Authorial Presence in English Research Articles in Medicine Written by American and Indonesian Authors

Tsabita Intan Tsaqifa*, Tofan Dwi Hardjanto
English Department, Universitas Gadjah Mada, Indonesia

*Corresponding Author: tsabita.intan@gmail.com

ABSTRACT

The present research attempts to investigate authorial presence in English research articles in medicine written by American and Indonesian authors. In doing so, the study first attempts to describe first-person pronouns used to express authorial presence. Secondly, the research aims to examine the discourse functions of first-person pronouns in the research articles. Data for the present research were taken from 20 English research articles in medicine, consisting of 10 articles published in *CA: A Cancer Journal for Clinicians* (Wiley) and 10 in *Medical Journal of Indonesia*. A corpus of 81,657 words was analyzed with the help of a concordance program, WordSmith Tools 5.0 (Scott, 2008), to identify the occurrences of first-person pronouns used in research articles. A qualitative analysis was also conducted to examine the discourse functions of each first-person pronoun using the classification proposed by Filimonova (2005) and Tang and John (1999). Hopefully, the present research findings could indicate the intention of authorial presence in academic writing, specifically in medical research articles. The findings also contribute to investigating the difference between American and Indonesian authors in presenting themselves in academic writing.

Keywords: *academic writing, authorial presence, concordance, discourse functions, research articles.*

INTRODUCTION

Authorial presence in academic writing is interesting to observe as it implies some conflicting ideas, especially in English academic writing. Recently, some studies have shown that academic writing is more adaptable; it is more than objective and impersonal. Academic writing involves the use of language to acknowledge, construct, and negotiate social relations (Hyland, 2005). Previous studies have been conducted to investigate the authorial presence in English academic writing, especially research articles (Harwood, 2005a, 2005b; Hyland, 2001; Kuo, 1999; Vassileva, 1998). Some of the previous studies have also identified the use of first-person pronouns in English research articles written by both native English speakers and non-native speakers (Dontcheva-Navrátilová, 2013; Hryniuk, 2018). However, few studies have been conducted to examine the authorial presence in English academic writing written by Indonesian scholars. Besides, there are still a few previous studies that have investigated the authorial presence in medicine (Hartwell & Jacques, 2014; Kim, 2015). Thus, the present research attempts to fill the gap by aiming several objectives: (1) to describe the first-person pronouns used to express authorial presence in English research articles in medicine written by

American and Indonesian authors, and (2) to examine the discourse functions of the first-person pronouns in these research articles.

LITERATURE REVIEW

Some of the previous studies have identified the use of first-person pronouns in English research articles written by both native English speakers and non-native speakers. For instance, a study was conducted by Hryniuk (2018), who investigated the comparison between the frequency of use and the role of first-person pronouns in English research articles in the field of applied linguistics written by native English and Polish authors. Another study has also been done by Dontcheva-Navrátilová (2013), who identifies the comparison and cross-cultural investigation of author-reference pronouns in English research articles in the area of applied linguistics written by Anglo-American and Czech linguists.

Previous studies that investigated the authorial presence in medicine have been conducted by some scholars (Hartwell & Jacques, 2014; Kim, 2015). Kim (2015) discovered that the use of the first-person plural of *we* in a vast amount of research article abstracts of the disciplines that are science-related or hard sciences was more frequently found rather than the first-person singular of *I*. The statement tends to stand with the results of previous research conducted by experts (Kuo, 1999; Hyland, 2001), in which it was found that research articles in the hard science discipline contain the most frequency of first-person plural pronouns.

In terms of discourse functions, previous studies have investigated the linguistic forms of first-person pronouns. These previous studies have explained that first-person pronouns can function to (a) explain what authors have done in the research and share ideas (Kuo, 1999), (b) fill the disciplinary knowledge gaps, and help to identify current research concerns (Harwood, 2005b), and (c) show the contribution of the authors and validate the authors' claims (Vladimirou, 2007). Furthermore, Hyland (2002) states that first-person pronouns in academic writing can be used to (a) state a goal or purpose, (b) explain a procedure, (c) state results or claims, (d) express self-benefits, and (e) elaborate an argument. Tang and John (1999) argue that the first-person pronouns hold the identities as (a) the representative, (b) the guide through the essay, (c) the architect of the essay, (d) the recounter of the research process, (e) the opinion holder, and (f) the originator.

