An Analysis of Interactional Metadiscourse Markers on COVID-19 Vaccine Hesitancy Op-ed Articles

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Abstract

Being one of the hardest hit in Southeast Asia by the COVID-19 pandemic, the Philippines considers vaccinations to control the growth of the pandemic; however, past issues with vaccines make it difficult for the country to suppress the pandemic. Adopting the framework of Hyland (2019) and Hyland & Tse (2004), this study analyzed the interactional metadiscourse markers in 20 COVID-19 vaccine hesitancy op-ed articles from online Filipino news sources which revealed attitude markers, engagement markers, and hedges to be more frequently used than boosters and self-mentions. Although the subcategories of the framework's model varied in frequency, the rhetorical nature of op-ed articles were found to be strong and consistent due to the collective culture of the context based on the established discourse between the writer and reader. Comparison of articles from different contexts is recommended to understand differences in rhetorical techniques used in a particular issue.

Keywords: *metadiscourse, op-ed, opinion, editorial, COVID-19, vaccine hesitancy*

1. Introduction

Public communication in the time of the Coronavirus disease 2019 (COVID-19) pandemic is considered as vital, particularly in the field of providing factual information through news reports and promoting discourse engagement to the public through opinions and editorials (op-ed), whether in print or digital. As an emerging issue in society, issues that surround the COVID-19 pandemic (i.e. government response, vaccinations) have been evident in various op-ed sections of news outlets in the aim of shaping public opinion (Coppock et al., 2018; Sukma & Sujatna, 2014).

One of the issues that would draw discourse engagement is the issue on vaccine hesitancy. Although the concept is evident in different parts of the world, the matter has resurfaced in the Philippines due to the COVID-19 pandemic. As a reemerging issue, op-ed articles in various news outlets have provided insights, while some have used it for persuading or convincing (van Dijk, 1988) the public to get vaccinated. Likewise, Hyland (2019) explains that writers who aim for persuasive goals engage in metadiscourse. Consistent with this purpose in writing, Sukma & Sujatna (2014) characterizes op-ed writers to possess outstanding ability in providing striking content while being able to develop rapport with the reader, which in turn delivers easier ways of attaining rhetorical goals; however, the focus of metadiscourse studies often revolve on academic and professional texts as Afiqah & Abdullah (2020) considered this gap in their study. Likewise, more emphasis on metadiscourse features is intended to be understood in op-eds in online news sources.

According to the World Health Organization (2019), vaccine hesitancy continues to be a public health issue, as it continues to be one of the bigger threats to global health. Given the global health crisis that the world faces due to COVID-19, the process of vaccine development has been fast-tracked with the help of technology and international cooperation; however, people in developing countries like the Philippines continue to develop a sense of distrust in vaccines, thus, making the aim of achieving herd immunity a tougher challenge. In response, experts continue to write about issues on vaccines (i.e., vaccine hesitancy) through op-ed articles as a form of invitation for the public to engage in discourse and more importantly of encouraging people to reevaluate their beliefs over vaccines and get inoculated. Moreover, rhetorical language use would require deeper understanding of how such language features are used to solve existing social issues, particularly on op-ed articles which are widely accesible due to its digital format. Adopting Hyland's interpersonal metadiscourse model, this study seeks to analyze the interactional metadiscourse markers in COVID-19 vaccine hesitancy op-ed articles in the Philippines.

1.1. Theoretical Framework

First coined by Zelig Harris in 1959 and known to have been categorized in different models by Vande-Koople, Crismore, and Williams, metadiscourse is defined as the words or terminologies used that assist the writer in conveying and assist the reader in understanding the views in the discourse as a community. It is also the approach where writers find themselves interacting with their readers (Afiqah & Abdullah, 2020; Amiryousefi & Rasekh, 2010; Hyland, 2017, 2019; Hyland & Tse, 2004).

Although there are broad approaches when applying metadiscourse, the model of Ken Hyland has been extensively applied in various studies (Wei et al., 2016). Hyland's metadiscourse model is categorized into two resources, namely, interactive and interpersonal, and further subcategorized.

