, while other researchers have used it to examine its conventional applications (Swy et al., 2024). The aim of the present study was to examine the selected corpora in order to extract signals indicating stances using Hyland's (2005) theoretical underpinnings of stance markers. Hyland (2005) states that “Metadiscourse in the argument articulated herein is predicated on a conception of communication as social interaction, and in academic contexts, it elucidates how writers embed themselves within their speech to convey their comprehension of the subject matter and their audience.” As part of a thorough investigation, we undertook an analysis of a diverse range of stance markers instantiating across the two corpora.

Next, customized Python scripts were developed to automatically scan the essays for pre-identified stance markers based on an established stance marker (e.g., Aull and Lancaster, 2014). We directed our focus toward three specific subcategories of metadiscourse which are observed to be reflective of the development of writers (Jiang and Hyland, 2018). These subcategories tend to decline or rise gradually as the writers evolve, progressing across the stages of first-year undergraduate writing and upper-intermediate proficient writing to

TABLE 1 Summary of the corpus size.

Type	Upper-intermediate	Lower-proficiency (novice)	Native
Number of texts	63	100	60
Average words per text	210.11	227.12	241.98
Tokens	13,237	22,712	14,519
Types	1,599	2097	1,485

emerging as published academic writers (Du et al., 2022; Afzaal et al., 2021). These categories pertain to hedges and boosters which help to convey the scope or the likelihood of a specific expression. In addition, the study took into account the use of code glosses and adversative/contrast connectives by the student writers.

Following the methodology adopted by Aull and Lancaster (2014), the present study devised the corpus query language (CQL) in order to extract selected stance markers. Next, a sophisticated CQL search in Sketch Engine was deployed manually to extract patterns. Subsequently, the CSV files containing stance markers from three corpora which had been generated by Sketch Engine were populated in MS Excel for statistical aggregation as well as granular analysis. We also used manual validation of 10% of the extracted instances to ensure annotation accuracy, achieving an inter-rater reliability score. Lastly, using Python 3.10, we performed statistical testing and visualization on the data.

In the statistical procedure of comparison, the present analysis employed a well-adjusted methodology for the examination of the nuanced subtype-level variations while maintaining statistical rigor. As the “Booster” contains a large set of lexicons, we split them into three chunks “Booster_1,” “Booster_2” and “Booster most” for the refined comparison in later stages. Subsequently, we implemented a weighted aggregation procedure for all the subtypes to address the low-frequency phenomenon, which could possibly lead to unreliable estimate due to data sparsity and insufficient sample sizes, thereby compromising the statistical validity of significance test (Baayen et al., 2008).

In doing so, we combined all the subtype counts proportionately taking into the account of corpus-specific denominators (corpus-size) through normalized rate calculation. It contributes to keeping Poisson-distribution variance structure in the case of frequency comparison.

Additionally, we employed the Fisher’s exact test due to its robustness in small expected counts (71%) and zero-inflated distributions (17%) along with Holm-Bonferroni method controlling the FER (Family-wise Error Rates) at $\alpha = 0.05$. In terms of effect size, we report the Odd Ratios (OR) supplemented with 95% CIs from Fishers’ Test.

Results and discussion

One of the aims of the present study was to compare how lower-proficiency (novice) and upper-intermediate students utilized stance markers while producing argumentative essays. In this context, we focused on examining the use of hedging and boosting. These devices have been shown to play a pivotal role in demonstrating writers’ commitment to their assertion.

Multiple studies (Aull and Lancaster, 2014; Pique-Angordans et al., 2002) have shown that hedging is characteristically realized through the deployment of evidential verbs connotative of appearance (e.g., it seems, appears that), mental process verbs (e.g., the research suggests, indicates), modal verbs indicating probability (e.g., may, might, could) and approximative adverbs (e.g., generally, likely, possibly). Researchers have also found writers to achieve hedging through the use of downgraders and minimizers (for example, somewhat, almost, nearly) (Biber et al., 1999, p. 23).

As Table 2 shows, normalized frequencies indicate differences in the use of hedges between the three groups of undergraduates at 95% confidence intervals. Mostly, lower-proficiency (novice) writers used hedges more similarly to native speakers than the more upper-intermediate Saudi writers. This was clearly exhibited in the production of approximative hedges [4.09 for lower-proficiency (novice) writers and native speakers], self-mention hedges [6.17 for lower-proficiency (novice) writers and 6.18 for native speakers] and evidential hedges [0.84 for lower-proficiency (novice) writers and 0.85 for native speakers]. The upper-intermediate Saudi writers produced different frequencies, namely, 2.38 for approximative hedges, 4.38 for self-mention hedges and 0.15 for evidential hedges. As for modal hedges, the lower-proficiency (novice) writers (a frequency of 18.81) exhibited a similar frequency to the upper-intermediate writers (a frequency of 20.08). This came as a little different from the native speakers’ use of modal hedges, which stood at a frequency of 14.13.

The results of the Fisher’s exact test along with OddsRatio is demonstrated in Appendix 1, from which we can identify significant difference between upper-intermediate and native writing ($p\text{-adj} = 0.016$, OR = 0.73), native and lower-proficiency (novice) writing ($p\text{-adj} = 0.018$, OR = 1.31) in terms of boosters (list2). Such

TABLE 2 Stance markers used in upper-intermediate and lower-proficiency (novice) argumentative essays.