THEORETICAL FRAMEWORK

'Authorial presence' refers to the presence of the authors in their own writings by using linguistic devices. The term 'authorial presence' (Chávez Muñoz, 2013; Dontcheva-Navrátilová, 2013; Hartwell & Jacques, 2014; Poudat & Loiseau, 2005) has been used to refer to a linguistic feature which presents the existence of the writer in the text. Hyland (2001, p. 215-217) argues that pronouns are the most salient forms of self-mention, in which the first-person pronouns take part "to assist authors to make a personal standing in their texts and to demarcate their own work from that of others." According to Filimonova (2005), there are two terms named 'inclusive' and 'exclusive' which are used "to denote forms of personal pronouns which distinguish whether an addressee (or addressees) are included in or excluded from the set of referents" (p. ix). The authors could possibly invent their own 'selves' through their writing, breaking free from the fixed rules in their discourse situations and chosen roles in their writing (Tang & John, 1999). Tang and John (1999) categorize the functions of authorial references into six roles:

a. *representative*
   It is the generic first-person pronoun, usually realized as *we* or *us* in the plural form, that writers use as a proxy for a larger group of people. The 'I' as the representative is shown to refer to people in general, to refer to a smaller group, or to signal ownership of some universal or common property;

b. *guide through the essay*
   To understand this role easily, we assume that the essay is a foreign country, with the writer as the guide during the reader's journey through that unfamiliar territory. This particular role is often signaled explicitly by the use of verbs like *see*, *note*, and *observe*. The writer as a guide is always implicitly and

explicitly accompanied by the reader. This particular usage of the first-person pronoun is usually realized in the plural form (an inclusive form of *we* or *us*);

c. *architect of the essay*

This role is usually realized as the first person singular. The usage of the *I* refers to the person who writes, organizes, structures, and outlines the material in the essay. The architect, or the writer, has the responsibility of organizing and outlining the material in the essay. Unlike *'I' as the guide through the essay*, the writer here merely guides the reader through an already existing terrain;

d. *recounter of the research process*

The person behind this role is the one who describes or recounts the various steps of the research process. The steps done by the writer include reading source texts, interviewing subjects, collecting data, etc. This particular role is often signaled by the pairing of the first-person pronouns with material process verbs or 'doing' verbs (*work*, *read*, *interview*, or *collect*) and frequently used in the past tense;

e. *opinion-holder*

The 'opinion-holder' role is the person who shares opinion, view, or attitude (expressing agreement, disagreement, or interest) regarding known information or established facts;

f. *originator*

This is the most powerful role out of all other roles that a writer can create. It includes the writer's conception of the ideas or knowledge claims in the essay. In short, the writer states ideas or knowledge that is 'new.' The 'author' has the 'right' and the 'ability' to originate new ideas or knowledge.

METHODS

In the present research, a corpus of 20 research articles (hereinafter abbreviated as "RAs") was selected to represent the study of authorial presence in English research articles in medicine, consisting of 10 RAs written by American authors and 10 RAs written by Indonesian authors. The research articles were selected from journals that are Scopus-indexed, suggesting that the journals are recognized internationally by scholars and academics. The selected research articles were primary, empirical research articles. The first 10 research articles belonging to the American sub-corpus were published in *CA: A Cancer Journal for Clinicians* (Wiley) (https://acsjournals.onlinelibrary.wiley.com/). The research articles were written by authors affiliated with institutions in the United States of America (USA). The first authors of the RAs are affiliated with the American Cancer Society (ACS), which is based in Atlanta, Georgia. This institutional affiliation of the first authors of the RAs was used as the criterion for the identification of American authors. As for the Indonesian sub-corpus, it consisted of 10 research articles published in *Medical Journal of Indonesia* (https://mji.ui.ac.id/). The selected research articles were written in English and internationally acceptable by confirming them through Scopus-indexed. The authors of the RAs are affiliated with academic institutions in Indonesia, mostly affiliated with the Faculty of Medicine of Universitas Indonesia.