Interactive resources refer to the features that organize information to readers in a coherent and convincing manner (Hyland, 2019; Hyland & Tse, 2004), considers the readers' knowledge, and assesses what the readers can gather from the text (Wei et al., 2016). These resources are similarly defined by Halliday & Hasan (1976) as 'texture' in text, where linguistic features provide links to create the total unity of a text. Moreover, these resources are subcategorized into five: transition markers consisting of conjunctions and adverbials that help readers to interpret connections in text; frame markers which monitor the order of arguments, signal text boundaries, announce discourse goals, and provide explicit additive relations; endophoric markers which are intra-textual references used as guide for readers for better understanding; evidentials which refer to the ideas represented in other sources; and code glosses which add information through elaboration and examples. Examples of these subcategories are found in Table 1.

Table 1

Interactive model of metadiscourse (Hyland, 2019; Hyland & Tse, 2004)

Interactive	Help to guide the reader through the text	Resources
Transition markers	express relations between main clauses	*in addition; but; thus; and*
Frame markers	refer to discourse acts, sequences, or stages	*finally; to conclude; my purpose is*
Endophoric markers	refer to information in other parts of the text	*noted above; see Figure ? in section 2*
Evidentials	refer to information from other texts	*according to X; Z states*
Code glosses	elaborate propositional meanings	*namely; e.g.; such as; in other words*

On the one hand, interactional resources illustrate that the writer opens opportunities to the readers inviting them to actively collaborate in the discourse by setting up the writer's views on the proposition and the reader as basis (Hyland, 2019; Hyland & Tse, 2004; Wei et al., 2016). Sukma & Sujatna (2014) adds that this is the discourse platform where good rapport between writer and reader is developed. This resource is subcategorized into five: hedges which present views as opinions than factual information in order to entice negotiation or challenge from the readers; boosters which narrow the writer's position to hook the readers into the view of the writer; attitude markers which indicate the writer's emotions to the propositions; self-mentions which explicitly refer to the writer's presence and role; and engagement markers which are used to invite readers to actively take part in the discourse in order to shape readers into a shared collective knowledge of the text using potential questions that may arise and rhetorical questions. Examples of these subcategories are found in Table 2.

Table 2

Interactional model of metadiscourse (Hyland, 2019; Hyland & Tse, 2004)

Interactional	Involve the reader in the text	Resources
Hedges	withhold commitment and open dialogue	*might; perhaps; possible; about*
Boosters	emphasize certainty or close dialogue	*in fact; definitely; it is clear that*
Attitude markers	express writer's attitude to proposition	*unfortunately; I agree; surprisingly*
Self-mentions	explicitly refer to author(s)	*I; we; my; our*
Engagement markers	explicitly build relationship with reader	*consider; note; you can see that*

To further emphasize which linguistic features and their subclassifications are to be defined in texts, Table 3 lists the different subcategories of the interactional model, including examples for each.

Table 3

Interactional model of metadiscourse and their subcategories (Hyland, 2005, as cited in Ghahremani Mina & Biria, 2017)

Interactional	Subcategory	Examples
Hedges	Epistemic verbs	*may, might, it must be…*
	Probability adverbs	*probably, perhaps, maybe*
	Epistemic expressions	*unlikely, unclear*
Boosters	Emphatics	*certainly, demonstrate, really*
	Amplifying adverbs	*totally, always in fact, definitely*
	Cognitive verbs	*it is clear that…*
Attitude markers	Deontic verbs	*have to, need to, we must know…*
	Attitudinal adverbs	*unfortunately, remarkably*
	Attitudinal adjectives	*it is absurd…, it is surprising…*
	Cognitive verbs	*I feel…, I think…, I agree…, I believe…*
Self-mentions	First-person pronouns	*I, my, me, mine*
Engagement markers	Second-person pronouns	*you, your, our, we*
	Interjection	*by the way…, you may notice…*
	Imperative verbs	*notice that…, identify…*
	Necessity modals	*must, have to, should*