Types		Upper-intermediate		Lower-proficiency (novice)		Native AmE	
		M	SD	M	SD	M	SD
Hedges	Approximate hedges	0.44	0.76	0.48	0.86	0.93	0.92
	Self-mention hedges	0.92	1.13	0.67	0.93	1.33	1.02
	Evidential verb hedges	0.03	0.18	0.05	0.22	0.18	0.47
	Modal hedges	4.05	2.24	4.08	2.79	3.03	1.93
Boosters		3.85	2.59	4.38	2.83		
Code glosses	Elucidation	0.06	0.25	0.03	0.17	0.03	0.18
	Exemplification	0.69	0.82	0.61	0.90	0.42	0.62
	Emphasis	0.07	0.27	0.08	0.27	0.15	0.36
	Counter-expectancy	0.00	0.00	0.03	0.17	0.00	0.00
Contrastive connectors		1.12	1.05	0.59	0.91	1.63	1.02

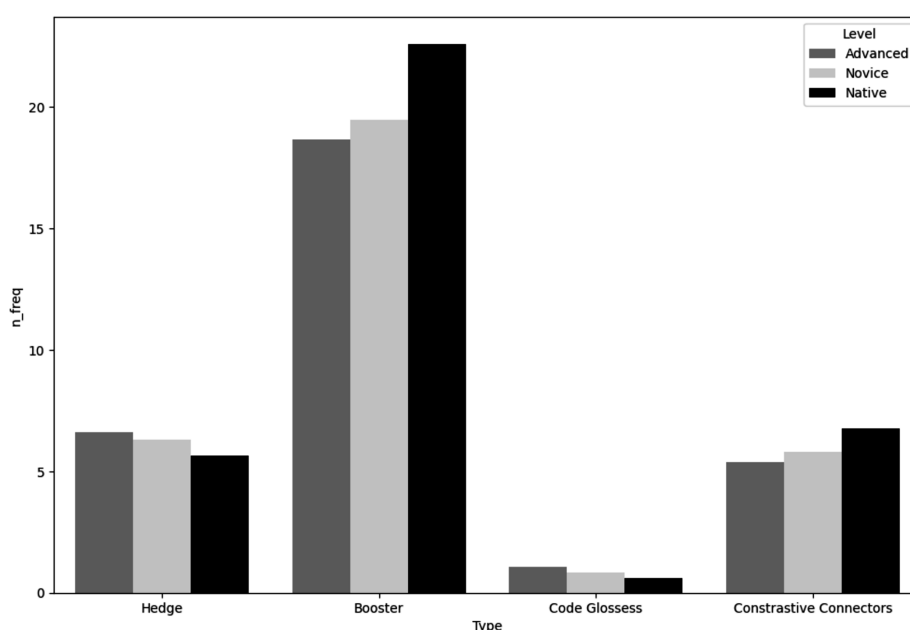


FIGURE 1
The normalized frequencies of stance markers.

difference is also found in the use of modal hedges between upper-intermediate and native writing ($p\text{-adj} = 0.007$, $OR = 1.44$), native and lower-proficiency (novice) writing ($p\text{-adj} = 0.031$, $OR = 0.75$).

Figure 1 shows answer of RQ1 in stating that in comparison with upper-intermediate level writers, the lower-proficiency (novice) Saudi EFL writers deploy considerably more boosters and contrastive connectors in their essays, reflecting a slight upward trend in the use of these devices. Additionally, we found that the native writers made greater use of boosters and contrastive connectors whereas Saudi EFL upper-intermediate writers were more inclined toward deploying hedges and code glosses. On the other hand, the lower-proficiency (novice) writers' use of stance markers occupied a midpoint on the continuum of use evidenced by the native writers and upper-intermediate writers.

Categories of each stance marker

In view of the variation in the size of the native corpus, we standardized the frequencies of stance markers deployed in the corpus to a common basis (specifically per 1,000 words). The results address research questions 2 and 3, as presented in Table 2, which shows the normalized frequencies of stance markers used in argumentative essays written by native speakers, upper-intermediate learners, and lower-proficiency (novice) writers. Notably, the deployment of metadiscourse categories in lower-proficiency (novice) and upper-intermediate argumentative texts indicated a somewhat comparable distribution as shown in Figure 2.

Figure 3 shows frequencies of stance markers in lower-proficiency (novice) learners, upper-intermediate learners and native speakers. Under use of all stance markers. The results show lower-proficiency (novice) learners rely heavily on exemplification, e.g., for example but struggles with other markers such as counter-expectancy and

elucidation. However, upper-intermediate learners show higher frequencies than lower-proficiency (novice)s but still used less frequent markers than natives. It is noted that upper-intermediate learners may overuse subtype or counter-expectancy markers (Table 3).

Adjusting commitment: hedges and boosters

Figure 4 shows the overall distribution of stance markers across proficiency levels. In terms of boosters lower-proficiency (novice) possibly overuse boosters for emphasis due to limited lexical variety. However, upper-intermediate and native learners suggested nuanced use only where contextually appropriate. Comprising a gamut of linguistic markers (as shown in Figures 3, 4) for regulating epistemic commitment to claims and for "expanding discursive space," the devices of hedging and boosting enable writers to express greater commitment to their assertions (Aull and Lancaster, 2014). Overall, the results indicate that lower-proficiency (novice) writers tend to overuse stance markers—particularly boosters and hedges—while upper-intermediate learners demonstrate usage patterns that more closely approximate native speaker frequencies. The frequency of hedge usage among lower-proficiency (novice) writers is 150, compared to 173 among upper-intermediate learners (as shown in Tables 4, 5). Examples of commonly used hedges include can, could, and may. These differences reveal important functional distinctions in how stance is expressed. Drawing on Hyland's (2005) findings, it can be observed that upper-intermediate learners tend to use hedges more strategically to mitigate claims and align with disciplinary conventions. In contrast, lower-proficiency (novice) writers frequently overuse boosters such as

