

METADISCOURSE IN THE DIGITAL ACADEMIC POSTER: EXAMINING THE TEXTUAL AND VISUAL METADISCOURSE IN THE CONSTRUCTION OF PERSUASION

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ABSTRACT

The demand for 21st-century skills has transformed the education landscape, altering how we teach, learn, and assess, integrating digital platforms into these processes. This study analyses the use of metadiscourse devices in digital academic posters, with the primary objective of identifying both textual and visual metadiscourse devices employed in academic posters to construct persuasive messages. A corpus of 10 academic posters was extracted from virtual academic presentations by diploma students and analysed with a mixed-method research approach. Metadiscourse elements were analysed quantitatively to investigate the presence of visual metadiscourse. Drawing from Hyland's (2006) model of metadiscourse and Kumpf's (2000) visual metadiscourse, this study compared the use of these two distinct elements in academic posters and their combined effect on persuasion. The results revealed that interactive resources were more frequently used than interactional resources. Additionally, students frequently employed visual metadiscourse to enhance persuasiveness, albeit at varying levels of frequency and effectiveness. This

study highlights the importance of incorporating both textual and visual metadiscourse knowledge into academic curricula for effective organisation, engagement, and persuasion of readers.

Keywords: textual metadiscourse; visual metadiscourse; digital academic poster; persuasion

Introduction

Twenty-first-century skills are essential for learners to thrive in an increasingly competitive future job market and the challenges of globalisation. These skills encompass learning, literacy, and life skills, which equip learners to succeed in the complex context of the 21st century. Learning skills involve the ability to study, select, and reflect on one's learning process, while life skills prepare learners for future life challenges. Literacy skills are essential for understanding, evaluating, and using information across various digital media platforms. Given the demanding nature of 21st-century skills, traditional teaching and learning methods are no longer adequate. Therefore, assessments should also evolve to meet these demands (Saavedra & Opfer, 2012). Harnessing technology is an approach to enhance the professional development of students today.

Implementing effective assessments through digital platforms is particularly crucial in tertiary education settings. As a result, digital poster presentations have become a common form of assessment, especially for final-year students to showcase their work. Research has shown the practical benefits of posters in complementing students' presentations. Ilic and Rowe (2013) noted that posters follow the structure of research articles, containing essential sections like introduction, method, results, and discussion, which demonstrate student's mastery of specific subjects. Scholars like D'Angelo (2010) and Erren and Bourne (2007) maintain that these multimodal documents, combining textual and visual elements, not only capture the audience's attention but also inform and persuade readers. Despite the significance of posters in the academic setting, posters have received limited attention from researchers (D'Angelo, 2010).

Considering the importance of academic posters towards the audience, authors must tailor these multimodal documents to suit and facilitate the audience's understanding, schemata, and needs. Unfortunately, studies on the use of metadiscourse in academic posters remain scarce (D'Angelo, 2016a). Thus, this study examines the linguistic and visual metadiscourse in undergraduate students' academic posters.

Literature Review

Metadiscourse refers to the use of linguistic cues to organise information in the text and create a connection between the author and the readers. Hyland (2005) defines metadiscourse as "the aspects of a text which explicitly organise a discourse or the writer's stance towards either its content or the reader" (p. 14). Nevertheless,

metadiscourse does not construe a text’s propositional meaning or “communicative content of discourse” (Hyland, 2005, p. 38) of a text; instead, it is the “linguistic material in text, written or spoken, which does not add anything to the propositional content but that is intended to help the listener or reader organise, interpret and evaluate the information given” (Crismore et al., 1993, p. 40). Succinctly, metadiscourse focuses on linguistic elements used by the author to organise the text and to induce the reader's involvement with the text.

Table 1
Hyland's Taxonomy of Metadiscourse (2005)

Category	Function	Examples
Interactive	Guide the reader through the text	Resources
Transitions	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 on 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
Interactional	Involve the reader in the text	Resources
Hedges	withhold commitments and open dialogue	Might; perhaps, possible about
Boosters	emphasise 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	express reference to author(s)	I; we; my; me; our
Engagement markers	explicitly build relationship with reader	consider; note; you can see that

As shown in Table 1, Hyland’s metadiscourse model (2005) presents two categories that serve to connect the author, reader, and text: interactive and interactional resources. Interactive resources consist of transitions, frame markers, endophoric markers, as well as evidential and code glosses, which use linguistic cues to enhance the reader’s understanding of the texts. Accordingly, the interactional resource is used to help engage with the readers using hedges, boosters, attitude markers, self-mentions, and engagement markers.

Given that academic posters include visual elements, this study utilises Kumpf’s (2000) model of visual metadiscourse as shown in Table 2. Echoing the

linguistic metadiscourse, Kumpf (2000) notes the importance of visual metadiscourse as “authors have many necessary design considerations as they attempt to help readers navigate through and understand documents “(p. 401). Ten categories fall under the visual metadiscourse: first impression, heft, convention, chunking, external skeleton, consistency, expense, attraction, interpretation, and style (refer to the findings section for more details). Kumpf (2000) also states that visual metadiscourse can invoke persuasion “to the point where the presence and the intelligent use of the visual category please and entices the reader “(p. 419). Thus, the combination of these two models was selected to understand this study's metadiscoursal elements in the written documents.

