Authorial and Gender Identity in Published Research Articles and Students' Academic Writing in Applied Linguistics

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Abstract

This study explores how professional and student writers manifest their authorial identities and project their gender voices in their academic texts. To this end, 38 male-authored and 38 female-authored articles published in seven leading international journals were selected. Moreover, 38 articles written by male students and 38 articles authored by female students were collected from two universities in Iran. Taking an academic writing course, these students handed in their papers as term projects. These academic writings were analyzed based on Hyland's metadiscourse framework comprising two major resources: interactional and interactive metadiscourse resources. The findings indicated the male authors mainly attended to discourse organization using more interactive resources while the female authors mostly solicited solidarity by employing more interactional resources. The professional authors engaged in a more critical stance using self-mentions and attitude markers and the students focused on discourse organization. Attitude markers and self-mentions, as markers of stance-taking, were absent in the students' writing. The professional authors made use of their gender identity to promote their authorial identity instead of suppressing it. These results suggest that EAP programs should inform students how to employ both metadiscourse resources and their gender-based discourse choices to express their authorial identity more effectively.

Keywords: gender voice, authorial identity, interactive metadiscourse, interactional metadiscourse, stance-taking

1. Introduction

Academic Discourse Community (ADC) has recently gained importance in academic literacy (Flowerdew, 2000; Zhang et al., 2020). A majority of novice writers endeavor to be identified as part of the ADC by learning its norms. This journey usually starts with an examination of the discourse of research projects generated by established members (Flowerdew, 2000). Authors initially tend to follow the discourse pattern of scholars to be considered legitimate members of the community and improve their authorial identity (Hyland, 2015). After getting acquainted with the general discourse of ADC, they attempt to stand out in the community by manifesting their subjectivity and taking a stance. The term 'stance' refers to a writer's personal opinion or evaluation of the status of knowledge presented in a text (Hyland, 2012).

It is of crucial importance to direct student writers toward the right path of their professionalism. Exploring the discourse of research articles (RAs) published in leading journals provides valuable information on how scholars manage to legitimize themselves in the ADC and express their authorial identity and stance within this community. Such information would guide students through socialization with the ADC and stance-taking in it. Moreover, the analysis of students' academic writing discloses the general discrepancy between professional authors' and students' RAs. Using this information, English for Academic Purposes (EAP) programs can devise more effective plans to eliminate this gap and enhance students' awareness of authorial identity and its linguistic manifestation.

The formation of authorial identity is determined by various social, biographical, and academic factors since authors (un)intentionally project their personal experiences onto their writings (Jiang & Ma, 2018). One of these factors is gender, a less recognized sub-community whose discourse deserves to be explored in academic settings (Lillis et al., 2018; Salimi et al., 2022; Tse & Hyland, 2008; Wang & Hu, 2023). Tse and Hyland (2008) claim that, since gender plays a fundamental role in everyone's lived experience, it is expected that it would impact the identities we assume in the context of professional writing.

In sociolinguistics, plenty of research has been conducted on the difference between the way each gender manipulates linguistic means in ordinary contexts (Gee, 2015); however, no definitive conclusion has been drawn (Hamdan, 2011). Perhaps, research on the discourse of specific communities, such as ADC, yields more conclusive patterns (Newman et al., 2008). The female discourse in ordinary contexts is claimed to be powerless (Deitrick et al., 2012). But, does it hold true when it comes to the ADC? How do professional female authors endeavor to outstand in this community? Do they try to make use of the specific features of their language or avoid projecting their gender identity? How do professional male authors manage their positioning and stance in the ADC? Finding answers to these questions provides great insights into how socialization in the academic community is mediated by gender. Such analysis would inform students of different genders about the way they can utilize metadiscourse resources at their disposal to socialize and

take a stance in the ADC. It can also encourage EAP teachers and programs to consider various linguistic and cultural backgrounds, like gender, in pedagogical practices for improving students' academic writing. Lillis et al. (2018) and Preece (2018) also lay emphasis on the significance of studying gender, as a possible influential factor, in academic contexts. To contribute to this line of inquiry, this study investigated the way student and professional authors manifest their authorial and gender identities in their RAs.

2. Literature Review

In the ADC, authors try to effectively establish their authorial identity and consolidate their position as legitimate members of this community via their discourse choice (Flowerdew & Wang, 2015; Hyland, 2012). The point is how authorial identity is realized in linguistic features and metadiscourse markers (MMs) (Hyland & Jiang, 2022). Drawn upon the interpersonal metafunction of language (Halliday, 1994), Hyland and Tse (2004) introduce a metadiscourse model which clarifies the way authors express their authority and communicates with their readers through their discourse.

This model encompasses two types of metadiscourse resources, namely, interactive and international resources. Interactive resources allow the writer to manage the information flow to explicitly establish her preferred interpretation. They are concerned with ways of organizing discourse to anticipate readers' knowledge and so reflect the writer's assessment of the reader's processing abilities, background resources, and intertextual experiences in order to decide what needs to be made explicit to constrain and guide readers' interpretations (Tse & Hyland, 2008, pp. 1236-7).

Interactional resources are more interpersonally oriented. Through these resources, writers try to "control the level of personality in a text and establish a suitable relationship to his or her data, arguments and audience… [and highlight] the degree of intimacy, the expression of attitude, the communication of commitments, and the extent of reader involvement" (Tse & Hyland, 2008, p. 1237). Table 1 provides different MMs of these resources along with their function and linguistic realizations.

Table 1

Metadiscourse Model of Academic Writing (adopted from Hyland & Tse, 2004, p. 169)

Category	Function	Linguistic means	Examples
Interactive resources			
Transitions	Express semantic relationships between main clauses	Contrastive/additive/consequential conjunctions	In addition/but/thus/and/in comparison
Frame markers	Refer to discourse acts, sequences, or text stages	Items used for sequencing, labeling stages, announcing discourse goals, and indicating topic shifts.	Finally/ to conclude/my purpose here is to
Endophoric markers	Refer to information in other parts of the text to make additional material salient to readers		Noted above/see fig/in section 2
Evidentials	Refer to source of information from other texts		According to X/ (Y, 1990)/ Z states
Code glosses	Help readers grasp functions of ideational material		Namely/ e.g./such as/in other words
Interactional resources			
Hedges	Withhold writers' full commitment to proposition		Might/perhaps/possible/about
Boosters	Emphasize force or writers; certainty in proposition		In fact/ definitely/ it is clear that
Attitude markers	Express writer's attitude to proposition	Items conveying surprise, obligation, agreement, importance	Unfortunately/I agree/surprisingly
Engagement markers	Explicitly refer to or build relationship with reader	Second personal pronouns, questions, imperatives, or obligation modals, shared knowledge, personal asides	Consider/note that/ you can see that
Self-mentions	Explicit reference to author(s)	First person pronoun and possessives	I/we/my/our

Interactive resources revolve around forming a relationship between clauses via transitions, expressing sequences through frame markers, referring to other parts of the text via endophoric markers, restating ideational information through code glosses, and providing textual information from other sources through evidentials (Table 1). These resources largely reflect the general organization of ideational information and probably the objective side of this genre. Hence, to approach the ADC and socialize in this community (*proximity* to the ADC), it is essential to know these interactive markers and their functions.