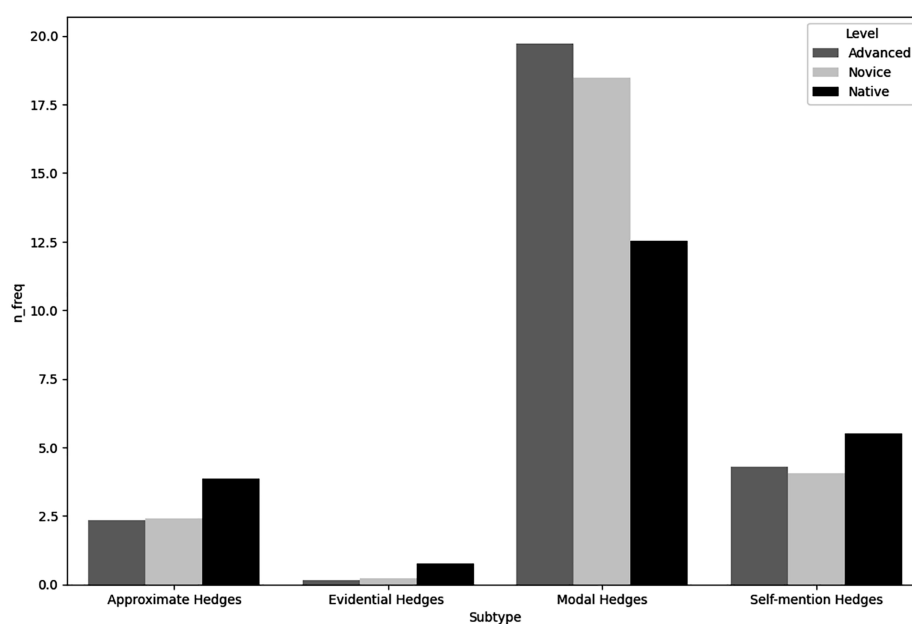


FIGURE 2
Stance markers used in upper-intermediate and lower-proficiency (novice) writers.

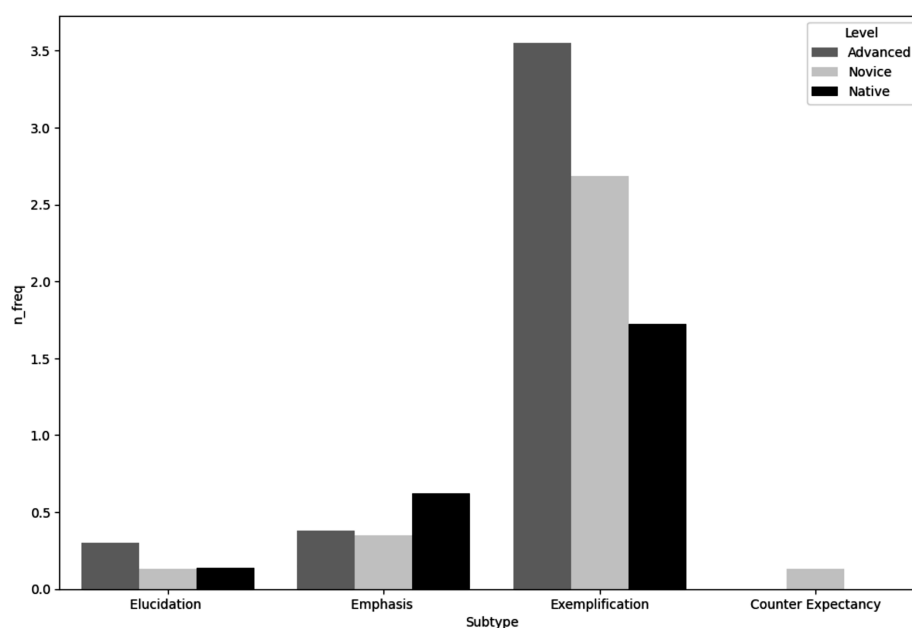


FIGURE 3
Sub type of codes.