Table 2
Kumpf's Visual Metadiscourse (2000)

Category	Function	Examples
First impression	Capture the audience's attention	font, typeface, styles
Heft	Describe the density of document	bulk, length, columns
Convention	Audience's expectation from the appearance of the document	format, spacing, citation
Chunking	Organisation of text on the document	gutters, columns
External Skeleton	Arrangement of the document based on genre	Introduction, Methodology, Results
Consistency	Coherent organisation of textual and visual elements in the document	cohere colour and design
Expense	Choices of materials of the documents	glossy paper, colours
Attraction	Ability to maintain the audience's attention	format, textual and visual elements
Interpretation	Guiding the audience to make sense of graphic	tables, photos, graphs
Style	Visual elements that complement the text	document design, template

Previous research has investigated metadiscourse not only in written communication such as undergraduate essays (Mohamed & Ab Rashid, 2017; Tan & Wong, 2014) and postgraduates' dissertations (Akoto, 2020; Navarro & Álvarez, 2022) but also in spoken communication such as lectures (Kashiha, 2022), campaign talk (Albalat-Mascarell & Carrió-Pastor, 2019) and business presentations (Kuswoyo & Siregar, 2019). The use of metadiscourse in digital communication has also been explored like request emails (Ho, 2018) and institutional responses in social media (Li, Cui, & He, 2020).

Early work on metadiscourse in the construction of persuasion focuses on linguistic realisations. Only a few studies have examined the use of metadiscourse in

multimodal documents such as in corporate annual reports (De Groot, Nickerson, Korzilius, & Gerritsen, 2015), community service announcements (Džanić & Berberović, 2021), and social media advertisements (Al-Subhi, 2022).

Methodology

This mixed-method study examined textual and visual metadiscourse elements in digital academic posters created by undergraduate students enrolled in an English professional communication programme. The content-based analysis was used to aggregate the metadiscourse elements as it allows researchers to test theoretical issues and to heighten the understanding of the data (Elo & Kyngäs, 2008). Figure 1 shows the conceptual framework of the study.

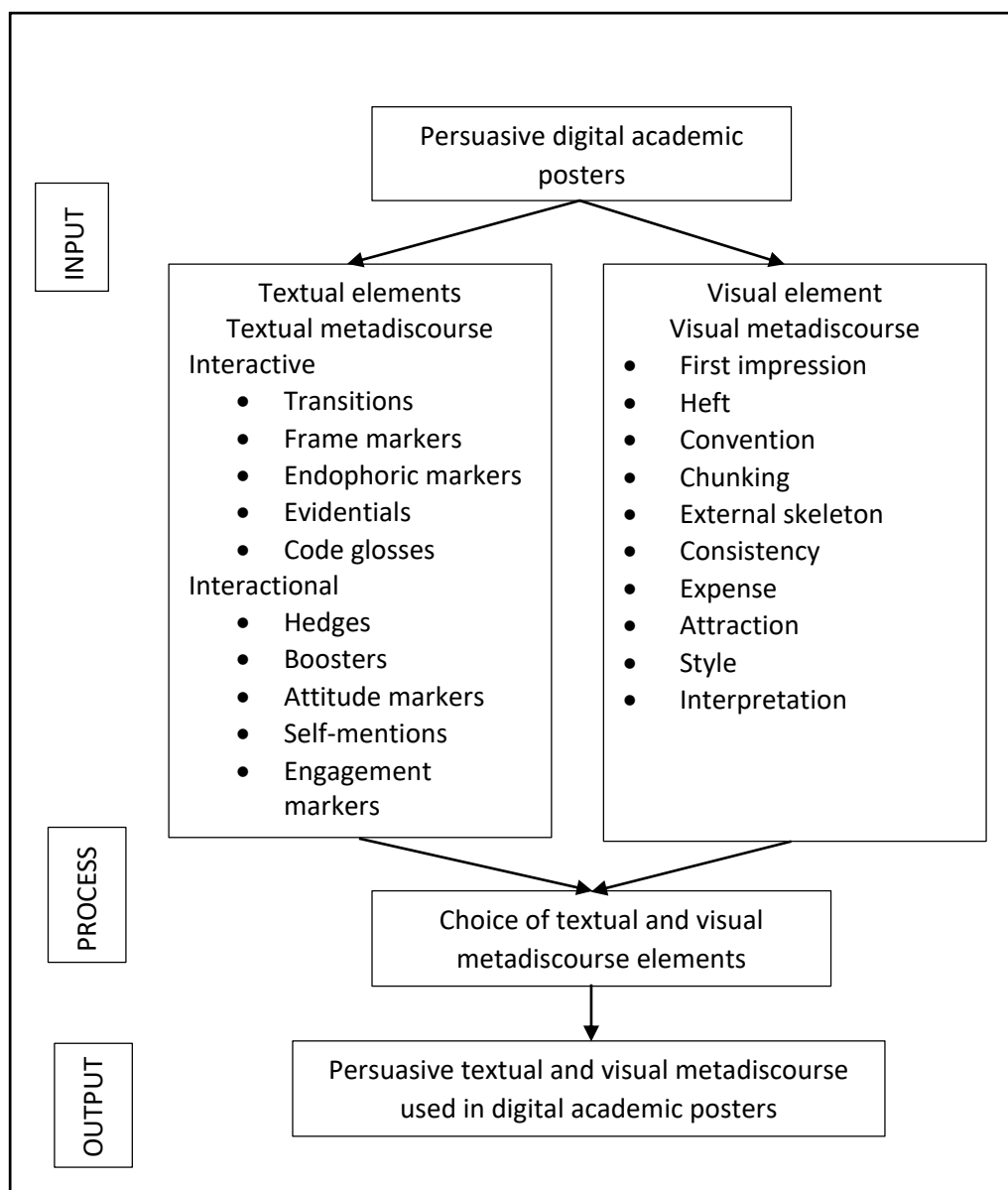
The present study analysed 10 digital academic posters that were selected to compare the use of two distinct elements of metadiscourse in the academic posters and the construction of visual metadiscourse in accompanying the textual element to achieve persuasion. These posters were prepared by students who were required to present final-year projects posters, covering project details, entrepreneurial opportunities, project development, and project outcomes. The assessment guidelines were provided in the first week of the semester, and students had approximately three to four weeks to produce an A0-sized poster with guidance from their supervisors.