As for interactional resources, authors use attitude markers to announce their perspective on certain propositions, boosters to underscore their certainty, hedges to avoid a thorough fulfillment of propositional information, and self-mentions to express their presence via first-person pronouns and possessives. Engagement markers are also used to bring readers into discourse and overtly initiate an active social engagement with them through reader mentions, personal aside, questions, and directives (Hyland & Jiang, 2022). As Jiang and Ma (2018) declare, these markers offer rhetorical choices to authors and help them vividly express their subjectivity, self-representation, and stance-taking with regard to other voices and cope with the dialogic nature of argumentation and persuasion in academic writing. Therefore, by using these markers, authors convey their authorial identity and voice and negotiate their positioning within this community (*positioning* in the community). Proximity can be defined as *assimilation* into DC since one modifies their writing based on the DC norms, and positioning as *accommodation* in DC as one attempts to

reshape the DC. Two important phases of academic acculturation and professionalism, proximity and positioning, deserve to be deeply examined (Flowerdew & Wang, 2015).

Despite the significance of these MMs in academic texts, not all students have access to or knowledge of them. In effect, literacy in this genre is very confusing for them (Feak & Swales, 2009), especially for foreign students, and they have difficulty legitimizing themselves in this discourse (Hyland, 2012; Hyland & Jiang, 2022). Hyland (2012) argues that most EAP courses focus on how ideational content can be organized rather than how students "adopt interactional and evaluative positions, …[predicts] readers' expectations and responses to craft a persona and participate in what amounts to a virtual dialogue with them" (p. 137). In other words, improving learners' voice and authorial identity within this discourse is what lacks in many academic programs. To enhance authorial presence in students' writing, the initial step is to identify how professional writers use interactive resources to organize their preferred interpretation and interactional resources to manifest their stance and engagement in RAs. Furthermore, exploring how the use of these resources is mediated by gender can shed more light on the way this moderating factor may affect participation in academia (Wang & Hu, 2023).

2.1. Studies On Authorial and Gender Identities

Numerous studies have been undertaken on how authors attempt to construct their authorial identity via MMs. Most of them have focused on either students' academic writing or published RAs. Hyland (2002) explored self-mentions in graduate students' writing and found that authorial references were very few. This indicates students' preference for objectifying their writing and the difficulty of using individualistic identity for them. Investigating hedges and boosters in the abstract of RAs, Hu, and Cao (2011) declared that the authors employed these markers to enhance their authorial certainty and confidence. Analyzing 20 RAs regarding the interactional MMs, Zarei and Saadabadi (2019) concluded that Iranian authors tended to use attitude markers and engagement as a means of manifesting their authorial identity. Bal-Gezegin and Bas (2020) explored interactional MMs in the conclusion section of RAs and book reviews and observed more hedges and attitude markers in RAs and book reviews, respectively.

Only a handful of studies centered on the comparison of students' and experts' academic writing. Comparing the introduction section of undergraduates' dissertations and published RAs (PRAs) in terms of attitude markers, Hood (2004) found that students took a descriptive, rather than critical, stance by avoiding the use of directives (such as *should, must*). Unlike Hood (2004), Schleppegrell (2004) detected more subjective pronouns and modal verbs in the students' texts and concluded that the students were more eager to include their subjective voice. In Hood's (2006) study, considering both the wider culture and immediate context of the ADC, professional writers employed more interpersonal resources than novice ones to keep the dynamics of their argument. In another study, Hood (2012) observed that the discourse of students' and expert authors' texts

differed in terms of attitude markers, engagement, hedges, and boosters, and claimed that using these interactional MMs for stance-taking depended on both academic norms and exigencies of the specific academic context.

Many of the above-mentioned studies have centered on interactional MMs, especially, hedges and attitude markers, at the expense of interactive MMs. To the best of the researchers' knowledge, Kawase (2015) is the only study in which both types of metadiscourse resources were examined. However, the focus of this study has been on one section, i.e., the introduction section, rather than on the entire academic writing. Moreover, he compared two different genres (Ph.D. dissertations and PRAs) with different moves and steps. To bridge the aforementioned gaps, the present study aimed to compare the whole RAs produced by professional and student authors with regard to both types of metadiscourse markers.

The concept of gender identity in academic texts has gained more attention over the past decades (Nasri et al., 2018; Preece, 2018; Tse & Hyland, 2008). It is widely believed that the academic community is primarily male-oriented with masculine epistemology as it is more argumentative in nature and involves assertions and competitive behavior (Hyland & Jiang, 2022; Tse & Hyland, 2008; Robson et al., 2002). Hence, males are quite familiar with this style of writing as they are more assertive (Anggraini et al., 2022). However, to seek solidarity and mutual understanding (Piersoul & Van de Velde, 2023; Schmauss & Kilian, 202; Tajeddin & Malmir, 2014), females have to initially learn the norms of this male-dominated academic culture. Here, the question is whether males and females ignore their gender identity or judiciously project it onto their texts for academic success.

Exploring the presence of gender identity in PRAs has been the objective of a few studies. Investigating the gender identity and voice of expert male and female book reviewers via the metadiscourse model, Tse and Hyland (2008) conclude that there is no direct association between gender and language, as gender and disciplinary identities intersect in meaningful ways in influencing how writers view themselves and their preferences professionally. Yeganeh and Ghoreyshi (2015) observed that Iranian male and female authors used more boosters and hedges, respectively, in their RAs. Similarly, Mirzapour and Mahand (2016) detected a greater number of hedges in female academic RAs.

A number of studies have been conducted on gender identity in students' academic writing. Shirzad et al. (2013) investigated male and female students' writing in terms of syntactic complexity, argumentation, and citations. They reported that female students' structures were more complex, used more paraphrased sentences rather than direct quotations, and organized their arguments better. Ishikawa (2015) studied vocabulary use in argumentative essays under controlled conditions and found that the female students had more tendency to utilize pronouns, intensifiers, and modifiers, and the nouns that were more associated with psychological cognitive processes in order to create a better relationship with readers. Nasri et al. (2018) analyzed 80 argumentative essays written by male and female students in terms of interactional MMs. They identified a similar pattern

of stance-staking for both genders in terms of attitude markers and self-mentions. However, hedges and boosters were more frequently used by female and male students, respectively.

To the best of the researchers' knowledge, no study has been undertaken on the comparison of the written texts of female and male students with those of male and female professional authors. Since academic writing is a central component of professional practice in academia, attempts to address the issue can be rewarding for the field of applied linguistics (AL); findings can be used to inform pedagogical interventions in higher education in order to help raise AL students' ability and confidence in professional academic writing. Further, in male-dominated academic circles as is the case in higher-education AL research in Iran and elsewhere (Lillis et al., 2018; Pennycook, 2022), investing the differences in which male and female scholars extend their research efforts, express their findings, and echo their voice might have significant repercussions. It would help address the barriers that hinder female scholars' progress in the field of AL with the outcome of declining gender inequality and nourishing the field for welcoming more female scholars to the circle.

To contribute to this line of inquiry, the present study aims to scrutinize metadiscourse resources in male and female students' RAs (SRAs) and male and female experts' PRAs to see how authors with different degrees of proficiency use metadiscourse resources to announce their authorial identity and whether authors with different genders systematically employ different patterns of metadiscourse resources in their academic practices. Such analysis would reveal what is actually taught to students and what is missing in EAP programs regarding interpersonal metadiscourse and authorial voice. Furthermore, the analysis of gender identity in students' and professional authors' academic writing would inform EAP programs whether they should treat students of different genders differently or not. Therefore, this study sought to find answers to the following research questions (RQ):

1. Do male and female writers of Applied Linguistics show significant differences in how they express their authorial identity in academic writings?