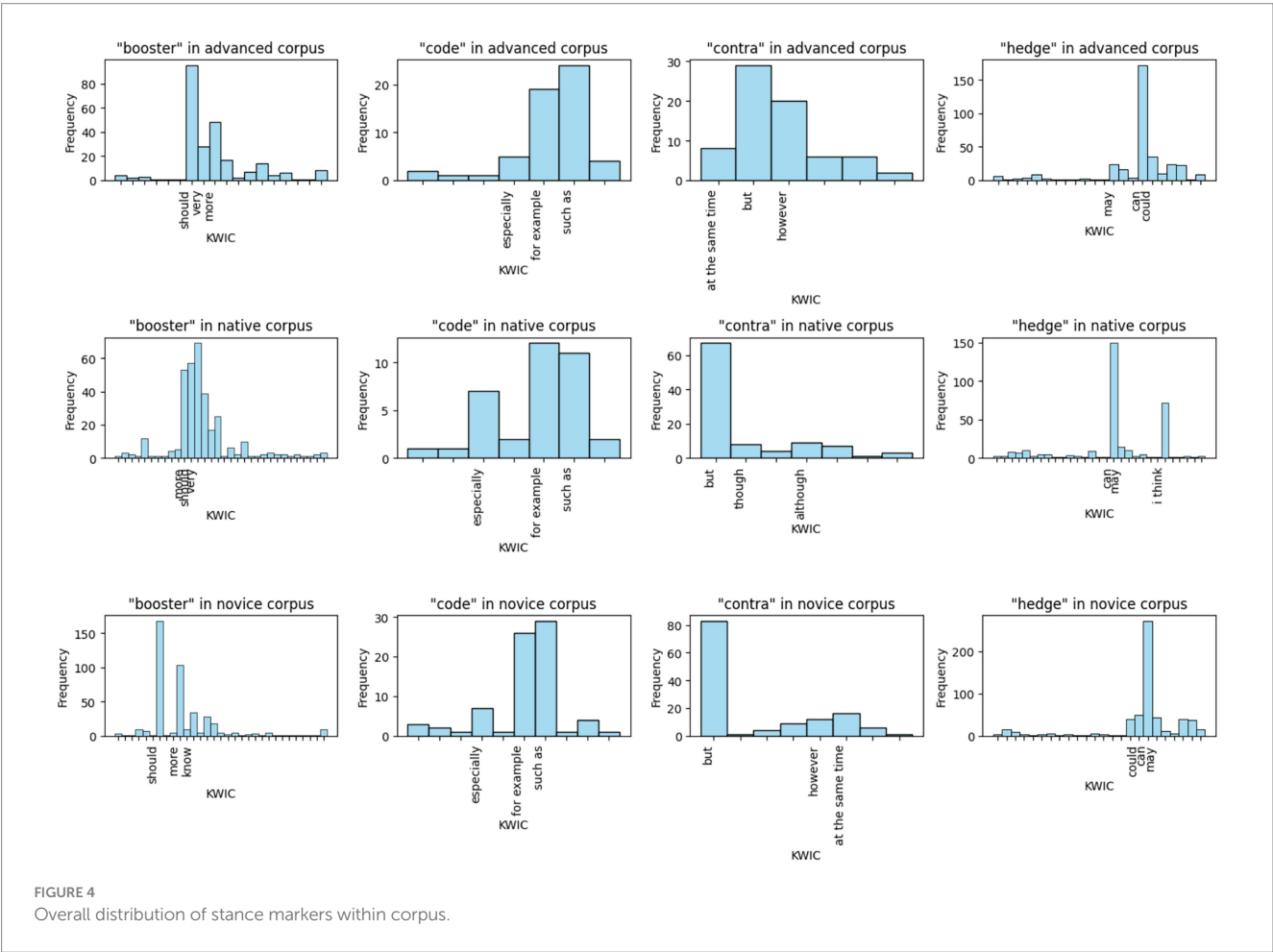
should (168 occurrences) and more (105 occurrences), which is notably higher than the frequencies among upper-intermediate learners (should = 95; more = 45).

Native writers, however, appear to optimize their use of stance markers for rhetorical effect. These findings suggest that instructors should teach lexical strategies that help lower-proficiency (novice) writers avoid over-reliance on boosters and develop more nuanced, audience-aware academic writing.

Table 4 displays the stance markers which are found to appear most frequently in the texts produced by upper-intermediate learners. The analysis of the corpus shows that while boosters like “should” and “more” both occur 95 times, boosters like “absolutely” (as shown in Figure 3), “clearly” and “actually” appear far less frequently when compared with the results reported by Aull (2015) and Hyland (2005). Hedges and boosters which enable authors to convey the extent of the veracity of a proposition (e.g.,

TABLE 3 Stance makers used in advanced and novice writers.

Type		Normalized frequencies				p-value
		Advanced	Novice	Native	F	
Hedges	Approximate Hedges	2.34	2.42	3.86	4.92	0.032
	Evidential Hedges	0.15	0.22	0.76	3.15	0.089
	Modal Hedges	19.72	18.49	12.53	8.74	0.008
	Self-mention Hedges	4.31	4.05	5.51	2.67	0.112
	Boosters	18.66	19.46	22.59	12.35	0.001
Code glosses	Elucidation	0.3	0.13	0.14	1.28	0.312
	Emphasis	0.38	0.35	0.62	5.41	0.027
	Exemplification	3.55	2.69	1.72	6.83	0.014
	Counter-Expectancy	0.00	0.13	0.00	1.00	0.420
	Contrastive	5.36	5.81	6.75	9.56	0.004



generally, truly, and certainly, are negligible in the upper-intermediate corpus). However, these same hedges and boosters occur far more frequently in the native corpus (Table 4).

Table 5 presents the normalized frequencies of sub-corpora which relate to the stance markers such as hedges, boosters, code glosses, and contrastive connectors. Unexpectedly, the normalized frequencies of hedges used by lower-proficiency (novice) writers is closer to that of the native English writers (4.09). While the frequency of certain stance markers used by upper-level writers appear closer to that of native-speaker writers in specific categories

TABLE 4 Top 20 stance markers in upper-intermediate learners corpus.

Sr.	Booster	Frequency	Code glosses	Frequency	Contrastive markers	Frequency	Hedge	
1	Should	95	Such as	24	but	29	Can	173
2	More	48	For example	19	However	20	Could	35
3	Very	17	Especially	5	At the same time	8	May	24
4	Find	14	For instance	4	On the other hand	6	I think	24
5	Know	8	Which means	2	although	6	In my opinion	23
6	Most	7	I mean	1	though	2	Might	16
7	Must	6	In other words	1			Maybe	10
8	Really	4					I believe	9
9	Sure	4					Usually	9
10	Always	3					Likely	6
11	Certain	2					Sometimes	4
12	Actually	2					Often	4
13	of course	1					Mostly	3
14	Can only	1					Possible	3
15	Can significantly	1					Tend	2
a16	Clearly	1					almost	1
17	Never	1					Somewhat	1
18	Extremely	1					Essentially	1
19	–	–					Certain amount	1
20	–	–					In my view	1

TABLE 5 Top 20 stance markers of native corpus.