All linguistic devices used in the academic posters were initially collected and converted into an electronic corpus. The linguistic metadiscourse markers were stored and generated 1,586 tokens. The textual metadiscourse was analysed quantitatively, where auto word-token calculation using Antconc software (Anthony, 2022) was utilised. The calculated words were compared to quantify the sub-categories and differentiate the pragmatic functions in context.

On the other hand, the visual metadiscourse was analysed qualitatively using ATLAS.ti software. The frequency for each sub-category of visual metadiscourse in the poster was recorded as a means to achieve persuasion. Analysis of the visual metadiscourse was done based on Kumpf's (2000) model of visual metadiscourse. Manual tagging of the visual metadiscourse was executed to identify the subcategories of visual metadiscourse and its frequencies. Once the occurrences of any visual metadiscourse have been identified, they are manually recorded in the software and reported.

The linguistic metadiscourse was identified and categorised according to Hyland's (2005) taxonomy of metadiscourse. At the initial stage, the linguistic markers in the corpus were compared against the 498 metadiscourse markers listed by Hyland (2005) and later expanded to all linguistic devices deemed fit in the context of the textual metadiscourse. Only sentences containing metadiscourse markers were analysed and classified according to the categories. Hyland's (2005) taxonomy of metadiscourse explains the relationship between the author, the reader, and the text through interactive and interactional resources. The occurrence of the specific linguistic markers identified in the corpus was later calculated based on all frequencies reported. Occurrences per 1,000 words were used to find a more accurate representation of the data based on the corpus.

Figure 1
Conceptual Framework of the Study



Results

Metadiscourse

The data reveals that interactive resources were used more frequently than interactional resources in academic posters. Interactive resources (102 instances) occurred twice as often, compared to interactional resources (47 instances). This is due to the academic poster convention requiring the author to present a precise format and content organisation such as introduction, methodology, result and

conclusion (Alley, 2003). Notwithstanding the fact that the language used for an academic poster is very precise and compact language (Swales & Feak, 2000), the academic poster created must fulfil the requirements of the course, which are to display the students' problem-solving together with entrepreneurial skills. Out of the five categories of the interactive metadiscourse, only three sub-categories were used in the academic posters. The frequency of use of interactive resources is presented in Table 3.

Data show a lesser occurrence of interactional resources in the academic poster. However, even though interactional resources appeared less than interactive resources, all five sub-categories of these resources were remarkably used by the students. This indicates that the students were aware of the need to connect with the audience, even in the rigid format of academic posters.

Table 3
Frequencies of Metadiscourse Resources in Students' Academic Posters

Metadiscourse category	Raw occurrences	F per 1,000 words	Percentage
Interactive			
Frame markers			
Transitions	54	34.09	52.94%
Code glosses	43	27.15	42.16%
Endophoric markers	5	4.9	4.9%
Evidentials	0	0	0%
	0	0	0%
Total	102		73.38%
Interactional			
Attitude markers			
Engagement markers	15	9.47	31.91%
Self-mentions	13	8.2	27.66%
Boosters	9	5.68	19.15%
Hedges	7	4.42	14.89%
	3	1.89	6.38%
Total	47		26.62%

Interactive Resources

Frame Markers in Students' Academic Posters

Frame markers have the highest occurrence in academic posters. This result is expected as the students are required to present the content according to a specific convention of Introduction-Method-Results-Discussion or IMRD framework. Besides that, the students were highly encouraged to use the labels for sections like Introduction, Methodology, Purpose, and Results to signal the specific discourse acts or stages in the poster. Apart from that, these labels also help to organise and set the boundary of the information presented in the poster. Since the academic poster was

supposed to enlighten the reader or assessor about the student project, the frame markers were heavily used to describe the processes undertaken by the students while doing the project.