2. Do professional and student writers of Applied Linguistics show significant differences in how they express their authorial identity in academic writing?

3. When the role of gender is taken into account, do professional and student writers of Applied Linguistics show significant differences in how they express their authorial identity in academic writing?

4. Method

4.1. Corpus of the Study

To select AL journals, three AL experts, who were university professors conducting research in the area of AL for more than 10 years, were separately asked to introduce the leading international journals in AL through email. The lists of well-established English journals prepared by Weber and Campbell (2004) and Egbert (2007) were also consulted. Twelve journals were

selected. Five journals were omitted due to an impact factor of less than one, the unavailability of RAs, or an exclusive focus on one area of AL. Seven remaining journals with a wider scope were considered: *System*, *RELC*, *TESOL Quarterly*, *English Language Teaching*, *The Modern Language Journal*, *Applied Linguistics*, and *Language Learning*. The single-authored articles in these journals were sorted out from 2011 to 2020 (84 PRAs). The multiple-authored RAs were excluded as it was impossible to identify the authorial stance of each author.

The term papers of graduate students who attended academic writing courses at two universities (Zanjan University and Shiraz University) were also collected (80 SRAs). Their professors (n=4) asked them to hand in an academic article on a topic in AL as their term project. To have an equal number of male and female authors, eight RAs and four RAs written by female professionals and male students, respectively, were randomly excluded. In total, 152 RAs (38 RAs of male students, 38 RAs of female students, 38 RAs of male professional authors, and 38 RAs of female professional authors) were analyzed.

4.2. Data Analysis

To delve into how the professional and student authors expressed voice and identity in their RAs and how it differed across gender, Tse and Hyland's (2008) metadiscourse model (Table 1) was considered. At first, the potential linguistic realizations of each MM were collaboratively detected by two experienced researchers. This initial coding was carried out through negotiation to make the researchers develop a shared understanding of MMs and their linguistic realizations for the subsequent coding process. Then, following Cao and Hu (2014), UAM CorpusTool (version 3.3) was employed to search for these linguistic realizations in the selected data. In the end, these researchers meticulously investigated 5% of the sample (the extracted linguistic parts of 8 RAs and their co-texts) in a meeting to figure out their actual discourse roles in the texts and reach an agreement on some challenging and confounding issues. Then, they coded the remaining data separately. A satisfactory level of inter-coder agreement measured by Cohen's Kappa was achieved as a whole ($\varkappa$total=.74) (Cohen, 1988). The inter-coder agreement was also estimated for each MM, and the results indicated an accepted level of agreement between the researchers ($\varkappa_{transitions}$=.64, $\varkappa_{evidentials}$=.67, $\varkappa_{code.glosses}$=.70, $\varkappa_{frame.markers}$=.79, $\varkappa_{endophoric.markers}$=.65, $\varkappa_{engagement.markers}$=.83, $\varkappa_{hedges}$=.80, $\varkappa_{attitude.markers}$=.78, $\varkappa_{boosters}$=.69, $\varkappa_{self.mentions}$=.85). To eliminate the effect of text length, the frequency of each discourse marker per 1000 words was estimated.

5. Results

The results of the metadiscourse resources employed by the male and female authors (RQ1) are presented in Table 2. It is worth mentioning that professionalism was not a dividing factor when

analyzing the sample data for RQ1; accordingly, both student and professional authors are included in the gender categories depicted in Table 2.

Table 2

Metadiscourse Markers Used by Male and Female Authors (per 1000 words)

|	Category	Male authors		Female authors		Total		Chi-square
		F	%*	F	%	F(%)	%	
Interactive resources	Transitions	26	8.61	11	3.64	37	12.25	9.87**
	Evidentials	10	3.31	23	7.62	33	10.93	8.36**
	Code glosses	23	7.62	10	3.31	33	10.93	8.63**
	Frame markers	25	8.28	9	2.98	34	11.26	8.03**
	Endophoric markers	11	3.64	10	3.31	21	6.95	0.19
	Total	*95*	*31.46*	*63*	*20.86*	*158*	*52.32*	*15.91** *
Interactional resources	Engagement markers	6	1.99	23	7.62	29	9.60	9.91**
	Hedges	9	2.98	26	8.61	35	11.59	10.24**
	Attitude markers	7	2.32	21	6.95	28	9.27	10.07**
	Boosters	17	5.63	10	3.31	27	8.94	6.58**
	Self-mentions	16	5.30	9	2.98	25	8.28	6.78**
	Total	*55*	*18.21*	*89*	*29.47*	*144*	*47.68*	*17.87** *
Total		*150*	*49.67*	*152*	*50.33*	*302*	*100.00*	*0.05*

* %= Percentage of discourse markers out of the total number of discourse markers (n=302)   ** $p < .05$

As seen in Table 2, 302 metadiscourse markers (158 interactive markers and 144 interactional markers) were used per 1000 words. Almost the same number of discourse markers were identified in the females' (152, 50.33%) and males' (150, 49.67%) RAs ($p > .05$). The males used more interactive resources (95, 31.46%) while the females employed more interactional resources (89, 29.47%). Concerning interactive MMs, the difference in the number of endophoric markers used by the males (11, 3.64%) and females (10, 3.31%) was negligible. In the males' RAs, more transitions (26, 8.61%), code glosses (23, 7.62%), and frame markers (25, 8.28%) were detected. The females were more willing to use evidentials (23, 7.62%). Regarding the interactional MMs, boosters (17, 5.63%) and self-mentions (16, 5.30%) were more prevalent in the males' RAs while engagement markers (23, 7.62%), hedges (26, 8.61%), and attitude markers (21, 6.95%) were identified more in the females' RAs. Each MM was significantly associated with gender ($p<.05$), except for endophoric markers (Table 1). Figure 1 depicts these findings.

Figure 1

Metadiscourse Resources Used by Male and Female Authors
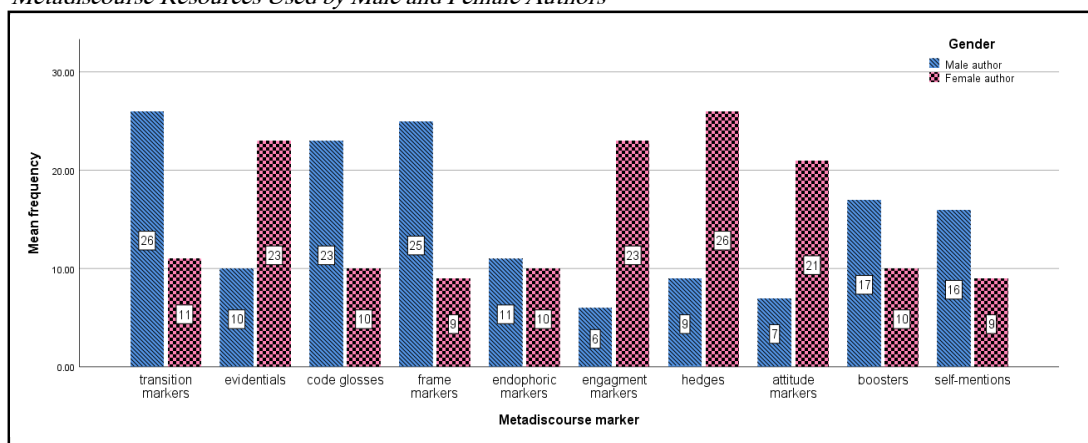
The results of the metadiscourse resources found in the RAs of the professional and student authors (RQ2) are provided in Table 3.