Sr.	Booster	Frequency	Code glosses	Frequency	Contrastive markers	Frequency	Hedge	
1	Should	168	Such as	29	But	83	Can	150
2	More	103	For example	26	At the same time	16	I think	72
3	Know	34	Especially	7	However	12	May	15
4	Very	28	For instance	4	Although	9	Quite	10
5	Find	18	Which means	3	On the other hand	6	Might	10
6	Most	9	That is to say	2	Though	4	Seem	9
7	Actually	9	specifically	1	Whereas	1	Sometimes	8
8	Really	9			Nevertheless	1	Probably	7
9	Always	7					often	5
10	Never	5					Somewhat	5
11	Extremely	5					Could	5
12	Sure	5					Usually	4
13	Must	5					Almost	3
14	Definitely	4					Possible	3
15	Show	3					Possibly	3
a16	Certain	3					I believe	3
17	Demonstrate	2					I thought	2
18	Truly	2					Fairly	2
19	Clearly	1					Tend	1
20	demonstrates	1					approximately	1

TABLE 6 Top 20 stance markers in lower-proficiency (novice) corpus.

Sr.	Booster	Frequency	Code glosses	Frequency	Contrastive markers	Frequency	Hedge	
1	Very	69	Such as	12	But	67	Can	272
2	Should	48	For example	11	Although	9	Could	50
3	More	17	Especially	7	Though	8	May	43
4	Find	14	For instance	2	However	7	Might	39
5	Really	8	Which means	2	At the same time	4	In my opinion	39
6	Know	7	I mean	1	On the other hand	3	I think	37
7	Always	6	This means	1	Whereas	1	I believe	16
8	Never	4					Sometimes	15
9	Found	4					Maybe	11
10	Extremely	3					Often	9
11	Can only	2					Usually	6
12	A	2					Quite	6
13	of course	1					Possible	4
14	Can only	1					Probably	3
15	Can significantly	1					Likely	3
16	Clearly	1					Tend	3
17	Never	1					Almost	2
18	Extremely	1					Suggests	1
19	–	–					Seem	1
20	–	–					–	–

(e.g., boosters or hedges), this should not be interpreted as full rhetorical equivalence. These results diverge from [Aull and Lancaster \(2014\)](#) findings wherein boosters and approximants were found to occur more frequently in first year corpus than in the upper-level learners’ corpus. However, the frequency of the booster use in the writing of the upper-intermediate learners is lower (2.38). Based on our analysis, we found a greater incidence of modal hedges in the texts produced by the upper-intermediate writers which contribute to an overall predominant use of hedging devices by the latter. However, our results show that native writers make greater use of approximate, evidential and self-mention hedges when compared with upper-intermediate and lower-proficiency (novice) writers. These results show that educational practices use personal expression and subjected opinions in writing, particularly in secondary and preparatory education. The studies of [Barbara et al. \(2024\)](#) and [Elyas and Picard \(2010\)](#) argue that Saudi learners are reinforced by broader cultural values, where personal credibility and individual honor are reflected in their lives.

In the context of code glosses, our results reveal discernible variation in the deployment of emphasis and exemplification across the lower-proficiency (novice), upper-intermediate and native writers’ texts. The data shows that native writers tend to use emphasis markers the most, followed by upper-intermediate and lower-proficiency (novice) student writers. The texts by upper-intermediate writers also feature greater use of exemplification markers than the texts by lower-proficiency (novice) and native writers. Interestingly, lower-proficiency (novice) writers make more use of counter-expectancy markers in comparison with

upper-intermediate and native writers who tend to utilize them to a minimal extent answers research question 4 as show in [Table 6](#).

Reformulating and exemplifying: use of code glosses

[Kopple \(1985, p. 84\)](#) defines code glosses as linguistic devices that “help readers grasp the appropriate meanings of elements in texts.” Similar to approximative hedges, many types of code glosses are deployed to convey meanings more precisely. By elaborating or clarifying a proposition, code glosses act to direct the focus of the readers to the material, signaling its inherent importance and complexity. Reformulation and exemplification are distinguishable code glossing strategies ([Hyland, 2007](#)). As indicated in Examples 1 and 2, while reformulation entails explaining, paraphrasing, or specifying a point made by the writer or someone else in the text, exemplification entails seeking to illustrate a point with examples.

Example 1: Exemplifications.

Analysis of data showed that upper-intermediate and lower-proficiency (novice) learners alike used exemplifications in their writings (e.g., for instance, such as, for example, for instance) and other wordings as shown in example 1. Moreover, the example demonstrates that upper-intermediate learners provide concrete, specific examples relevant to their arguments, such as citing multiple situations (e.g., caregiving responsibilities). Their rhetorical awareness is evident in their deliberate use of exemplification markers (e.g., for example, for instance). In contrast, lower-proficiency (novice) learners attempt to

employ exemplification markers but often provide isolated or underdeveloped examples (e.g., “bank job for business”). Examining the texts produced by upper-intermediate writers, we found that their use of frequent exemplification aided their trajectory of development as writers. These results suggest that upper-intermediate learners not only use exemplification more significantly, but also with greater rhetorical function. The following example compares the use of exemplifications by upper-intermediate and lower-proficiency (novice) learners.