Transitions in Students' Academic Posters

Transitions have the second-highest occurrence in the corpus. Coordinating conjunction “and” has the highest rate of occurrence, followed by subordinating conjunction “while” and “yet” and the conjunctive adverb “still”. It is important to note that the convention of an academic poster is to use concise and non-verbose language which can be achieved using simple and compound sentences. However, the use of transitions in the poster is prevalent as this element is used to connect phrases and clauses that offer additional description and clarification of the student’s projects, as examples (1) and (2) illustrate:

- (1) A great way to show the community that we can learn English **and** culture at the same time. (S1)
- (2) To preserve **and** promote Malay folklore in the form of interactive Audiobook. (S2).

Code Glosses in Students' Academic Posters

Code glosses were the least used among the three sub-categories that appeared in the Interactive Resources. Called, that is, and such as are the examples of code glosses used in the academic poster. Hyland (2007) describes code glosses as “small acts of propositional embellishment” (p. 267) and can be categorised into reformulation and exemplification. Reformulation introduces a new element to the old one with the function of offering a different stance, providing more elaboration or adding emphasis. Exemplification relates to using examples to help the reader better understand the content. Only a small amount of reformulation (“called” and “that is”) was used throughout the corpus. A similar pattern happens to exemplification whereby only “such as:” was evident throughout the whole corpus. This result is expected as any form of a repeated word or clause is not typically inserted in the academic poster due to its limited space and rigid format. Examples (3) and (4) show code glosses used in the academic poster.

- (3) A card game featuring Malaysian's traditional kuih **called** Borong That Kuih (S1).
- (4) To provide a product **that is** informative (S6).

Endophoric Markers and Evidential in Students' Academic Posters

The last two elements were not evident in the students’ academic posters. Since the academic poster is the presentation of the process(es) carried out by the students while completing the project, using endophoric markers or referring to specific information in the other part was not required. A similar pattern happens to

evidential, whereby the need to quote other sources of information or citation was not warranted for the project.

Interactional Resources

Attitude Markers in Students' Academic Posters

Attitude markers demonstrate notable occurrences in the academic posters. Koutsantoni (2004) explains that attitude markers are used to show the significance of a research project, to justify and present the originality of the author's work, as well as to identify the under-researched area. Since the academic posters were used to display the students' project, the posters must professionally communicate the students' evaluation and credibility, which are shown through the project's significance (i.e., important, importance), limitation (i.e., issue, only), emotions (i.e. interesting) and assessment (i.e. easy, new) (Azar & Hashim, 2019). An exclamation mark was used in the sentence to convey the author's strong feeling and stresses the credibility of the author's work. The direct appeal increases the author's persuasive force, which easily persuades the reader to perform the action as required. The examples of attitude markers can be seen in (5) and (6):

- (5) Scan Me!!! (S3)
- (6) Introduce intercultural communication and its *importance* to people. (S8)

Engagement Markers in Students' Academic Posters

Engagement markers have the second highest frequency compared to other elements in the interactional resources. The use of reader-inclusive pronouns such as "our", "we", and "your" were commonly used in the academic posters. In addition, directives such as "scan" and "should" were also visible on the academic posters. The imperative sentences used in the academic posters expressed order and command to the readers to perform. These directives connect the author with the readers and implicitly persuade the readers to act in the real world such as in "Most of the people agreed that the designs *should* be made simple" (S6).

Self-mentions in Students' Academic Posters

There was a low frequency of self-mentions in the academic posters. Using a possessive determiner "my" (example (7)) clearly expresses the students' identity and mark their novel contribution and stance on the project. Another element of self-mentions used in the academic posters was the plural pronouns of "we" and "they" (example (8)). These inclusive pronouns were used to include the presence of author and readers together, implying that students seek to persuade the readers to agree with their argument.

- (7) Obtained exposure in translation for **my** future career path. (S2)

- (8) A great way to show the community that **we** can learn English and culture at the same time. (S1)

Boosters in Students' Academic Posters

Boosters imply certainty and commitment in forwarding the argument and signalling the author's "privileged knowers in their disciplinary community" (Hu & Cao, 2015, p. 20). It was not very highly used in the academic posters, but they were used more than hedges. Example (9) show boosters ("clear") used in the academic poster.

- (9) The audio aid helped to **clear** out confusion pronunciation of words. (S3)

Hedges in Students' Academic Posters

Hedges was the least frequently used in academic posters. Lakoff (1972) defines hedges as "words or phrases whose job is to make things fuzzier" (p. 195). This powerless language signals the author's reluctance to commit to the argument and simply offers a vague statement on the issue. Modal auxiliaries like "can" and "should" are used as hedges, as shown in example (10).