The overall sections of the RAs were used as data sources, excluding headers, footnotes, graphics, tables, etc. A corpus of 81,657 words in total was obtained, with the shortest article length of 2,175, while the longest is 8,103. Since the research articles were taken from online refereed journals, a computer-assisted method was applied to find the first-person pronouns throughout the sections of the research articles. A concordance program, namely *WordSmith Tools* Version 5.0 (Scott, 2008), was employed in this research. The concordance program displayed the data of first-person pronouns used to express the potential authorial presence in the research articles by searching each pronoun (*we*, *our*, *us*) and its lexical expression (*the authors*). Other lexical expressions of first-person pronouns (the researchers) were also searched, but no occurrences were found at all. Therefore, this expression was not reported in the findings. The data then filtered to eliminate unrelated expression. The final concordances were saved to *Microsoft Excel* (.*xlsx*) to ease the analysis.

The authorial presence was analyzed by calculating the numbers of the first-person pronouns. The data that had been collected in this research were categorized based on the first-person pronouns

(*we, our, us, the authors*) to analyze the frequency of first-person pronouns in RAs. The occurrences of first-person pronouns found in all RAs were presented by displaying the raw frequency and normalized frequency (per 10,000 words). The data were then analyzed using Filimonova's (2005) clusivity theory and Tang and John's (1999) theory to examine each identified first-person pronoun's semantic reference and discourse functions.

The data in the present research were then codified using a certain coding system to mark each of the data that had been analyzed. All the data were coded using the following coding system:

(journal's abbreviation)(article number) – (1st person pronoun)(occurrence number) – (1st person pronoun function)(occurrence number)

The journal abbreviations of 'CA' and 'MJI' were taken from the initial letters of the titles of the journals *CA: A Cancer Journal for Clinicians* (Wiley) and *Medical Journal of Indonesia*.

Chi-square tests were also performed to compare the two sub-corpora. The chi-square tests in the present research were calculated with the help of statistical software SPSS Statistics for Windows 25.0 (IBM Corp, 2017) to ease the calculation process.

RESULTS AND DISCUSSION

The total raw frequencies and normalized frequencies of the first-person pronouns found in the corpus are displayed in Table 1.

Table 1. First-person pronouns in the corpus

RAs' Authors	Raw	Normal
American	88	16.65
Indonesian	67	23.26
Total	**155**	**39.91**

A chi-square test was conducted to identify the comparison of the use of first-person pronouns between American sub-corpus and Indonesian sub-corpus, resulting in $\chi^2_{(1)} = 0.900$ and $p = 0.343$, as shown below.

Test Statistics
RAs

Chi-Square	.900[a]
df	1
Asymp. Sig.	.343

a. 0 cells (,0%) have expected frequencies less than 5. The minimum expected cell frequency is 20,0.

Based on the chi-square test result, it is found that there is no significant difference since the significance level accepted in linguistics is $p < 0.05$.

Table 2 shows detailed results of first-person pronouns identified in the two sub-corporas.

Table 2. First-person pronouns across the American sub-corpus and Indonesian sub-corpus

First Person Pronouns	American		Indonesian	
	Raw	Normal	Raw	Normal
we	65	12.30	43	14.93
our	19	3.60	22	7.64
the authors	4	0.76	1	0.35
us	0	0.00	1	0.35
Total	**88**	**16.65**	**67**	**23.26**

A chi-square test was performed to the pronoun *we* since the calculation of a chi-square test can only be conducted if the cell has an expected frequency of more than five times per 10,000 words. This is for the sake of getting the correct approximate calculation. The result of the chi-square test was $\chi^2_{(1)} = 0.333^a$ and $p = 0.564$, as shown below.