Table 3

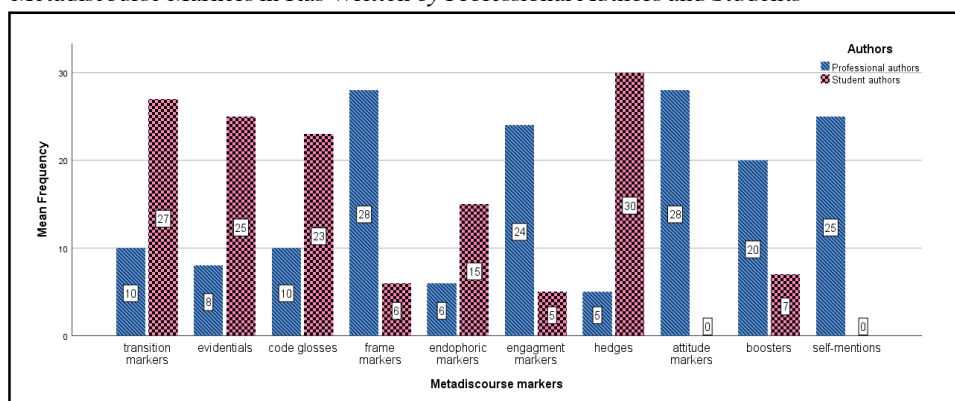*Metadiscourse Markers Used by Professional Authors and Students (per 1000 words)*

	Category	Professional authors		Student authors		Chi-square
		F	%	F	%	
Interactive resources	Transitions	10	3.31	27	8.94	8.57[*]
	Evidentials	8	2.65	25	8.28	10.11[*]
	Code glosses	10	3.31	23	7.62	8.36[*]
	Frame markers	28	9.27	6	1.99	11.11[*]
	Endophoric markers	6	1.99	15	4.97	8.32[*]
	Total	*62*	*20.53*	*96*	*31.80*	*15.98[*]*
Interactional resources	Engagement markers	24	7.95	5	1.66	10.10[*]
	Hedges	5	1.66	30	9.92	11.76[*]
	Attitude markers	28	9.26	0	.00	0.0[*]
	Boosters	20	6.62	7	2.32	9.89[*]
	Self-mentions	25	8.28	0	.00	0.0[*]
	Total	*102*	*33.77*	*42*	*13.90*	*19.65[*]*
Total		*164*	*54.30*	*138*	*45.70*	*5.65[*]*

[*] Significant at $p < .05$

As seen in Table 3, the professional authors used more MMs (164, 54.30%) than the students (138, 45.70%). A greater number of interactive MMs were detected in the SRAs (96, 31.80%) while the professional authors used more interactional MMs (102, 33.77%). Concerning the interactive MMs, transitions (27, 8.94%), evidentials (25, 8.28%), code glosses (23, 7.62%), and endophoric markers (15, 4.97%) were more prevalent in the SRAs. Frame markers were observed more in the PRAs (28, 9.27%). Regarding the interactional MMs, the students employed neither attitude markers nor self-mentions. Hedges (30, 9.92%) were found more frequently in the SRAs while boosters (20, 6.62%), self-mentions (25, 8.28%), attitude markers (28, 9.26%), and engagement markers (24, 7.95%) were more widespread in the PRAs. The relationship between author proficiency and each MM was significant (p<.05) (Table 3). These results are illustrated in Figure 2.

Figure 2

Metadiscourse Markers in Ras Written by Professional Authors and Students

The results of the frequencies of MMs used by professional authors and students with different genders (RQ3) are reported in Table 4.

Table 4

Metadiscourse Markers Used by Professional Authors and Students across Gender (per 1000 words)

|	Category	Professional female authors		Professional male authors		Student female authors		Student male authors		Chi-square
		F	%	F	%	F	%	F	%	
Interactive Resources	Transitions	5	1.66	5	1.66	6	1.99	21	6.96	9.43*
	Evidentials	4	1.32	4	1.32	17	5.63	8	2.66	8.59*
	Code glosses	3	.99	7	2.32	6	1.99	17	5.63	8.24*
	Frame markers	19	6.30	9	2.98	2	.66	4	1.32	9.01*
	Endophoric markers	4	1.32	2	.66	11	3.64	4	1.32	6.12*
	Total	*35*	*11.59*	*27*	*8.94*	*42*	*13.91*	*54*	*17.88*	*5.65**
Interactional resources	Engagement markers	18	5.96	6	1.99	1	.33	4	1.32	8.14*
	Hedges	3	.99	2	.66	21	6.96	9	2.98	8.54*
	Attitude markers	24	7.95	4	1.32	0	.00	0	.00	8.87*
	Boosters	8	2.65	12	3.98	3	.99	4	1.32	7.96*
	Self-mentions	9	2.98	16	5.30	0	.00	0	.00	8.87*
	Total	*62*	*20.53*	*40*	*13.25*	*25*	*8.28*	*17*	*5.62*	*7.23**
Total		*97*	*32.12*	*67*	*22.19*	*67*	*22.19*	*71*	*23.50*	*5.97**

* Significant at *p* < .05

Table 4 indicates that the professional female authors employed the greatest number of interactional resources (62, 20.53%), and the male students utilized the highest number of interactive resources (54, 17.88%). Transitions (21, 6.96%) and code glosses (17, 5.63%) were the most frequently used interactive MMs by the male students. Endophoric markers (11, 3.64%) and evidentials (17, 5.63%) were most prevalent in the female students' RAs. The professional female authors' RAs had the highest frequency of frame markers (19, 6.30%). Engagement markers (18, 5.96%) and attitude markers (24, 7.95%) were the most frequent interactional MMs in the

professional female authors' RAs. The male professional authors used the greatest number of boosters (12, 3.98%) and self-mentions (16, 5.30%). Hedges (21, 6.96%) were most detected in the female student authors' RAs. These relationships turned out to be statistically significant ($p<.05$) (Table 4). Figure 3 depicts these findings.

Figure 3

Metadiscourse Markers Used by Professional Authors and Students across Gender
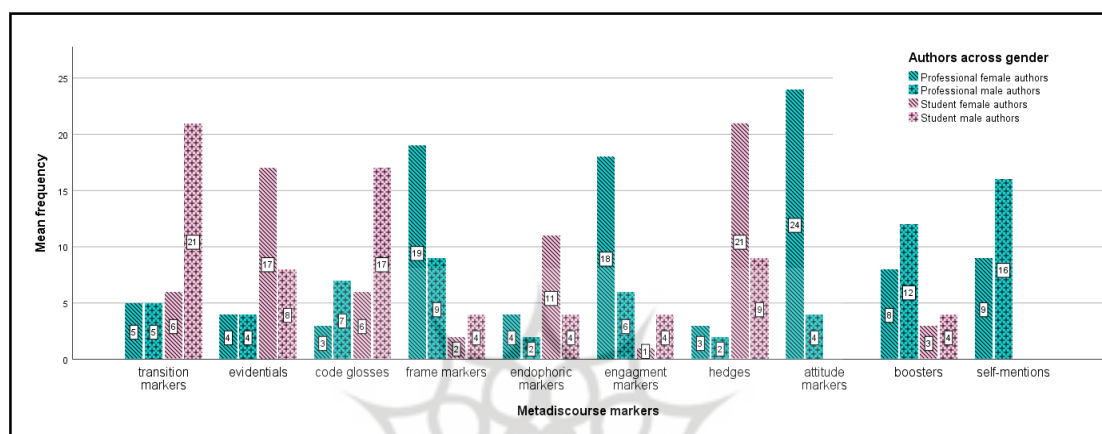
6. Discussion

6.1. Authorial Identity in RAS of Male and Female Authors

The first research question dealt with how male and female authors utilized MMs in their texts. The results indicated that there was no substantial difference in the number of MMs in the female and male authors' texts. More interactional MMs, especially engagement markers, hedges, and attitude markers, were observed in the females' writings. Conversely, the males used more interactive MMs, particularly code glosses, transitions, and frame markers.