Because metadiscourse is associated with the interaction between writer and reader, particularly defined as a form of social engagement (Amiryousefi & Rasekh, 2010), its intentions are relative to rhetoric. Sukma & Sujatna (2014) state that rhetorical goals become easier to attain when engagement between writer and reader are developed. Op-ed articles, for instance, provide the reading public positions about pertinent and complex social issues, which by feature leads readers into understanding tackled issues in the lens of the writer, as it contributes to the credibility appeals (ethos) where the writer's abilities are demonstrated; affective appeals (pathos) where the writer expresses the significance of the matter in the text to the reader's context; and rational appeals (logos) where ideas and arguments are connected (Hyland, 2019). Therefore, the manner in which op-ed article writers reach out to their readers, as a way of connecting with the public, is similar to the importance of the communicative purpose of metadiscourse (Fu and Hyland, as cited in Afiqah & Abdullah, 2020). Hence, this establishes the significance and connection of metadiscourse and rhetoric in writing.

By nature, op-ed articles promote public discourse. Although it was originally intended to boost readership, the engagement of the readers towards the discourse has become more evident (Coppock et al., 2018; Sukma & Sujatna, 2014). According to van Dijk (1988), such articles are persuasive in purpose, thus, metadiscourse markers function throughout these texts in achieving their objectives, and a higher sense of engagement may be possible due to the social contexts that both writer and reader belong to.

1.2. Vaccine hesitancy

Vaccine hesitancy refers to a situation where people delay or refuse safe inoculation despite vaccine availability (Fatima & Syed, 2018; Sallam, 2021; World Health Organization, 2019). In 2019, the World Health Organization (2019) listed vaccine hesitancy as one of the 10 threats to global health alongside air pollution and climate change, noncommunicable diseases, influenza, vulnerable environments, antimicrobial resistance, highly infectious pathogens (e.g. Ebola), weak healthcare systems, Dengue, and HIV/AIDS; further, it remains as a hindrance in attaining vaccination goals (Dror et al., 2020).

Relatively, this threat exists in various parts of the world. For example, Khan et al. (2020) details Pakistan's ordeals with mass vaccinations as far as its experiences with polio vaccination are concerned and attributes these threats to various conspiracy theories and links to religious beliefs. Similarly, the study of Khubchandani et al. (2021) showed 52% of Americans were highly likely of getting inoculated, while the remaining percentage were either unsure or hesitant in receiving vaccines, with the black population showing more hesitance towards vaccines; hence, it is similar to the study conducted by Razai et al. (2021) where it was found out that ethnic minority groups (i.e. black, Pakistani, Bangladeshi) in the United Kingdom showed high hesitancy percentages than those coming from a white ethnic background.

Dror et al. (2020), Razai et al. (2021), and Sallam (2021) attribute the causes of vaccine hesitancy to vaccine safety (i.e., side effects and long term effects to health) and lack of trust in vaccines. Comparatively, the Philippines is one of the countries with resurfacing issues on vaccines. According to a Pulse Asia survey, 6 of 10 Filipinos are unwilling to get vaccinated, citing effectivity and safety of the vaccines and non-essentiality of the vaccines in combatting COVID-19; also, the country was among four other nations (i.e., Afghanistan, Indonesia, Pakistan, and South Korea) to have confidence in vaccines plunge between September 2015 and December 2019 (de Figueiredo et al., 2020; Magsambol, 2021). Even though the country was one of those leading in vaccine confidence prior to 2015, the significant trust drop is attributed to the controversy caused by safety concerns over Dengvaxia—the world's first developed vaccine against Dengue (Fatima & Syed, 2018), where the death of those inoculated was linked to the vaccine and nationally sensationalized.