Test Statistics
we

Chi-Square	.333[a]
df	1
Asymp. Sig.	.564

a. 0 cells (,0%) have expected frequencies less than 5. The minimum expected cell frequency is 13,5.

Based on the chi-square test result, it is found that

there is no significant difference in the use of the pronoun *we* between American sub-corpus and Indonesian sub-corpus.

The clusivity of first-person pronouns

Filimonova (2005) categorized the semantic reference of first-person pronouns into two categories, 'inclusive' and 'exclusive.' In the present research, the exclusive first-person pronouns are the most commonly found across the RAs. Tables 3 and 4 below show the findings of clusivity of first-person pronouns in the corpus.

Table 3. Clusivity of First-Person Pronouns in the American sub-corpus

First-person pronouns	American			
	Inclusive		Exclusive	
	Raw	Normal	Raw	Normal
we	0	0.00	65	12.30
our	0	0.00	19	3.60
us	0	0.00	0	0.00
the authors	0	0.00	4	0.76
Total	0	0.00	88	16.65

Table 4. Clusivity of First-Person Pronouns in the Indonesian sub-corpus

First-person pronouns	Inclusive		Exclusive	
	Raw	Normal	Raw	Normal
we	1	0.35	42	14.58
our	0	0.00	19	7.64
us	0	0.00	1	0.35
the authors	0	0.00	1	0.35
Total	1	0.35	66	22.91

The examples below illustrate the use of inclusive and exclusive first-person pronouns.

(1) Often, <u>we see</u> that all patients diagnosed with b-thalassemia/HbE automatically receive transfusion, whereas in reality the spectrum of the disease is variable, and they do not always require transfusion. (MJI 10 – *we* 1 – REP 1)

Example (1) shows the inclusive *we* in which the pronoun *we* semantically belongs to the inclusive

category since the pronoun refers to both the writers and the readers at once.

(2) <u>We considered</u> only recreational activity for the association between physical inactivity and cancer, because guidelines generally pertain to recreational activity, and most studies have investigated this type of activity. (CA 5 – *we* 2 – ORI 1)

The first-person plural pronoun *we* in example (2) can be categorized as exclusive *we* since it refers exclusively to the writers of the research articles.

The high frequency of the use of exclusive first-person pronouns probably correlates with the genre of academic writing used as the data, which is research articles. The writers used exclusive pronouns to refer to themselves in their writing since the RAs report empirical results of their research.

Discourse functions of first-person pronouns

The functions of the first-person plural pronouns were categorized based on the classification proposed by Tang and John (1999). Table 5 below shows the frequencies of the functions of the first-person pronouns in the corpus.

Table 5. Discourse functions of first-person pronouns in the corpus

Functions	Raw	Normal
Representative	1	0.35
Guide	4	1.23
Architect	19	3.59
Recounter	81	21.16
Opinion-holder	22	5.90
Originator	28	7.67
Total	155	39.91

The findings show that the recounter function is the most frequently used function in the corpus. Meanwhile, the representative function is the least employed function. The detailed findings in each sub-corpus are elaborated in Table 6.

Table 6. Discourse functions of first-person pronouns in the American and Indonesian sub-corpora

Functions	American		Indonesian	
	Raw	Normal	Raw	Normal
Representative	0	0.00	1	0.35
Guide	1	0.19	3	1.04
Architect	19	3.59	0	0.00
Recounter	44	8.32	37	12.84
Opinion-holder	11	2.08	11	3.82
Originator	13	2.46	15	5.21
Total	88	16.65	67	23.26

A chi-square test was conducted to recounter the function since this function is the only function that meets the minimum expected frequency of 5 per 10,000 words. The chi-square test has resulted in $\chi^2_{(1)}$ = 1.190^a and p = 0.275, as shown below.

Test Statistics

	REC
Chi-Square	1.190^a
df	1
Asymp. Sig.	.275

a. 0 cells (,0%) have expected frequencies less than 5. The minimum expected cell frequency is 10,5.

Based on the chi-square test result, it was found that there was no significant difference in the usage of the recounter function between the American sub-corpus and the Indonesian sub-corpus. The examples of each function are elaborated as follows.