The approximately same number of MMs in the female and male authors' texts shows that both female and male writers were well aware that metadiscourse resources and self-reflective linguistic means were integral parts of RAs (Hyland & Tse, 2004; Tse & Hyland, 2008). As Tse and Hyland (2008) believe, when male-female discourse shows similarities, the similarities may point to the presence of larger normative limitations in academic discourse and the effects of these limitations on the options available to the writer.

The female authors had a greater tendency to use interactional MMs, which can be attributed to their gender identity and their seeking more interpersonal and social connection with their readers (Allum & Okahuna, 2015; Newman et al. 2008; Deitrick et al., 2012). Among the interactional MMs, they used more engagement markers, hedges, and attitude markers. By using engagement markers, the females seemed to solicit greater solidarity with readers (Ishikawa, 2015; Jiang & Ma, 2018):

we *have to place a strong emphasis on early vocabulary learning as young as age 2 if children were to become highly competent in later literacy skills.* (F[1]/PRA)

This female author tried to persuade readers to take similar understandings of the favored interpretation. The greater use of hedges demonstrates their greater attempt to tone down their authorial imposition and judgmental authority, give readers a discussion space to question their interpretation, and provide a less-threatening argument (Dafouz-Milne, 2008; Dousti & Eslami Rasekh, 2016; Malmir, 2020; Mirzapour & Mahand, 2016; Nasri et al., 2018; Piersoul & Van de Velde, 2023; Schmauss & Kilian, 2023; Tse & Hyland, 2008; Yeganeh & Ghoreyshi, 2015):

This *appeared* *to have reflected her emphasis on knowledge transmission,* *probably* *a cultural influence.* (F/PRA)

The females in this study also preferred to provide emotional and personal evaluation through attitude markers:

It is *surprisingly* *unclear what rank content knowledge plays in the making of a good teacher.* (F/PRA)

These results partially align with Tse and Hyland (2008) who observed a greater number of hedges and engagement markers in females' book reviews. A closer analysis indicated that the use of self-mentions before hedges was common in the females' RAs. Maybe, as Schleppegrell (2004) contends, they combined these two discourse markers to underscore their implicit subjective stance:

First, by investigating complete beginners, *I could be* *confident that they had no prior knowledge of the targets of incidental acquisition.* (F/PRA)

In this example, the writer's stance is not interpreted as a projected belief (Schleppegrell, 2004). Unlike the females, the males used more self-mentions and boosters probably to exhibit their interpersonal stance and their certainty and confidence in their arguments:

It is thus *definitely* *challenging to have a larger number of participants.* (M/PRA)

This male author lays emphasis on the force of the preposition via this booster. It seems the male authors employed these MMs to accentuate their firm assertions, which is indicative of their authoritative stance and more personalized style (Deitrick et al., 2012; Nasri et al., 2018; Tse & Hyland, 2008; Yeganeh & Ghoreyshi, 2015).

All the interactional MMs, as a means of expressing doubt and certainty, are essential linguistic means of announcing stance in the academic context (Biber, 2006) and help authors balance objective information, subjective evaluation, and interpersonal negotiation. Based on the results, it is required to help female writers develop an awareness of boosters and self-mentions and male writers of hedges and attitude markers.

Regarding the interactive resources, the females used evidentials more, especially, direct quotations. Females are usually more conservative (Hamdan, 2011), and perhaps, by directly quoting well-known scholars' words, they attempted to highlight the accuracy of their statements

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[1] F= female; M=male

and gain greater acceptance from established members. Direct and indirect quotations are features of the descriptive and argumentative styles, respectively (Shirzad et al., 2013). Therefore, in this study, unlike the males who used more indirect quotations, the female writers were inclined to the descriptive style.

The males used transitions, code glosses, and frame markers more than the females. A closer analysis of their RAs indicated that transitions were primarily used for comparative purposes:

> Seen *in comparison with* Cabaroglu and Roberts' (2000) study, this study provides further evidence that re-existing beliefs can change by means of critical reflection. (M/PRA)

This male author was eager to persuade the reader to accept his argument and evaluative comments by comparing it with another argument. However, transitions largely fulfilled an additive function in the female discourse, which reflects their great inclination toward the descriptive style. Code glosses were generally used for the reformulation in the males' RAs:

> teachers may have limited pedagogic resources when it comes to developmental progression for their learners' listening abilities. *In other words,* students may do essentially the same thing in each listening lesson. (M/PRA)

This male author employed this discourse marker to insist on readers following his exact argument rather than their own interpretation (Dafouz-Milne, 2008). The females embellished their writings with code glosses merely for exemplification. Frame markers were mostly used for the purpose of sequencing the propositions by both genders, which highlights the persuasive function of their RAs (Dafouz-Milne, 2008):

> *First*, the way the study was conducted is presented. *Second*, the obtained results are reported... (F/SRA)

The RAs of males and females included approximately the same number of endophoric markers mainly for reporting statistical results and review.

On the whole, both males and females tried to follow the norms of ADC by using various MMs, but to different degrees. They also projected part of their gender identity on their texts. For instance, the females were more concerned with engaging readers and sharing their personal evaluation with some degree of doubt for stance-taking while the males used boosters and self-mentions to take an authorial stance and express self-assurance and dominance.

Another point worth mentioning is that ADC is claimed to be male-oriented (i.e., assertive or argumentative) and has 'masculinist epistemology' (Tse & Hyland, 2008; Robson et al., 2002; Sugimoto et al., 2013). This might limit females to utilize their own resources and impel them to follow that epistemology. Being more self-assured and argumentative in nature, males are more familiar with the linguistic realization of this style. Hence, they may have less difficulty taking a stance in the ADC (positioning in the community). On the contrary, females are so concerned with learning such masculinist epistemology and its linguistic realization (proximity to the community) that they can concentrate less on stance-taking and positioning. The results of this study also partly

confirm this claim. This state of affairs entails greater attention to gender differences in the academic context.

6.2. Authorial Identity in RAs of Professional and Student Authors

The second research question addressed the comparison of the RAs produced by professional writers and students. The results indicated the use of more MMs, especially interactional ones (boosters and engagement markers) by professional writers. The students utilized a greater number of interactive MMs, particularly evidentials, endophoric markers, and transitions.