The issue on vaccine hesitancy resurfaced during the COVID-19 pandemic with similar concerns. Currently, the pandemic has led to more than two million cases in the Philippines, one of the highest in terms of active cases in the entire Southeast Asian region. Combined with difficulties in containing the virus and economic challenges brought by the pandemic, the Philippines turns to vaccination as a resort to ending the outbreak; however, it also combats vaccine hesitancy from its population. To eliminate vaccine hesitancy in the country, health experts, through mass and social media, provide information drives to persuade the public about the safety and benefits of vaccines, including perspectives of reputable personalities in written media (i.e., op-ed articles). Through such mechanisms, the public is also actively engaged in discourse to evaluate and further decide on whether to get vaccinated or not.

2. Methods

According to Gee (2005), discourse analysis shows how language is used in both social and cultural contexts. Using Ken Hyland's framework on metadiscourse, specifically the interaction model, this study employed discourse analysis to analyze the interactional metadiscourse markers in COVID-19 vaccine hesitancy op-ed articles within the Philippines' social and cultural contexts.

Twenty op-ed articles with a total of 14,007 words written in English about vaccine hesitancy in the Philippines, published online from October 2020 to March 2021, were manually collected from leading online Filipino news sources. The purposive selection of articles followed the following guidelines: first, the articles must have been written within the last six months from the date of collection; second, the articles must be written in English and must come from online Filipino news sources; lastly, the articles should be centered on the issue of vaccine hesitancy in the Philippines.

Selected articles were anonymized and collated into PDF copies for individual screening and analysis. Each article was codenamed according to the format "OE-n" (e.g., OE-1, OE-2; OE stands for 'op-ed') in random order. Adopting the interactional model of metadiscourse (Hyland, 2019; Hyland & Tse, 2004), the resources and their subcategories (see Tables 2 and 3) that illustrate interaction with the readers were highlighted and analyzed. Further, common observations across the data set were also taken into consideration for deeper understanding of the discourse construct in the given context.

After the manual and individual screening and analysis of the data set, frequency and percentage of the interactional metadiscourse markers were analyzed using Microsoft Excel 365.

3. Results

3.1. Frequency and percentage of interactional metadiscourse markers

Table 4 shows that the most frequent interactional metadiscourse markers came from attitude markers, specifically the significant use of attitudinal adjectives, followed by engagement markers, specifically second-person pronouns, then the use of hedges, particularly epistemic verbs; while the use of boosters and self-mentions were ranked as the two less frequent in the data set.

Table 4

Frequency and percentage markers in the data set

Subcategory	Frequency	Percentage
Hedges		
Epistemic verbs	85	13.80%
Probability adverbs	7	1.14%
Epistemic expressions	1	0.16%
Total	93	15.10%
Boosters		
Emphatics	30	4.87%
Amplifying adverbs	22	3.57%
Cognitive verbs	2	0.32%
Total	54	8.77%
Attitude markers		
Deontic verbs	63	10.23%
Attitudinal adverbs	35	5.68%
Attitudinal adjectives	140	22.73%
Cognitive verbs	10	1.62%
Total	248	40.26%
Self-mentions		
First-person pronouns	59	9.58%
Total	59	9.58%
Engagement markers		
Second-person pronouns	147	23.86%
Interjection	0	0.00%
Imperative verbs	8	1.30%
Necessity modals	7	1.14%
Total	162	26.30%
Overall	**616**	**100.00%**

Among the five subcategories, the use of attitude markers was the most prevalent with 40.26% of the data set's overall metadiscourse markers. These markers were written to indicate the writer's affective attitude in the text towards the readers (Sukma & Sujatna, 2014). According to Fuertes-Olivera, et al., (2001) as cited in Amiryousefi & Rasekh (2010), the illustration of the writer's attitudes in the text is significant in building the engagement with their readers. Op-ed writers usually present propositions that often aim to persuade its readers. Hyland (2019) supports this by describing metadiscourse to be relative to rhetoric.

Moreover, the use of engagement markers in the data set proves that op-ed article writers consider their engagement with their readers as vital, because metadiscourse, in principle, is considered interpersonal (Hyland, 2019). Hence, the use of engagement markers serves as an explicit feature that the writers use in either involving the readers into the discourse or involving himself/herself into the context of the discourse. Relatively, the use of hedges is the third most frequent. The use of such markers, together with the intention of using engagement markers,

invites the readers to negotiating the written proposition in the article, thus, welcoming the involvement of the readers into the discourse.