(3)   Often, <u>we see</u> that all patients diagnosed with b-thalassemia/HbE automatically receive transfusion, whereas in reality the spectrum of the disease is variable, and they do not always require transfusion. (MJI 10 – *we* 1 – REP 1)

Example (3) belongs to the representative function since the writers here try to represent the readers' background knowledge and ability to easily get into the arguments (Kuo, 1999). Recalling the readers' background knowledge makes it easier for the writers to state their arguments.

(4)   The evidence reviewed by the ACIP and the additional studies <u>examined in our supplemental review</u> support national recommendations for HPV vaccination, particularly for early adolescents. (CA 10 – *our* 3 – GUI 1)

Example (4) belongs to the guide function as the pronoun *our* in the sentence "indicates move and topic boundaries and intra-textual reference" (Dontcheva-Navrátilová, 2013, p. 18). The intention of the writers here is to point out to the readers the part of the research article that discussed the supplemental review.

(5)   <u>In this article, we augment</u> the existing literature by presenting estimated counts of new lymphoid neoplasm cases by WHO subtype for 2016 as well as updating lymphoid neoplasm incidence rates using US data that are more comprehensive than those used in previous publications. (CA 9 – *we* 6 – ARC 2)

Example (5) indicates the architect function since the pronoun *we* in the sentence outlines the textual structure of a particular part of the research article. The writers here organize the materials of the research article so that the readers would understand its organization.

(6)   <u>We used</u> the Borg scale and the Borg CR-10 scale, which consisted of rating perceived exertion (RPE), Borg scale dyspnea index (BSDI), and leg fatigue (LF) parameters. (MJI 3 – *we* 3 – REC 3)

Example (6) is categorized as the recounter function as the pronoun *we* in the sentence describes one of the steps of research process.

(7)   <u>In the Wouters et al</u>, intervention in the aquatic exercise group subjects only performed walking exercises for six weeks <u>meanwhile in this study we have used</u> ankle weights for eight weeks. (MJI 3 – *we* 6 – OPI 1)

Example (7) indicates the opinion-holder function as the pronoun *we* in the sentence represents the writers in sharing their attitude in the research process with regard to the previous attitude proposed by other people.

(8)   In the course of our screening program of the anti-HCV activities of Indonesian medicinal plants, <u>we observed</u> the potential of the

methanol crude extract and butanol fraction from the leaves of *A. pauciflorum* as anti-viral activities against HCV. (MJI 8 – *we* 4 – ORI 1)

Example (8) belongs to the originator function since the pronoun *we* in the sentence also holds the function of the writers as the ones who have a claim to the original finding and idea of the research. The expression *we observed* means that the writers have found a new discovery from their research.

CONCLUSION

The present research has been an attempt to meet two objectives: (1) to identify the first-person pronouns used to express authorial presence in English research articles in medicine written by American and Indonesian authors and (2) to examine the discourse functions of the first-person pronouns in these research articles. As for the first objective, the results show that *we* is the most frequently used first-person pronoun across the sub-corpora. In contrast, *us* is rarely used in the overall research articles.

In relation to the second objective, the findings show that the recounter function is the most frequently found in overall RAs. Meanwhile, the representative function is the least employed in the corpus. The high frequency of recounter function might be influenced by the writers' role as the ones who have done the research process. The writers conduct various steps of the research process since the article is a report of empirical research results. The absence of the architect function in the Indonesian sub-corpus might be attributable to the objectifying of knowledge (Tang & John, 1999). The writers tend to use other lexical and syntactic choices instead of first-person pronouns. The same thing might also be the reason behind the absence of the representative function in the American sub-corpus.

The comparisons between the American and Indonesian authors in terms of the use and the discourse functions of first-person pronouns have been evaluated by chi-square tests. The results of the chi-square tests show no significant differences between the American sub-corpus and Indonesian sub-corpus. It can also be assumed that the authors are on the same level of expertise since the journals chosen for both sub-corpora must be Scopus-indexed. The authors from these reputable journals are assumably having the same level of proficiency as it is difficult for journal articles to be recognized internationally. In doing so, Indonesian authors here might learn from native speakers.