- (10) It **can be** concluded that ... (S6).

Visual Metadiscourse

First Impression

The first category of visual metadiscourse is the first impression. This element refers to the reader's reception of the document (Kumpf, 2000). This set as an impetus for the reader to read or not to read the document. This is an important requirement for academic posters as the visual cues must pique the readers' interest and garner their immediate response which will increase the readers' likelihood of being persuaded. Typographical resources such as font, typeface and styles were greatly used to display their own first impression, as can be seen in Figure 2.

The poster by S7 entitled "Untold Malay Folklore" has a simple layout, easy-to-read font, and the use of simple sentences. However, since the posters were created by novice multimodal authors, the poster was not professional. This can be seen by the icons used, such as the use of envelopes, candles, clouds, and branches that do not connote the e-book. Besides that, the mustard colour of the poster did not emphasise the e-book created in black and gold colours. Hence, the first impression was not very persuasive.

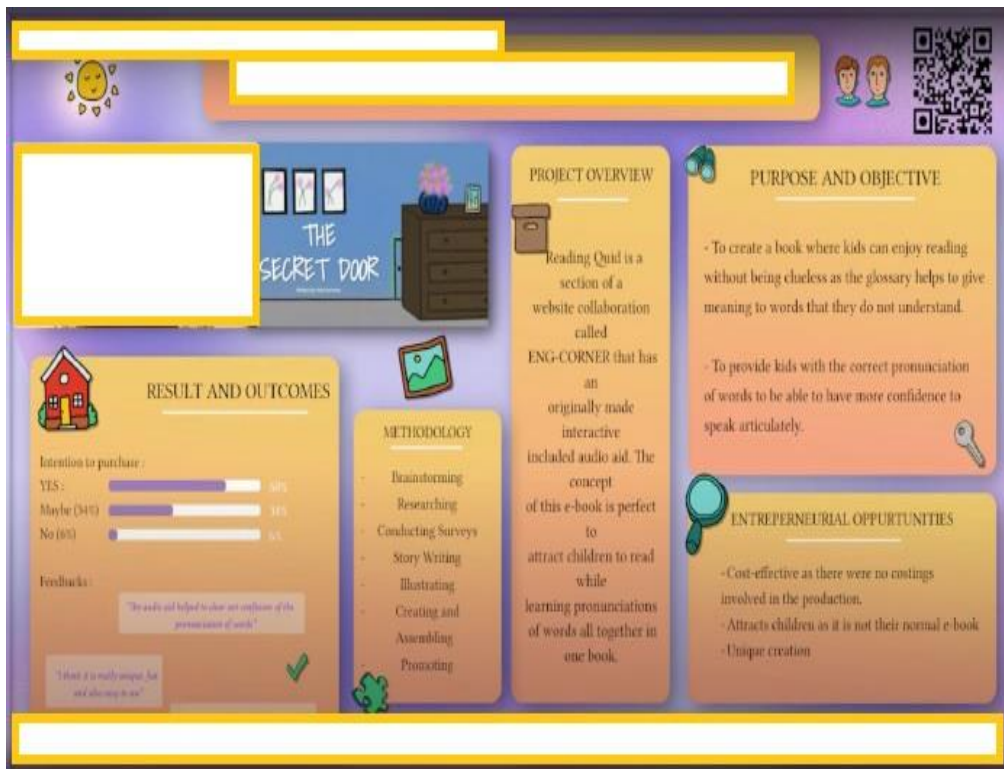
Figure 2
First Impression of Academic Posters by S7



Heft

Heft refers to the bulk or length of the printed or digital document that is closely related to the first impression (Kumpf, 2000). Size, shape, quantity, and weight are the factors involved in heft and typically influence the readers’ first impression. The document consists of too much information which might not be well-received by readers. The data revealed that the academic posters created by the students integrated text, graphic images, icons, QR codes and charts. Based on the number of tokens used in the corpus, the average number of words used in each academic poster was around 150. See Figure 3.

Figure 3
Heft in Academic poster by S3



The heft under investigation mainly consists of declarative sentences used to explain and describe the project conducted by the students. Even though the sentences were listed uniformly using only one sentence for each column or bullet point, the sentences used were lengthy. In addition to that, the number of columns used to segregate their information was also inappropriately hefty, as shown in Figure 4. So, it can be said that due to the number of hefts presented in the student's academic posters, the targeted readers may not find the posters appealing to read.

Convention

Another element closely related to the first impression is convention. This represents the readers' expectations from the appearance of the document. The expectation was derived from observing other documents of the same genre (Kumpf, 2000). Mancini (2005) defines convention as "what readers expect from the appearance of a document concerning what they actually have before their eyes, which influences their perception to it" (p. 97). A document must adhere to specific designs and criteria associated with its genre. Kumpf (2000) notes that a research paper, for example, must follow a certain citation format, spacing, and font type to be recognised within its specific genre. Similar principles apply to academic posters, which integrate conventions like affiliation, title, and both textual and visual elements.