The second least frequent was the use of self-mentions. One distinct observation from the data set was that the more engagement markers in an article, the fewer the self-mentions; likewise, when there are more self-mentions, there are fewer engagement markers.

Table 5

Comparison of frequency and percentage in self-mentions and engagement markers

Subcategory	OE-8	OE-11
Self-mentions	22 (56.41%)	5 (11.11%)
Engagement markers	3 (7.69%)	14 (31.11%)

For example, Table 5 shows the comparison of frequency and percentage in self-mentions and engagement markers. In OE-8, self-mentions were higher than those in OE-11, while engagement markers were higher in OE-11 than those in OE-8.

Table 6, however, shows that there are instances where self-mentions become entirely absent in some articles, with the writer favoring the use of engagement markers to effectively connect with the readers. Although both subcategories of interactional metadiscourse explicitly address readers, Filipino op-ed article writers on COVID-19 vaccine hesitancy collectively immerse themselves as one community (Wang & Liu, 2010) with their readers.

Table 6

Absence of self-mentions vs. engagement markers

Article	Self-mentions	Engagement markers
OE-4	0 (0.00%)	10 (31.25%)
OE-7	0 (0.00%)	26 (54.16%)
OE-10	0 (0.00%)	21 (34.43%)

Lastly, the least frequent was the use of boosters. The use of boosters is observed as a way to strengthen the evidence presented in the article in support of the central issue being discussed; whereas attitude markers provide the readers a secondary lens in view of the issue, which was deemed more important, so that the readers would become engaged in discourse or negotiate with the writer concerning the proposition in the article.

3.2. Hedges

The use of hedges in the data set were dominated by epistemic verbs. Writers use epistemic verbs to express a degree of confidence in their propositions (Cornillie, 2009), which is subject to negotiation by readers by engaging into the discourse.

In the context of COVID-19 vaccine hesitancy, the writers presented recommendations in addressing the issue without finality, considering that the readers are to negotiate these recommendations in the discourse. For instance, the first two excerpts use an epistemic verb to

suggest a possible solution to counter vaccine hesitancy, considering that it is a barrier in attaining herd immunity.

- *Likewise, Asean **should** capitalize on its existing capacities; the region hosts two of the world's top 20 largest vaccine exporters—Indonesia and Singapore.* (OE-4)
- *Risk communication and community engagement **will** be very important to build trust and confidence.* (OE-12)

Based on the social context, the writer hypothesizes a probable instance if a solution to counter vaccine hesitancy and achieve herd immunity is made. Since this is the writer's belief, this is open for a counterclaim by the readers who might have opposing beliefs or support in the event of a similar belief. Further, in the third excerpt the belief in the necessity of getting vaccinated is highlighted as an advantage by the writer.

- *Following this viewpoint, it **would** appear that whatever the national government and local governments are doing now, they are merely going out of their way in the performance of public service.* (OE-7)
- *This **would** make the vaccination effort an act of generosity on the part of government.* (OE-7)
- *Businesses that can assure their customers that they will be safe because all their employees are vaccinated **will have** an edge over businesses that don't.* (OE-19)

The hedges in the op-ed articles on COVID-19 vaccine hesitancy definitely represent a rhetorical aim by implicitly asking the readers to get themselves vaccinated. Although writers open the discourse with the readers, the statements where there are open fields of negotiation are only exclusive to the context of how to eliminate vaccine hesitancy in the social and/or cultural context. This observation supplements the principle in metadiscourse as rhetorical in nature (Hyland, 2019; van Dijk, 1988) through interaction to build interpersonal bonds with the readers in negotiating more possible solutions and claims which would eventually lead the readers to have themselves ditch their hesitance in vaccines (Amiryousefi & Rasekh, 2010; Sukma & Sujatna, 2014).

3.3. Boosters

Most boosters in the data set are fairly distributed between emphatics and amplifying adverbs, while the category of cognitive verbs also has its own fair share of markers. In this context, claims and propositions are either emphasized, or they forcefully highlight the clarity of the proposition within the context.