By using more MMs, the professional writers seemed to engage in a more critical and interpersonal voice. Probably, that is the reason why they were successful in conveying their authorial voice and consolidating their position in this DC. Conversely, the students were less concerned about reader-writer engagement, dialogic voice, and explicit evaluation.

The students were heavy users of interactive MMs while the professional authors were keen on interactional MMs. One possible explanation is that the target readers of students' and professional authors' RAs are different. The readers of the SRAs were university professors with their own assessment criteria while the evaluators of the PRAs were journal reviewers/editors and the whole academic community. This difference in the targeted audience probably affects the discoursal choices of authors (Isik-Tas, 2018). A university professor expects students to precisely follow academic writing standards so as to facilitate their proximity to the ADC (Hood, 2012). The general notion of these standards is that academic writing has an impersonal and voiceless nature (Matsuda & Tardy, 2007). Consequently, it is more likely that the university professors who had taught academic writing to the participants underscored interactive MMs (i.e., organization of ideational information) rather than interactional MMs (i.e., stance-taking and engagement) and encouraged them to be as objective as possible. On the other hand, journal reviewers/editors generally expect authors to express their authorial voice and stance; therefore, the professional authors were more inclined to employ more interactional MMs in their RAs.

Regarding interactive MMs, the student writers used a greater number of evidentials. A close analysis demonstrated that the function of evidentials or intertextuality in the SRAs and PRAs differed. For example, for the professional authors, intertextuality was a means of demonstrating the novelty of their position with respect to other voices. However, the students used evidentials, especially direct quotations, as solid evidence from the disciplinary research tradition to support their ideas and arguments:

> **Similarly, Ishikawa (2007, p. 149) argues,** *"Manipulating task complexity may have motivated a shift from a less to a more advanced mode of planning."* (M/SRA)

The greater number of endophoric markers in the SRAs confirms their greater concern about discourse organization (Hyland, 2005). These results partially align with Kawase (2015) who

observed considerably fewer evidentials but more endophoric markers in the introduction section of Ph.D. dissertations. The professional authors used endophoric markers for a wider range of functions, such as preview and overview. By using more code glosses, especially for exemplification, they attempted to clarify ideational information and make their readers follow their text smoothly and comfortably (Dafouz-Milne, 2008). Nonetheless, professional writers used them for both exemplification and reformulation:

> One cause of these difficulties is the fact that many pragmalinguistic forms are semantically opaque. **In other words,** it is extremely difficult for learners to identify the illocutionary force of such forms from the words alone. (M/PRA)

Another type of interactive marker frequently found in the SRAs was transition markers, which indicated their great concern to guide the readers through their text. Transitions mainly had additive, comparative, and inferential purposes in the PRAs. The students used them for additive function:

> **In addition to** enhancing learners' motivation, this treatment can help them promote their self-regulating strategies. (F/SRA)

Frame markers, as significant elements of academic writing (Hyland & Tse, 2004), were the only interactive markers used more frequently by the professional authors, especially, for sequencing information and introducing a topic shift. Nonetheless, in the SRAs, they had just a sequencing function.

As regards interactional MMs, attitude markers and self-mentions, as two prominent components of stance-taking if accompanied by good arguments (Bondi, 2012; Hyland & Tse, 2004), were absent in the SRAs. It can be ascribed to the overemphasis of their professors on avoiding the use of first-person pronouns or affective markers in RAs. During an informal meeting, the professors declared that they had underscored this issue during their instruction because these markers were subjective and academic writing should be objective and voiceless. Hence, in pursuit of being a legitimate member of the ADC, the students endeavored to be objective by excluding these markers from their writings. They seemed to have difficulty using self-mentions in their writings due to explicit cultural and pedagogical practices for authorial suppression (Hood, 2006; Hyland, 2002; Hyland & Tse, 2004; Zarei & Saadabadi, 2019). Conversely, the professional authors were keen on using attitude markers:

> The danger is **unfortunately** real, even when teacher bashing is surely far from being one of the uses envisioned by the researchers producing or reproducing such research-based conclusions. (F/PRA)

This author shares her attitude toward a phenomenon, implicitly kindles readers' interest in it, and invites them to think about it; therefore, she tries to establish an interaction with the readers. Self-mentions were also frequently seen in the PRAs probably because the professional writers were well aware that using first-person pronouns was an effective way to make a commitment to their words and express their authorial presence (Hyland, 2015).

Boosters and engagement markers were more prevalent in the PRAs, which substantiates the greater attempt of professional authors to engage their audience through obligation modals, imperatives, etc. The use of these MMs signifies self-confidence in controlling readers and their self-assurance in their arguments (Bal-Gezegin & Bas, 2020; Hu & Cao, 2011; Hyland, 2005). On the contrary, the students used a fewer number of these markers since they might have lower self-confidence and consider themselves less legitimate members of the DC.

The students were heavy users of hedges, which can be attributed to the conservative nature of students and their inclination to take an implicit subjective stance (Schleppegrell, 2004; Bal-Gezegin & Bass, 2020). Their use of hedges indicated that the students respected readers' views and avoided imposing ideas on them (Hyland, 2005). Moreover, hedges are usually among the elements mostly taught in academic writing courses (Bondi, 2012). It is possible that this discourse marker was underlined in the students' courses, encouraging them to use it more than other interactional MMs.

On the whole, it seems that the students utilized more interactive resources to precisely follow the disciplinary norms of DC and construct an effective disciplinary identity. They were primarily concerned about fitting into the current community (*proximity* and *assimilation* to the community). On the other hand, the professional authors actualized their authorial stance mainly via interactional resources to involve readers in actual interactions. Hence, they sought stance-taking and the reshaping of the current community (*positioning* and *accommodation* in the community). Given the results, students should learn how to involve the audience in an interactional manner rather than just conveying information to them. It is also required to raise students' awareness of authorial identity and teach them how to employ both interactive discourse markers, as a means of text organization, and interactional metadiscourse, as a means of self-representation, in their RAs (Pho, 2008).

6.3. *Authorial Identity in RAS of Professional Writers and Students with Different Genders*

The last question dealt with the use of metadiscourse resources by professional male/female authors and male/female students. As the results indicated, the female professional authors utilized the greatest number of interactional MMs, especially, attitude markers and engagement markers. Their higher tendency to use these markers reflects their great inclination to express their attitude toward information and establish solidarity and communal understandings with their readers, which are general characteristics of women (Ishikawa, 2015; Piersoul & Van de Velde, 2023; Schmauss & Kilian, 2023). Self-mentions and boosters had the highest frequencies in the male professional authors' RAs. It highlights their propensity to provide bold assertions and arguments and impose their dominance, both of which are among the traits of men (Deitrick et al., 2012; Anggraini et al., 2022). Therefore, for stance-taking, the female professionals made use of attitude markers and

engagement markers while the male professionals employed self-mentions and boosters. These findings prove that following the norms of the ADC, professional authors enjoy individual variations and actively involve themselves in individualized identity construction, partly through projecting their gender identity in their RAs.

The male students used the highest number of interactive resources in their writing. Transitions and code glosses were seen most frequently in their RAs. The female students used the highest number of endophoric markers and evidentials (especially direct quotations), probably as a way to found an academic credential (Hyland & Tse, 2004). The male students tried to avoid stance-taking by using the least number of international MMs. The only interactional marker used frequently by the female students was hedges. Hedges, as a linguistic realization of face-saving acts, were likely employed to mitigate their arguments and show their openness to other views (Schmauss & Kilian, 2023). Other studies have observed equivocal results as well (Yeganeh & Ghoreyshi, 2015; Dousti & Eslami Rasekh, 2016; Nasri et al., 2018).