Upper-intermediate Learners	Part time jobs require so much efforts and energy for example working as waiter, convenient store and baby sitter which takes also so much time for a small amount of money. And then when we talk about college students, we are talking about grown adults who have other things to focus one, for instance a college student might have a family member who needs to be taken care of, or a younger sibling who needs someone to look over them Moreover, part-time employment allows students to develop important transferrable skills such as time management, teamwork and communication, which are highly valued by future employers.
Lower-proficiency (novice)	One advantage would be that students would be exposed to real life experiences working in a specific job, relating to their major or not. For example, business students may have a part time job working in an office at a bank. Moreover, university students should not have a part-time job because it effects badly on the student's health. For instance, many students consume energy at studying and working when they have a part time job which lead them to get tired after. For me the most important reason is they will see the real world, student will experience challenges, difficulties and situations such as solving problems, rude people and team work.

Example 2: Code glasses: Contrastive markers.

Based on analysis of data, we found that Saudi EFL writers tended to employ adversative/contrast connectors (e.g., however, but), while differentiating between two fairly similar functional categories (concessive and counter connections), such as “on the one hand.” These findings are in alignment with the results of the study by Aull (2019).

In example 2, we see the use of such contrastive markers (bolded) such as “however,” which are reported in several sources

(Halliday and Hasan, 2014). In addition, example 2 show more complex concessive structures such as “although some argue,” “however, suggesting increased awareness of academic argument structure.” On the other hand, lower-proficiency (novice) learners use shorter and simpler constructions often to mark contrast without elaborating complex opposing views. These results aligns with the idea of Ädel (2006) and Hyland (2005) that increased frequency of stance markers does not guarantee functional equivalence with native academic writing.

Upper-intermediate Learners	Although some argue that the time and energy spent on part-time jobs may distract students’ opportunities for having activities, internships, getting good grades, and will have lack of time management they will not be able to manage to study or to work, however the benefits of working part-time job are enormous when it comes to real-world experience. Most people prone to agree with University students should have the right to choose wither they would like a part time job, however there will be hardships along the way
Lower-proficiency (novice)	University can be a lot of hard work. However, most students have a different problem to deal with money. Many people believe that students having a part time job is not convenient for their time and schedule and that it is tiring and a waist of their time. However, I believe that students should have a part time job, because it helps them have control and have better time management skills.

The results of the study further highlighted that lower-proficiency (novice) EFL writers employed contrastive markers as mentioned in example 2 such as “however” at rates similar to those of upper intermediate learners. This contests the presumption that contrastive skill is directly related to writing proficiency. Moreover, lower-proficiency (novice) writers may excessively employ rudimentary hedge phrases such as “I think, ‘maybe,’ or ‘it seems,”” motivated by uncertainty or a deficiency in confidence. This excessive use may increase hedge frequency without demonstrating subtle rhetorical control. Secondly, upper-intermediate learners may have been prompted to formulate more assertive assertions through instruction, resulting in a decrease in hedging.

Conclusion

Stance markers are key to establishing authorial presence within academic texts and demonstrating the writers’ epistemic

commitment to their propositions, claims and assertions. In the present study, comparing the use of stance markers by Saudi EFL upper-intermediate and lower-proficiency (novice) level writers and native writers, we found that the use of metadiscoursal categories such as hedges/boosters, code glosses, and adversative/contrastive connectors were reflective of the writers’ developmental trajectory. Specifically, the patterns of use evidenced by lower-proficiency (novice) writers differed from those evidenced by the upper-intermediate writers in three particular categories, namely approximants, self-mention and boosters. On the other hand, lower-proficiency (novice) writers tended to use evidential verbs in almost the same ways as the native writers. While lower-proficiency (novice) writers overused self-mention as compared to the upper-intermediate and native writers, the upper-intermediate writers overused modal hedges in comparison with the native and lower-proficiency (novice) writers. We found that the use of stance markers varied considerably in the lower-proficiency (novice) and upper-intermediate writers’ texts. Notably, while the native writers

made more frequent use of the contrastive markers, the lower-proficiency (novice) and upper-intermediate learners were inclined to use contrastive markers to a similar extent. Lower-proficiency (novice) writers also made more frequent use of approximant hedges (possibly, generally), contrastive markers (in contrast, alternatively), and self-mention as compared to upper-intermediate writers.

Limitations

This study fills an important gap in literature on stance-taking by lower-proficiency (novice) Arab EFL university writers. However, due to the constraints of scope, the study has certain inherent limitations. While the study bases its findings on the analysis of academic writing corpora produced by lower-proficiency (novice) and upper-intermediate Saudi EFL writers as well as English as L1 native writers, the selection of larger corpora would have yielded richer insights and more generalizable findings. Beyond the limitations of corpus size, the findings would have been more nuanced if the analysis had drawn upon other data to take into account other factors of influence (e.g., gender, university profile, type of instruction imparted to the writers) on the writers of the texts under study. The study was also limited because it looked at the patterns or frequency of stance-taking device utilization but did not explore why writer's representative of the selected corpora made such choices. In addition, a key limitation is the use of the ICNALE corpus, which may affect the accuracy of cross-genre comparisons due to mismatches in genre alignment and participant profiles. Last but not least, for a truly comparative study, the study could have selected a native writer corpus from different academic levels. In the current study, while lower-proficiency (novice) and upper-intermediate EFL corpora were considered, such variations were not considered when selecting the native writer corpora.

Future study

If comprehensive insights are to be generated in relation to how Arab EFL university writers express stance in their academic writing, it is important for future researchers to also investigate why the writers make the choices that they do in stance-taking. Future studies can inquire into the influence of pedagogy on the writers' use of stance-taking devices as they progress through academic levels. Questionnaire and interview data gleaned from students and teachers, observation of lectures and examination of the curriculum would bring about a deeper understanding of how linguistic choices are made by EFL writers. Future research could also expand the scope of this study by undertaking large-scale comparative analyses of L2 and L1 academic writing across diverse universities and national contexts, incorporating cultural variables as a critical dimension of analysis. These insights would be vital to creating a tailored pedagogy of writing which can enable students to deploy meta discourse strategies in their writing strategically.