The situation of the vaccine hesitancy is not new in the social context; both the writers and the readers know this. In the first excerpt, the writer forcefully emphasizes the issue of vaccine hesitancy, while the second recalls with the readers the amount of people who have died from the disease, probably stressing the importance of getting vaccinated in order to not expand the existing number. Both of these excerpts indicate that the writer and reader dwell in the same issue and context of a particular community by having the same issue and having the same threats.

- ***This is a clear indication*** *that vaccine hesitancy suppressed the desire for new vaccines, for new innovations and healthier solutions.* (OE-10)

- ***It's reported*** *that over 12,000 Filipinos have died from COVID-19, probably much more.* (OE-20)

Due to the known circumstances of the situation where the writer and reader dwell in, the following excerpts are concerned with directly addressing the readers to have themselves vaccinated. Since all come from the same context, the writer carries a significant obligation or responsibility as stated in his/her pleas:

- ***As I have stated time and again****, there is a need to mass-vaccinate in order to create herd immunity that would enable everyone to get back to their old lives, while practicing the minimum health protocols, and for the country to once again open up its economy.* (OE-6)
- *In every forum available, including interviews and in my weekly live broadcasts, **I repeatedly call on the public***, *specially [sic] Manilans, to avail of the free vaccination being offered by the Manila city government.* (OE-6)
- ***Let me reiterate*** *that the benefits of getting vaccinated far outweigh the losses and anything above zero is positive.* (OE-6)

The elaboration of such information from the initial excerpts justifies the association of writers and readers in the same context, most especially the pleas of the writer in OE-6. As rhetorical by nature (Hyland, 2019; van Dijk, 1988), the metadiscourse markers in op-ed articles presented in this subcategory continue the aim of persuading the readers to get vaccinated, most especially in the last three excerpts, where it has been explicitly mentioned. Moreover, this agrees with the definition of a discourse community by Swales (1990), as cited in Amiryousefi & Rasekh (2010), where the writer should possess a mechanism in publicly communicating with the members of a community.

3.4. Attitude markers

Attitude markers refer to the writers' feelings and judgments towards the proposition (Ghahremani Mina & Biria, 2017; Hyland, 2019; Hyland & Tse, 2004). Among the five subcategories of the interactional metadiscourse model, this provides the most frequent markers in the entire data set. Perhaps, this is the strongest that a writer may use in a rhetorical paper. In order to persuade readers, there has to be an expression of emotion to convey the degree of attitude of the writer towards the proposition.

Using attitudinal adjectives and adverbs, the writer possesses the ability to describe a proposition, phenomenon, or claim in the social context where COVID-19 vaccine hesitancy is a central issue up to a certain degree. The following excerpts clearly describe the writer's description on these matters, and at the same time they convey emotion to successfully persuade the readers as part of the same social and/or cultural context.

For instance, the first excerpt expresses the writer's concern in achieving herd immunity. Assuming that the desire of the writer is the hesitancy of the people in getting vaccinated, the readers are explicitly told that there has to be something done to flip the situation in the context. In the second excerpt, the writer gives an unfortunate reality in the social, possibly intersocial, context, further citing the need of getting vaccinated, not only against COVID-19, but also for existing illnesses where vaccinations are the only way to prevent severe and critical illnesses; therefore, implicitly mentioning that vaccination is important and should be taken when offered.

The third excerpt openly discredits the cause of the issue in the context wherein the writer describes the issue as 'foolish' or 'senseless'.

In terms of persuasion, the writers' descriptions already possess emotional appeal for readers to potentially change their hesitant views on vaccines. These descriptions, as interactional metadiscourse markers, do not only serve for the sake of stylistics, but they serve to intentionally put the minds of readers in favor of vaccines.