The female students' RAs lacked attitude markers and self-mentions. They employed the least number of engagement markers although these markers are part of the female discourse (Ishikawa, 2015). Interestingly, the male students used boosters not to announce their argument firmly and exhibit their dominance and authorial stance, but to underscore general statements or facts, as also found by Chang (2010):

It is clear that using authentic materials is a good way to motivate learners. (M/SRA)

These results suggest that, unlike students who suppress their gender identity to get closer to the DC, professional authors make use of their gender identity to enhance their professional identity and positioning in the DC.

7. Conclusion

The present study investigated gender and authorial identities in the RAs of professional writers and students. The results imply that professional authors are more engaged in stance-taking and positioning and try to subjectify 'objective' meaning (Hood, 2004) while students devote a lot of attention to discourse organization, the explicit norms of the ADC, and proximity to this community. The results also suggest that, unlike students, professional authors are more willing to project their gender identity rather than avoid it.

These findings offer constructive implications for EAP students, teachers, programs, and material developers and make great contributions to learning and teaching academic writing in higher education. The results can raise EAP students' awareness about genre conventions and the common preferences of the disciplinary community by highlighting different metadiscourse features of the RAs published by professional authors. Moreover, by knowing that professional authors tend to project their gender identity onto their RAs, students pay more attention to their gender-based discourse and attempt to utilize, rather than suppress, it in academic settings.

Certainly, EAP teachers and practitioners play a crucial role in creating such awareness for these students and facilitating this process.

The results can inform EAP teachers about the importance of authorial identity in academic writing and encourage them to direct students' attention to this concept and how to realize it through discourse markers. One strategy is to provide samples of scholarly articles, as proper models of academic writing, for students and analyze them in terms of authorial identity and metadiscourse markers as part of class activities. EAP teachers can motivate students to read published articles outside the classroom not only to gain information but also to detect how professional scholars echo their voices in their RAs. Furthermore, it is essential for teachers to draw equal attention to both types of metadiscourse resources in their lesson plans and not to ignore one type at the expense of the other. Based on the results, different genders have particular markers to create textual interaction. The implication is that teachers should not expect similar performances from different genders. Probably, they should even treat male and female students differently to help them overcome the weaknesses induced by their gender. Since the ADC seems to be partly gender-biased in favor of males (Tse & Hyland, 2008), female students may need more instruction to get familiar with this community and adopt a more assertive stance and express their arguments more firmly, for example by using more boosters (as a more masculine feature). Male students can also be taught to use more attitude and engagement markers to express their stance more vividly and establish greater solidarity with readers. EAP practitioners can also raise students' awareness of gender differences and teach male and female students on, and boost their confidence in, how to effectively make use of their gender-based discourse within the general framework of the academic community.

This study provides valuable information for EAP program designers and teacher-training programs. EAP program designers should strive to understand the complexities of educating students of different genders and help teachers consider this issue in their decision-making process and assessment. As few teachers consider gender differences in writing instruction, teacher-training programs should be devised in a way to boost teachers' attention to gender in their instruction. In other words, gender inclusivity that respects the diversity of gender identities in academic writing should be promoted in such programs as much as possible. Syllabus designers and material developers can highlight the issue of authorial identity and include authentic extracts of published articles in their materials. They can also provide materials so as to meet the requirements of gender differences.

The low number of PRAs and their selection from a limited number of leading journals and the collection of SRAs from two universities can be among the limitations of this study. This limitation may introduce a potential lack of diversity in the sample of PRAs and SRAs. For the PRAs, a bias toward certain types of research perspectives and scopes may exist in the sampled journals. Similarly, a sample of SRAs from only two universities may not be representative of student research, limiting the validity of the findings to make broader inferences about the research

practices of AL students across different universities or regions. Future studies can adopt a more in-depth analysis of the discourse function of these metadiscourse markers to increase our understanding of the way professional and student writers utilize such resources to express their voices and identity.

References

Allum, J., & Okahana, H. (2015). *Graduate enrollment and degrees: 2004 to 2014*. Council of Graduate Schools.

Anggraini, L., Maisarah, I., Syafryadin, S., & Arsyad, S. (2022). The study of gender on language use through conversation of XI Social 1 Students at SMAN 9 Musi Rawas. Linguists: *Journal of Linguistics and Language Teaching*, *8*(2), 246-257. http://dx.doi.org/10.29300/ling.v8i2.8291

Bal-Gezegin, B., & Bas, M. (2020). Metadiscourse in academic writing: A comparison of research articles and book reviews. *Eurasian Journal of Applied Linguistics*, *6*(1), 45-62.

Biber, D. (2006). *University Language: A corpus-based study of spoken and written registers*. John Benjamins Publishing Company.

Bondi, M. (2012). Voice in Textbooks: between Exposition and Argument. In K. Hyland & C. S. Guinda (Eds.), *Stance and voice in written academic genres* (pp. 101-118). CPI Antony Rowe, Chippenham and Eastbourne: Great Britain.

Cabaroglu, N., & Roberts, J. (2000). Development in student teachers' pre-existing beliefs during a 1-year PGCE programme. *System*, *28*(3), 387-402.

Cao, F., & Hu, G. (2014). Interactive metadiscourse in research articles: A comparative study of paradigmatic and disciplinary influences. *Journal of Pragmatics*, *66*, 15-31.

Chang, P. (2010). *Taking an effective authorial stance in academic writing: Inductive learning for second language writers using a stance corpus*. [Unpublished Doctoral Dissertation]. The University of Michigan.

Cohen, J. (1988). *Statistical power analysis for the behavioral sciences*. Academic Press.

Dafouz-Milne, E. (2008). The pragmatic role of textual and interpersonal metadiscourse markers in the construction and attainment of persuasion: A cross-linguistic study of newspaper discourse. *Journal of Pragmatics*, *40*(1), 95-113.

Deitrick, W., Miller, Z., Valyou, B., Dickinson, B., Munson, T., & Hu, W. (2012). Gender identification on twitter using the modified balanced winnow. *Communications and Network*, *4*(3), 189-195.

Dousti, M., & Eslami Rasekh, A. (2016). ELT students' gender differences in the use of hedges in interpersonal interactions: A mixed method approach applied. *Journal of Applied Linguistics and Language Research*, *3*(1), 217-231.

Egbert, J. (2007). Quality analysis of journals in TESOL and applied linguistics. *TESOL Quarterly*, *41*, 157-171.

Feak, C. B., & Swales, J. M. (2009). Telling a Research Story: Writing a literature review, Ann Arbor, MI: University of Michigan Press.

Flowerdew, J. (2000). Discourse community, legitimate peripheral participation, and the nonnative-English-speaking scholar. *TESOL Quarterly*, *34*(1), 127-150.

Flowerdew, J., & Wang, S. (2015). Identity in academic discourse. *Annual Review of Applied Linguistics*, *35*, 81-99.

Gee, J. (2015). *Social linguistics and literacies: Ideology in discourses*. Routledge.

Halliday, M.A.K. (1994). *An Introduction to Functional Grammar*. Edward Arnold.

Hamdan, S. (2011). Identifying the linguistic Genderlects of the style of writing of Arab male and female novelists. *Journal of Education Culture and Society*, *2*, 55-62.