The present research only considered the use of first-person pronouns and the functions of these first-person pronouns in English research articles in medicine written by American and Indonesian authors. Authorial presence might be expressed with other lexical and syntactic items aside from the use of first-person pronouns. The present research has a limitation in the data set as the data set was not large enough to discern any significant difference. Thus, the present research suggests that further research needs a larger data set to determine whether there is a significant difference in the functions of authorial self-reference since the results might differ. Besides, the limited number of authorial presence studies in English research articles written by Indonesian authors could be considered the main topic to be investigated in future research.

REFERENCES

Chavez Munoz, M. (2013). The "I" in interaction: Authorial presence in academic writing. *Revista de Lingüística y Lenguas Aplicadas*, *8*(0). https://doi.org/10.4995/rlyla.2013.1162.

Dontcheva-Navrátilová, O. (2013). Authorial presence in academic discourse: Functions of author-reference pronouns. *Linguistica Pragnensia*, *3*(1), 9–30.

Filimonova, E. (2005). Clusivity cross-linguistically: Common trends and possible patterns. In E. Filimonova (Ed.), *Clusivity: Typology and case studies of the inclusive-exclusive distinction* (Vol. 63, pp. 399–424). John Benjamins Publishing Company.

Hartwell, L., & Jacques, M.-P. (2014). Authorial presence in French and English: "Pronoun + Verb" patterns in biology and medicine research articles. *Discours*, *15*. https://doi.org/10.4000/discours.8941.

Harwood, N. (2005a). 'I hoped to counteract the memory problem, but I made no impact whatsoever': Discussing methods in computing science using I. *English for Specific Purposes*, *24*(3). https://doi.org/10.1016/j.esp.2004.10.002.

Harwood, N. (2005b). 'We do not seem to have a theory … The theory I present here attempts to fill this gap': Inclusive and exclusive pronouns in academic writing. *Applied Linguistics*, *26*(3). https://doi.org/10.1093/applin/ami012.

Hryniuk, K. (2018). Expressing authorial self in research articles written by Polish and English native-speaker writers: A corpus-based study. *Studies in Second Language Learning and Teaching*, *8*(3). https://doi.org/10.14746/ssllt.2018.8.3.5.

Hyland, K. (2001). Humble servants of the discipline? Self-mention in research articles. *English for Specific Purposes*, *20*, 207–226.

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). https://doi.org/10.1177/1461445605050365.

IBM Corp. (2017). *IBM SPSS Statistics for Windows* (25.0). IBM Corp.

Kim, E. (2015). Quantitative evidence on the uses of the first person pronoun (*I* and *We*) in journal paper abstracts. *Journal of the Korean Society for Information Management*, *32*(1). https://doi.org/10.3743/KOSIM.2015.32.1.227.

Kuo, C.-H. (1999). The use of personal pronouns: Role relationships in scientific journal articles. *English for Specific Purposes*, *18*(2), 121–138.

Poudat, C., & Loiseau, S. (2005). Authorial presence in academic genres. In E. Tognini-Bonelli & G. del Lungo Camiciotti (Eds.), *Strategies in academic discourse* (Eds., pp. 51–68). John Benjamins.

Scott, M. (2008). *WordSmith Tools* (5.0). Lexical Analysis Software.

Tang, R., & John, S. (1999). The "I" in identity: Exploring writer identity in student academic writing through the first person pronoun. *English for Specific Purposes*, *18*, S23–S39.

Vassileva, I. (1998). Who am I/who are we in academic writing? A contrastive analysis of authorial presence in English, German, French, Russian and Bulgarian. *International Journal of Applied Linguistics*, *8*(2), 163–190.

Vladimirou, D. (2007). "I suggest that we need more research": Personal reference in linguistics journal articles. In C. Gabrielatos, R. Slessor, & J.W. Unger (Eds.), *Lancaster University postgraduate conference in linguistics and language teaching* (pp. 139-157). Lancaster University.