- ***This is troubling news**, because for the vaccination program to work, it requires the participation of a majority of the population so herd immunity can be achieved.* (OE-19).
- *Unfortunately, because of the very poor handling of the Dengvaxia issue, today the Philippines is reputed to be **the most vaccine-hesitant country in the world**, causing the resurgence of polio, measles, pertussis, and other preventable childhood infections, and the very low percentage of Filipinos wiling to get vaccinated for COVID-19.* (OE-11)
- *This, however, was blown up into a **wild claim** that Dengvaxia was killing kids.* (OE-20)

On the one hand, deontic verbs allow the writer to express necessity or possibility based on their desire. These markers are mostly seen when writers provide a necessary or possible recommendation they deem fit for the context. In the first excerpt, the writer does not explicitly mention what is necessarily desirable for the context; however, it leaves the description that the current efforts in promoting vaccinations may not be enough or not strong enough. As potentially desired responses in the first excerpt are noticed, the next five excerpts provide a strong necessity in order to achieve such desires, citing the non-negotiable basic needs for living; for instance, the need to travel, the need to get a job, and the need for those who are in frontline jobs to interact with different people physically in order to deliver services efficiently. Through this, most readers might deem it very important to get a vaccine since their lives would depend on it.

- *We **have to** do better.* (OE-17)
- *The public **should** also be clearly informed on the government approaches like text messages, telephone calls, mobile applications as reminder platforms and for immediate reporting of adverse events after vaccination.* (OE-5)
- *For the vast majority of Filipinos, vaccination is going to be a necessity, because the economy **needs to** restart, businesses **need to** operate regularly, people **need to** make a living, and customers **will** require services.*
- *Those working as frontliners (health services, military, police) will all **have to** be vaccinated; the nature of their job requires it.* (OE-19)
- *With debates about so-called "vaccine passports," such a requirement **will mean** you don't get much of a choice if your work requires you to travel.* (OE-19)
- *Finally, the vaccines **must** also be accessible to all those who need them, at affordable prices, but preferably for free.* (OE-19)

On a rhetorical basis, the use of attitude markers in op-ed articles may bring significance to vaccine hesitant readers, which in return makes them decide to get vaccinated. Similar to the previous two subcategories of interactional metadiscourse markers, the art of persuasion continues to be intact in op-ed articles in order to successfully persuade readers into getting vaccinated against COVID-19.

3.5. Self-mentions

The use of self-mention markers indicate the writer's direct address towards the readers as if they knew each other personally. As the only subcategory with only one distinct feature, it can be flexible in addressing different statements towards readers without compromising the rhetorical nature of metadiscourse.

For example, the following statements directly persuade the readers to get vaccinated. Behind these statements are a sense of comfort anchored to the obligations and responsibility that the writer pledges to be loyal to.

- *Too, **I urge** everyone to avail of whatever vaccines may come our way, because the benefits of getting the vaccine far outweigh the disadvantages.* (OE-6)
- ***I** personally **assure** that only those vaccines that have been duly approved by our health authorities and certified as safe and efficient will be used in the mass vaccination in Manila.* (OE-6)

The excerpts below show a writer's anecdote towards vaccines in general. First, the writer explains his/her experience in acquiring illnesses that can be prevented with getting a vaccine shot. Second, the writer appeals to the readers to remove the factor of politics when dealing with the choice of getting vaccinated or not. Although the thoughts are implicit, the writers mention to the readers to change their views towards vaccines, as they protect people from viral infections and diseases, which may be contrary to their current context.

- ***I was confined** in the Georgetown University Hospital diagnosed with polio.* (OE-12)
- ***I realized that my vaccine hesitancy had been colored by my political journey** over the past several years.* (OE-8)

The use of first-person pronouns allows the writer to engage with the readers on a more personal level than how engagement markers are used by a writer in texts (i.e. second-person pronouns). As a persuasion mechanism, it helps the writer to persuade the readers in accepting vaccines on the basis of readers knowing his or her credentials. Clearly, the use of self-mentions does not only limit to the writer mentioning himself or herself in the text, rather it is also used as a tool to continue persuading the readers.