Hood, S. (2004). Managing attitude in undergraduate academic writing: a focus on the introductions to research reports. In L. J. Ravelli & R. A. Ellis (Eds.), *Analysing academic writing: Contextualized frameworks* (pp. 24-44). Continuum.

Hood, S. (2006). The persuasive power of prosodies: Radiating values in academic writing. *Journal of English for Academic Purposes*, *5*, 37-49.

Hood, S. (2012). Voice and Stance as APPRAISAL: Persuading and positioning in research writing across intellectual fields. In K. Hyland & C. S. Guinda (Eds.), *Stance and voice in written academic genres* (pp. 51-68). CPI Antony Rowe, Chippenham and Eastbourne: Great Britain.

Hu, G., & Cao, F. (2011) Hedging and boosting in abstracts of applied linguistics articles: A comparative study of English- and Chinese-medium journals. *Journal of Pragmatics*, *43*, 2795-2809.

Hyland, K. (2002). Authority and invisibility: Authorial identity in academic writing. *Journal of Pragmatics*, *34*, 1091-1112.

Hyland, K. (2005). Stance and engagement: A model of interaction in academic discourse. *Discourse Studies*, *7*(2), 173–192.

Hyland, K. (2009). *Academic Discourse: English in a Global Context*. Cambridge University Press.

Hyland, K. (2012). Undergraduate understandings: Stance and voice in final year reports. In K. Hyland & C. S. Guinda (Eds.), *Stance and voice in written academic genres* (pp. 134-150). CPI Antony Rowe, Chippenham and Eastbourne: Great Britain.

Hyland, K. (2015). Genre, discipline and identity. *Journal of English for Academic Purposes*, *19*, 32-43.

Hyland, K., & Jiang, F. K. (2022). Metadiscourse choices in EAP: An intra-journal study of JEAP. *Journal of English for Academic Purposes*, 60(101165). https://doi.org/10.1016/j.jeap.2022.101165.

Hyland, K., & Tse, P. (2004). Metadiscourse in academic writing: A reappraisal. *Applied Linguistics*, *25*(2), 156-177.

Ishikawa, Y. (2015). Gender differences in vocabulary use in essay writing by university students. *Procedia - Social and Behavioral Sciences*, *192*, 593-600.

Isik-Tas, E. E. (2018). E Authorial identity in Turkish language and English language research articles in Sociology: The role of publication context in academic writers' discourse choices. *English for Specific Purposes*, *49*, 26-38.

Jiang, F., & Ma, X. (2018). Positioning and proximity of reader engagement: authorial identity in professional and apprentice academic genres. *Eurasian Journal of Applied Linguistics, 6*(1), 45-62.

Kawase, T. (2015). Metadiscourse in the introductions of PhD theses and research articles. *Journal of English for Academic Purposes*, *20*, 114-124.

Lillis, Th., McMullan, J., & Tuck, J. (2018). Gender and academic writing. *Journal of English for Academic Purpose, 32*, 1-8.

Malmir, A. (2020). Interlanguage pragmatic learning strategies (IPLS) as predictors of L2 social identity: A case of Iranian upper-intermediate and advanced EFL Learners. *Iranian Journal of Applied Language Studies, 12*(1), 177–216.

Matsuda, P. K., & Tardy, C.M. (2007). Voice in academic writing: The rhetorical construction of author identity in blind manuscript review. *English for Specific Purposes*, *26*, 235-249.

Mirzapour, F., & Mahand, M. (2016). Hedges and boosters in native and non-native library and information and computer science research articles. *The Southeast Asian Journal of Language Studies*, *18*(2), 119-128.

Nasri, M., Biri, M., & Karimi, M. (2018). Projecting Gender Identity in Argumentative Written Discourse. *International Journal of Applied Linguistics & English Literature*, *7*(3), 201-205.

Newman, M. L., Groom, C. J., Handelman, L. D., & Pennebaker, J. W. (2008). Gender differences in language use: An analysis of 14,000 text samples. *Discourse Processes*, *45*, 122-236.

Pho, P (2008). Research article abstracts in applied linguistics and educational technology: a study of linguistic realizations of rhetorical structure and authorial stance. *Discourse Studies*, *10*, 231-250.

Pennycook, A. (2022). Critical applied linguistics in the 2020s. *Critical Inquiry in Language Studies*, *19*(1), 1-21.

Piersoul, J. & Van de Velde, F. (2023). Men use more complex language than women, but the difference has decreased over time: A study on 120 years of written Dutch. *Linguistics*, *61*(3), 725-747. https://doi.org/10.1515/ling-2021-0022

Preece, S. (2018). Identity work in the academic writing classroom: Where gender meets social class. *Journal of English for Academic Purposes*, 9-12.

Robson, J., Francis, B., & Read, B. (2002). Writers of passage: stylistic features of male and female undergraduate history essays. *Journal of Further and Higher Education*, *26*(4), 351-362.

Salimi. E.A., Salimi, M., Nezakatgoo, B., & Hajokandi, A.M. (2022). Author count, author gender, and authorial stance: A corpus-assisted analysis. *Teaching English Language*, *16*(1), 261-283.

Schleppegrell, M. (2004). Technical writing in a second language: the role of grammatical metaphor. In Ravelli and Ellis (Eds.), *Analysing academic writing: Contextualized frameworks* (pp. 173-189). Continuum.

Schmauss, L. S., & Kilian, K. (2023). Hedging with modal auxiliary verbs in scientific discourse and women's language. *Open Linguistics*, *9*(1), 20220229. https://doi.org/10.1515/opli-2022-0229

Shirzad, F., Musavi, K., Atmani, S., Ahranjani, A., & Iraji, S. (2013). Gender differences in EFL academic writing. *International Journal of Academic Research*, *5*(5), 79-88.

Sugimoto, C. R., Lariviere, V., Ni, C. Q., Gingras, Y., & Cronin, B. (2013). Global gender disparities in science. *Nature*, *504* (7479), 211-213.

Tajeddin, Z., & Malmir, A. (2014). Knowledge of L2 speech acts: Impact of gender and language learning experience. *Journal of Modern Research in English Language Studies, 1*(2), 1–21.

Tse, P., & Hyland, K. (2008). `Robot Kung fu': Gender and professional identity in biology and philosophy reviews. *Journal of Pragmatics*, *40*(7), 1232-1248.

Wang, P., & Hu, G. (2023). Disciplinary and gender-based variations: A frame-based analysis of interest markers in research articles. *English for Specific Purposes*, *70*, 177-191.

Weber, M., & Campbell, C. M. (2004). In other professional journals. *Modern Language Journal*, *88*, 457-466.

Yeganeh, M. T., & Ghoreyshi, S. M. (2015). Exploring gender differences in the use of discourse markers in Iranian academic research articles. *Procedia-Social and Behavioral sciences, 192*(24), 684-689.

Zarei, Z., & Saadabadi H. M. (2019). Authorial Identity Presence in Academic Articles: The Case of Iranian Scholars. *Journal of New Advances in English Language Teaching and Applied Linguistics, 1*(1), 38-51.

Zhang, Y., Yu, S., & Yuan, K. (2020). Understanding Master's students' peer feedback practices from the academic discourse community perspective: A rethinking of postgraduate pedagogies. *Teaching in Higher Education, 25*(2), 126-140.

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