Data availability statement

The raw data supporting the conclusions of this article will be made available by the authors, without undue reservation.

Author contributions

MA: Conceptualization, Methodology, Writing – original draft, Writing – review & editing. DE-D: Investigation, Project administration, Supervision, Writing – review & editing. NM: Formal analysis, Investigation, Resources, Writing – review & editing. FA: Data curation, Software, Writing – original draft. HI: Formal analysis, Validation, Visualization, Writing – review & editing.

Funding

The author(s) declare that financial support was received for the research and/or publication of this article. The researchers thank Prince Sultan University for funding this research project through the grant (Language and Communication Research Lab. RL-CHS-2019/9/1).

Conflict of interest

The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

Generative AI statement

The authors declare that Gen AI was used in the creation of this manuscript. The author acknowledges the use of Generative AI to assist in improving the typesetting and proofreading of this paper.

Publisher's note

All claims expressed in this article are solely those of the authors and do not necessarily represent those of their affiliated organizations, or those of the publisher, the editors and the reviewers. Any product that may be evaluated in this article, or claim that may be made by its manufacturer, is not guaranteed or endorsed by the publisher.

Supplementary material

The Supplementary material for this article can be found online at: <https://www.frontiersin.org/articles/10.3389/feduc.2025.1589004/full#supplementary-material>