3.6. Engagement markers

As previously illustrated in Tables 5 and 6, engagement markers appear as the second most frequent metadiscourse marker in the data set. This is hypothesized due to the collectiveness of Asians compared to other cultures. Wang and Liu (2010) define collectivism as groups that tie individuals of common identity as one community. Further, Filipinos do likewise, specifically in written contexts.

Similar to self-mentions, the use of engagement markers collectively tie the writer and reader with the same intentions, thus, persuading the readers in the process. For example, the writer in the first excerpt collectively invites everyone to take part of the vaccination program of the government, assuming it as an urgent mission; on the other hand, the second excerpt calls on everyone for nation-building or community-building in the form of vaccination as a way to fulfill social responsibility.

- ***We need to vaccinate as many Filipinos as soon as possible*** *in view of the reported new variant which purportedly is more contagious.* (OE-9)
- ***We need solidarity and cooperation*** *if we are to win the battle against this invisible and virulent enemy.* (OE-9)

Assuming that the readers take part in the collective missions set by the writer, the writer gives instructions to the readers to collectively accomplish a common goal—having people vaccinated within the context.

- ***Identify*** *those people at the local level.* (OE-18)
- ***Reach out*** *first to the internal stakeholders—the staff in city hall, the barangay leaders, the health workers in the health center.* (OE-18)

Engagement markers in COVID-19 vaccine hesitancy op-ed articles provided the collective effort by the writer and reader to achieve a common goal. In terms of persuasion, it can be effective if the goals on these collective efforts are clear, detailed, and achievable. Since they are tied to a collective group, it will also become easier for these intentions to come into fruition if the factors of nation-building or community building and social responsibility are explicitly mentioned.

4. Discussion

According to Hyland (2019) and van Dijk (1988), metadiscourse is naturally rhetorical. By analyzing the interactional metadiscourse markers of the op-ed articles on COVID-19 vaccine hesitancy, the language used consistently retains its rhetorical nature, as each of the subcategories in the interactional metadiscourse model was able to produce its own ways of either implicitly or explicitly persuading the readers. The significant subcategories in this model were the use of attitude markers, engagement markers, and hedges as they were able to explicitly persuade the readers through various factors that affect the reader or the context (i.e., emotional appeal, interpersonal bonds, and nation/community-building). Likewise, boosters and self-mentions also provided a more personal and rhetorical interaction of the writer and the reader (i.e., bearing the responsibilities, giving assurances, and testimonials). Moreover, this study provided a more thorough understanding of how certain language features like metadiscourse markers, in general, are used in op-ed articles or at least in rhetoric in solving modern and existing social issues.

With the reemergence of vaccine hesitancy as a social issue in the middle of the COVID-19 pandemic, the importance of public communication is emphasized as a powerful tool. From desired recommendations as a collective group to openly describing propositions, phenomenon, or claim, their use strongly reflects the need of the context to counter this trend. As a response, experts and authorities have publicly expressed their stance towards the issue; more importantly on how it will be countered, especially now that the present context would need to achieve herd immunity to control the pandemic.

Overall, COVID-19 vaccine hesitancy op-ed articles were able to elaborate their stance towards COVID-19 vaccines to the readers. Most of the views expressed in the articles refer to the background of vaccines, in general, assurances of getting vaccinated, and the importance of getting vaccinated. A fairly-constructed and straightforward rhetoric was posed in the articles, thus, illustrating the necessity of getting vaccinated in the current context, which led to the strong persuasive nature of the articles. The strong rhetoric present in the articles, including the perceived

engagement of readers in the discourse, were set through the use of the interactional metadiscourse markers, most especially through attitude markers, hedges, and engagement markers.

Due to the limited data size, future research interests in metadiscourse concerning COVID-19 vaccine hesitancy, or vaccine hesitancy in general, can further expand to different contexts, possibly by comparing one context to another, for instance; American and Filipino, and so on, for better and deeper understanding of language use within the issue. Moreover, further research on the language use of different op-ed articles from varied sources that focus on a single social and cultural issue may be conducted to see if there are varying rhetorical techniques in op-ed articles according to issue.

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