The data reveal that all academic posters followed the conventions of research posters, with columns divided into sections such as Overview, Purpose and Objectives, Methodologies, Results and Outcomes. These templates are readily available in poster-making programmes, simplifying the process for students. Students effectively integrate text and non-linear elements, such as university affiliation and logo, were omitted, potentially affecting the authors' credibility and persuasive appeal.

Chunking

The information arrangement on the document into separate visual sections is referred to as chunking. This element is to assist readers to “identify the constituent parts of a document and to show the boundaries of related items” (Kumpf, 2000, p. 409). In addition, chunking also allows the reader to pause and internalise the information presented in the document.

Based on the data presented, it can be said that all academic posters were chunked skilfully. Different columns and gutters were used to signify frame markers, allowing the readers to interact with each of the columns according to their own pace. A bullet list was also used to avoid the information appearing to be dense. Meaningful visuals were also achieved through the use of their own product picture creation as a means to provide closure to the readers, as presented in Figure 4.

Figure 4
Chunking in Academic Poster by S2



External Skeleton

The external skeleton serves as the bones of the document. This element displays how the document is arranged and the function it serves (Kumpf, 2000). The intricacy of this element depends on the genre of the document. For example, an academic essay requires the author to start with a title, an introduction paragraph, several body paragraphs, and a conclusion.

For this study, the major features of the academic poster's external skeleton include the title of the project, Introduction or Project Overview, Objectives, Methodology, Results and Outcomes. Since the readers spend more time on the external skeleton than the first impression, it is crucial for the students to provide cohesive cues and mark the internal elements of their academic posters for the readers' easy reference. Correspondingly, the external skeleton was also achieved through extensive chunking, section title and labels. Given the fact that the template of the academic poster layout was readily available, the external skeleton is not amiss in any of the academic posters.

Consistency

Consistency refers to the organisation of the document that helps the readers to be prepared for the details that ensue (Kumpf, 2000). Consistency offers a coherent and stable view of the document and fulfils the readers' need for order and unity (Kumpf, 2000; Mancini, 2005). Hence, to realise consistency in a document, the text and visuals must be consistent with one another. For example, the sentences used in the document must follow the same sentence type or grammar pattern as the previous one, and the visual element must complement the tone set by the textual element.

In the case of the academic posters, it was found that the students know how to maintain consistency in their academic posters using graphic design tools that are embedded in the programme. The templates available in the design tools only require minimal editing and consistency in the templates is already in existence.

Expense

This element is affected by money through the type of material used, printing and visuals (Kumpf, 2000), and these visual parts influence the readers' reception of the document (Mancini, 2005). In the case of students' academic posters, the poster presentation was done online; thus, the posters were only required to be created digitally. The expense was also not included in the design of the academic posters, as these documents were created using the free design tool available online. Due to that, this element was not considered a part of this study's visual metadiscourse.

Attraction

Another element of visual metadiscourse is attraction, which holds the readers' attention until the end of the document (Kumpf, 2000). To achieve this, consistency, chunking and external skeleton must be played together using different types of

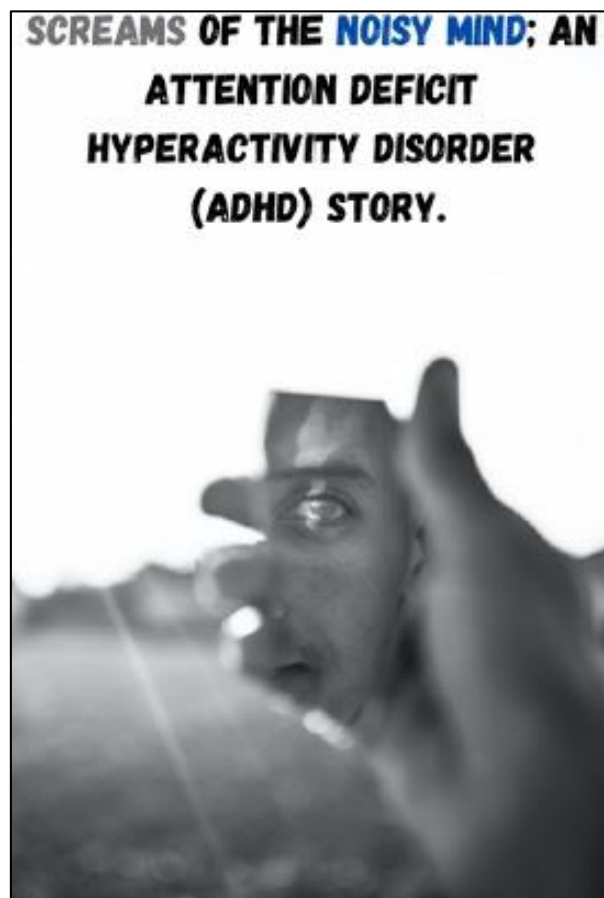
visuals. With the availability of poster templates online, it should be noted that the standard format for the poster template utilised the same convention as any academic research presentation, whereby all stages involved were explained in detail. Thus, the academic posters' standard format begins with the introduction, methodology, and result and ends with a conclusion. In this study, it was found that all the academic posters used the standard template provided by the design program of their choice. The template ensures that detailed information is appropriately positioned on the posters. In addition, attraction can also be seen through striking visuals, fonts, size, and colours, to pull the readers' attention to read the whole document.