References

- Ädel, A. (2006). *Metadiscourse in L1 and L2 English*.
- Afzaal, M., Ilyas Chishty, M., Liu, C., and Zhang, C. (2021). Metadiscourse in Chinese and American graduate dissertation introductions. *Cogent Arts Hum.* 8:1970879. doi: 10.1080/23311983.2021.1970879
- Afzaal, M., and Xiangyi, J. (2020). Book review: Ken Hyland and Feng (Kevin) Jiang, academic discourse and global publishing: Disciplinary persuasion in changing times. London: Sage.
- Alghazo, S., Al Salem, M. N., and Alrashdan, I. (2021). Stance and engagement in English and Arabic research article abstracts. *System* 103:102681. doi: 10.1016/j.system.2021.102681
- Al-otaibi, G. M., and Hussain, A. A. (2024). The use of interactional metadiscourse markers by Saudi EFL male and female college students: the case of a gender-sensitive topic. *Humanit. Soc. Sci. Commun.* 11:988. doi: 10.1057/s41599-024-03506-3
- Aull, L. (2015). "Corpus linguistic analysis of scope and certainty in FY and expert writing" in First-year university writing: A Corpus-based study with implications for pedagogy. ed. L. Aull (London: Palgrave Macmillan UK), 84–112.
- Aull, L. (2019). Linguistic markers of stance and genre in upper-level student writing. *Writ. Commun.* 36, 267–295. doi: 10.1177/0741088318819472
- Aull, L. L., and Lancaster, Z. (2014). Linguistic markers of stance in early and upper-intermediate academic writing: a corpus-based comparison. *Written Commun.* 31, 151–183. doi: 10.1177/0741088314527055
- Baayen, R. H., Davidson, D. J., and Bates, D. M. (2008). Mixed-effects modeling with crossed random effects for subjects and items. *Journal of memory and language*, 59, 390–412.
- Barbara, S. W. Y., Afzaal, M., and Aldayel, H. S. (2024). A corpus-based comparison of linguistic markers of stance and genre in the academic writing of novice and advanced engineering learners. *Humanities and Social Sciences Communications*, 11, 1–10.
- Bailey, D. R., and Almusharraf, N. (2022). A structural equation model of second language writing strategies and their influence on anxiety, proficiency, and perceived benefits with online writing. *Educ. Inf. Technol.* 27, 10497–10516. doi: 10.1007/s10639-022-11045-0
- Biber, D., Johansson, S., Leech, G., et al. (1999). Longman grammar of spoken and written English. London: Longman.
- Chafe, W. (1986). "Evidentiality in English conversation and academic writing" in Evidentiality: The linguistic coding of epistemology. eds. W. L. Chafe and J. Nichols (Norwood, NJ: Ablex Publishing Corporation), 261–272.
- Chintalapalli, V., and Bahl, N. (2025). "Linguistic markers of stance in essay writing: a corpus-based study of EFL student writing" in Language education in Saudi Arabia: Integrating technology in the classroom. eds. A. H. Al-Hoorie, C. Mitchell and T. Elyas (Cham: Springer), 35–52.
- Deng, L., and He, P. (2023). "We may conclude that:" a corpus-based study of stance-taking in conclusion sections of RAs across cultures and disciplines. *Front. Psychol.* 14:1175144. doi: 10.3389/fpsyg.2023.1175144
- Du, X., Afzaal, M., and Al Fadda, H. (2022). Collocation use in EFL learners' writing across multiple language proficiencies: a corpus-driven study. *Front. Psychol.* 13:752134. doi: 10.3389/fpsyg.2022.752134
- El-Dakhs, D. A. S. (2018a). Comparative genre analysis of research article abstracts in more and less prestigious journals: linguistics journals in focus. *Res. Lang.* 16, 47–63. doi: 10.2478/rela-2018-0002
- El-Dakhs, D. A. S. (2018b). Why are abstracts in PhD theses and research articles different? A genre-specific perspective. *J. Engl. Acad. Purp.* 36, 48–60. doi: 10.1016/j.jeap.2018.09.005
- El-Dakhs, D. A. S. (2020). Variation of metadiscourse in L2 writing: focus on language proficiency and learning context. *Ampersand* 7:100069. doi: 10.1016/j.amper.2020.100069
- Elyas, T., and Picard, M. (2010). Saudi Arabian educational history: Impacts on English language teaching. *Education, Business and Society: Contemporary Middle Eastern Issues*, 3, 136–145.
- Halliday, M. A. K., and Hasan, R. (2014). Cohesion in English. London: Routledge.
- Huh, M.-H., and Lee, I. H. (2016). On the use of metadiscourse in EFL undergraduate student writing. *English Teaching* 71, 99–120. doi: 10.15858/engtea.71.3.201609.99
- Hyland, K. (2005). Representing readers in writing: student and expert practices. *Linguist. Educ.* 16, 363–377. doi: 10.1016/j.linged.2006.05.002
- Hyland, K. (2007). Genre pedagogy: language, literacy and L2 writing instruction. *J. Second. Lang. Writ.* 16, 148–164. doi: 10.1016/j.jslw.2007.07.005
- Jalilifar, A., Hayati, S., and Don, A. (2018). Investigating metadiscourse markers in book reviews and blurbs: a study of interested and disinterested genres. *Studies Lang.* 1, 90–107. doi: 10.5755/j01.sal.0.33.19415
- Jiang, F. K., and Hyland, K. (2018). Nouns and academic interactions: a neglected feature of metadiscourse. *Appl. Linguist.* 39, 508–531. doi: 10.1093/applin/amw023
- Kopple, W. V. (1985). Some exploratory discourse on metadiscourse. *College Comp. Commun.* 36, 82–93. doi: 10.58680/cc198511781
- Lee, J. J., and Deakin, L. (2016). Interactions in L1 and L2 undergraduate student writing: interactional metadiscourse in successful and less-successful argumentative essays. *J. Second. Lang. Writ.* 33, 21–34. doi: 10.1016/j.jslw.2016.06.004
- Martin, J., and White, P. (2005). The language of evaluation. New York, NY: Palgrave Macmillan.
- Min, S., Paek, J. K., and Kang, Y. (2019). Exploring the use of hedges and stance devices in relation to Korean EFL learners' argumentative writing qualities. *English Teaching* 74, 3–23. doi: 10.15858/engtea.2019.03.74.1.3
- Ozfidan, B., and Mitchell, C. (2020). Detected difficulties in argumentative writing: the case of culturally and linguistically Saudi backgrounded students. *J. Ethn. Cult. Stud.* 7, 15–29. doi: 10.29333/ejecs/382
- Ozfidan, B., and Mitchell, C. (2022). Assessment of students' argumentative writing: a rubric development. *J. Ethnic Cult. Stu.* 9, 121–133. doi: 10.29333/ejecs/1064
- Papangkorn, P., and Phoocharoensil, S. (2021). A comparative study of stance and engagement used by English and Thai speakers in English argumentative essays. *Int. J. Instr.* 14, 867–888. doi: 10.29333/iji.2021.14152a
- Pique-Angordans, J., Posteguillo, S., and Andreu-Besó, J. V. (2002). Epistemic and deontic modality: a linguistic indicator of disciplinary variation in academic English. *LSP Prof. Commun.* 2:141219. doi: 10.24425/linsi.2022.141219
- Rezaei, S., Kuhl, D., and Saeidi, M. (2021). Diachronic corpus analysis of stance markers in research articles: the field of applied linguistics. *Cogent Arts Hum.* 8:1872165. doi: 10.1080/23311983.2021.1872165
- Shen, Q., and Tao, Y. (2021). Stance markers in English medical research articles and newspaper opinion columns: a comparative corpus-based study. *PLoS One* 16:e0247981. doi: 10.1371/journal.pone.0247981
- Strauss, S., and Feiz, P. (2013). Discourse analysis: Putting our worlds into words. London: Routledge.
- Swy, B., M. A., and Aldayel, H. S. (2024). A corpus-based comparison of linguistic markers of stance and genre in the academic writing of lower-proficiency (novice) and upper-intermediate engineering learners. *Humanit. Soc. Sci. Commun.* 11:284. doi: 10.1057/s41599-024-02757-4
- Wing, B. Y. S., Afzaal, M., Saleh Aldayel, H., and Curle, S. (2024). Unlocking the mysteries of academic writing: a Corpus-based analysis of lexical bundles in L2 English for engineering students. *SAGE Open* 14:21582440241299997. doi: 10.1177/21582440241299997
- Wu, B., and Paltridge, B. (2021). Stance expressions in academic writing: a corpus-based comparison of Chinese students' MA dissertations and PhD theses. *Lingua* 253:103071. doi: 10.1016/j.lingua.2021.103071
- Xie, J., Xie, J., and Bui, G. (2024). A diachronic study of authorial stance in the discussion of Chinese MA theses and published research articles. *J. Engl. Acad. Purp.* 67:101320. doi: 10.1016/j.jeap.2023.101320
- Yoon, H.-J. (2021). Interactions in EFL argumentative writing: effects of topic, L1 background, and L2 proficiency on interactional metadiscourse. *Read. Writ.* 34, 705–725. doi: 10.1007/s11145-020-10085-7
- Zhang, L., and Zhang, L. J. (2023). Improving EFL students' stance-taking in academic writing with SFL-based instruction: a qualitative inquiry. *Lang. Teach. Res.* 2:13621688231164758. doi: 10.1177/13621688231164758
- Zou, H., and Hyland, K. (2022). How the medium shapes the message: stance in two forms of book reviews. *J. Pragmat.* 193, 269–280. doi: 10.1016/j.pragma.2022.03.023