Interpretation

Interpretation refers to using textual and visual elements to improve the structure of the document (Kumpf, 2000). Hence, the use of tables, graphs and photos are traditionally used to provide extra features to the textual element to assist and guide the readers' understanding.

Figure 5

Interpretation from S9

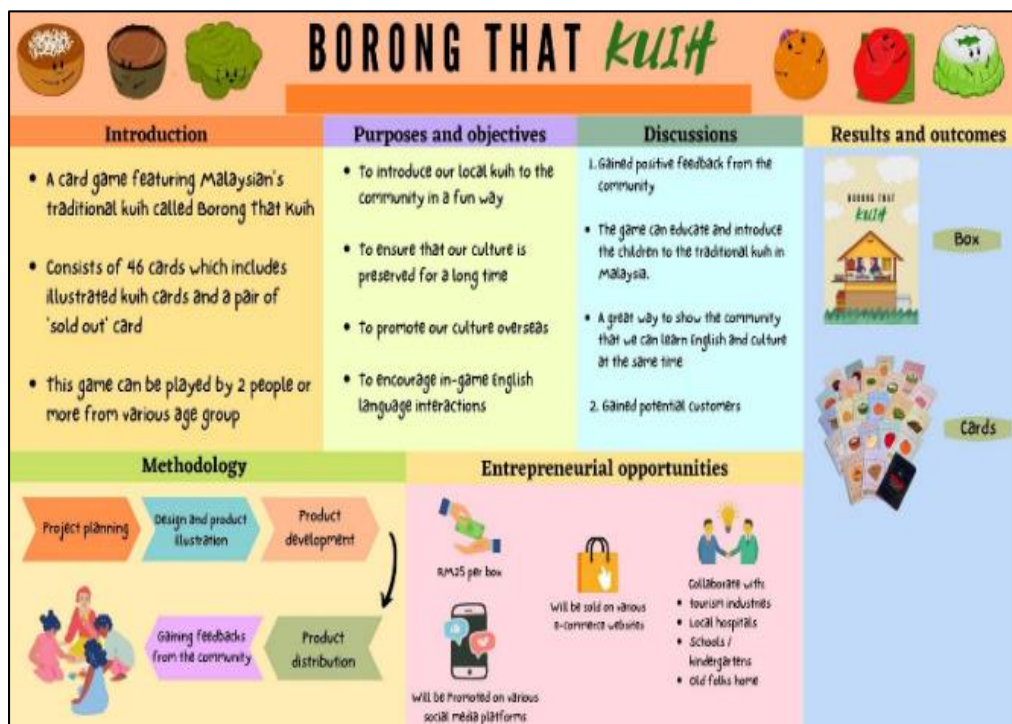


This element was pervasive in all academic posters, including photos or caricatures as presented by S9 (Figure 5). This element stimulates persuasion, requiring the reader to think of the information displayed. Based on the data presented, it can be implied that certain concepts, such as mental health issues, require a visual stimulant to enhance readers' understanding further. Consequently, this will increase the readers' likelihood of being persuaded by the information presented in the document.

Style

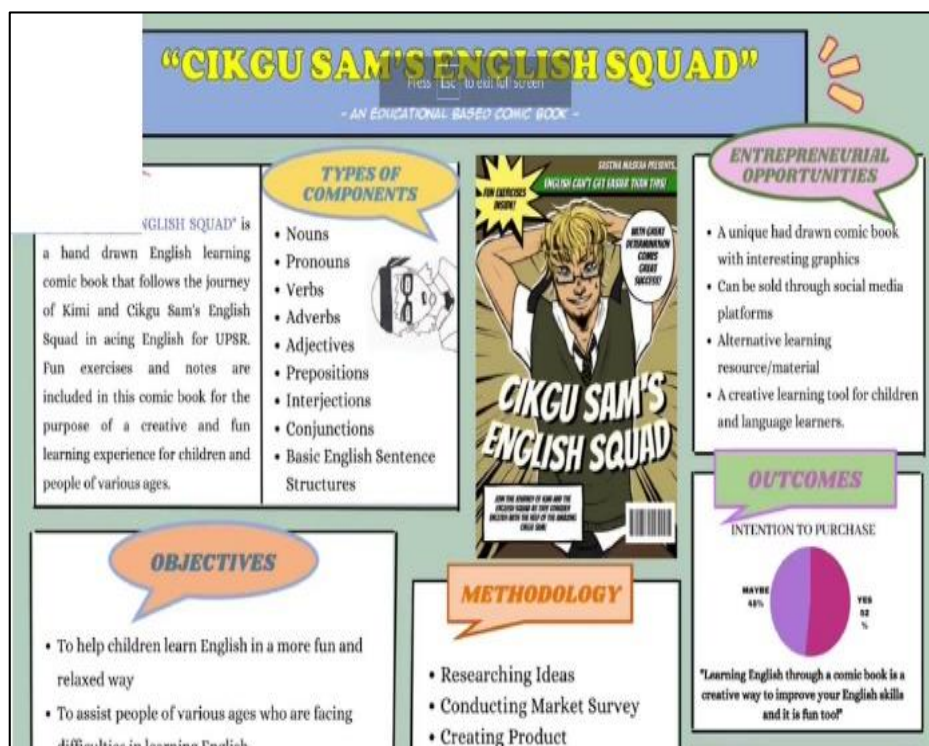
The last element of the visual metadiscourse is the style. This element refers to the “assumptions readers form when seeing documents and judging them according to conventions” (Kumpf, 2000, p. 417). The visual style must complement and not bury the textual element in the academic posters. Hence, visual choices by the students must be made correctly, as the style will project the author's persona, influencing the readers' perception of the document. Figure 6 shows S1's academic poster that has the casual and fun style. The typeface used is not serious.

Figure 6
The Style Used by S1



To cite another instance, the style used by S5 was very similar to a graphic novel using speech balloons, scream dialogue boxes, panels, gutters, and motion lines, as shown in Figure 7. Therefore, the styles used in these academic posters may persuade or dissuade the readers from reading the entire document.

Figure 7
The Style Used by S5



Discussion

This study showed that students favoured using interactive metadiscourse over interactional metadiscourse in creating persuasion in academic posters. This aligns with findings from studies by D'Angelo (2011; 2016b) and Fouad (2021), emphasising the importance of guiding the reader over engaging them, given the IMRD framework genre and the nature of academic posters, which require direct and attention-grabbing textual elements.

While interactive metadiscourse predominated, some categories, such as endophoric markers and evidential, were absent in this study. These metadiscourse elements typically serve to reference other parts of the document and cite information from primary sources. Novice authors tend to use more interactive metadiscourse, a common trait attributed to their inexperience in creating academic posters (Esfandiari & Allaf-Akbary, 2022).

Due to the convention of academic posters, frequent use of frame markers is customary. Academic posters require brevity and precision, and frame markers are a practical means of organising information (Alley, 2003). Moreover, they aid in persuading readers and ensuring a clear flow of information. The second most prominent metadiscourse feature is transitions, widely used in academic posters to logically link arguments between clauses, ensuring text coherent and persuasiveness. This is followed by attitude markers in the form of an adjective, which provides a

certain noun description. Adjectives such as “easy” and “new” are categorised under assessment, whereas “interesting”, which describes the emotional condition of the author, was commonly used. One explanation for these results is the author’s goal of achieving a desired impact by using emotionally charged words (Hunston, 1985). In addition, employing attitude markers can shape the reader's perspective in line with the author's preferences (Hunston & Thompson, 2001). Given the nature of the students’ projects, which required them to develop products or services related to their field of study, the use of these adjectives helps convey the nature of their offerings to the readers. Adjectival forms in all academic posters are powerful tools for enhancing persuasiveness as they elicit positive emotions in readers and create emotional engagement (Liu & Zhang, 2021).

The academic posters were made persuasive by extensively using visual metadiscourse. The findings show that almost all of Kumpf’s (2000) visual metadiscourse elements were utilised, with the exception of expense due to the digital nature of posters. Elements like the first impression, heft, and convention play a significant role in capturing readers’ interests. As Barthes (1994) suggests, humans primarily engage with images, and text serves a secondary role. Therefore, these students heavily relied on visuals to grab readers' attention in their academic posters. Once the reader is drawn by these visual elements, they engage with the content presented in the document, achieving reader engagement.

Conclusion

This research showed that students focused more on text organisation, with less emphasis on reader engagement. The study also revealed that most linguistic and visual metadiscourse elements were effectively used in academic posters, using both text and images to persuade readers. The findings are useful for teaching students about both textual and visual metadiscourse to guide reader interpretation and enhance the persuasiveness of the text. While the use of these metadiscourse elements was evident in academic posters, there were still areas for improvement, particularly in enhancing the professional visual presentation to enhance persuasive appeal. Incorporating metadiscourse knowledge into the curriculum is vital, as it prepares students for their future roles as industry professionals. Failing to impart this knowledge could affect their professionalism.

A limitation of the study is only 10 academic posters were analysed. Future studies could develop a larger multimodal corpus to provide more definitive evidence of persuasion in such documents. In addition, researchers might explore other aspects beyond metadiscourse, such as semiotics, to gain a deeper understanding of persuasive elements in academic posters and other multimodal documents, including brochures, websites, and academic presentations.

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