

Move Structure and Lexico-Grammatical Features of Master's Thesis Abstracts in a State University

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RESEARCH ARTICLE

Abstract

Writing abstracts requires a more disciplined style of writing, with higher demands on both form and substance. Graduate students are expected to produce scholarly outputs attuned to the rhetorical and linguistic conventions of abstract writing, acceptable to a wider academic community. Thus, this study examined the usage, distribution, and order of moves, along with the identification of selected lexico-grammatical features of 43 masters' thesis abstracts from nine graduate programs of a state university. Using descriptive research design, following Hyland's five-move analysis framework, findings revealed that the presentation of the introduction (I), purpose (P), method (M), product (Pr), and conclusion (C) moves in the abstracts varies across programs (Hyland, 2000). However, the I-move was found to be optional, but all four moves (P, M, Pr, C) were found to be conventional, with a semi-linear structure as P-M-Pr-C. Results further revealed that the lexico-grammatical features of thesis abstracts such as modal choice, use of verb tense and voice, and utilization of nominalization were influenced by the nature of the move type and discipline, along with the authors' emphasis and goal in writing. Conversely, the abstract length of these abstracts was more than twice the number of words suggested by different citation systems, implying a lack of brevity. Based on these findings, the University Graduate School is encouraged to suggest specific guidelines in thesis abstract writing. Lastly, genre-based approach via explicit instruction to promote consistency in lexico-grammatical features of abstracts is highly recommended.

Keywords: Move Structure, Lexico-grammatical, Lexical Density, Master's Thesis Abstracts, Rhetorical Conventions

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1 INTRODUCTION

In line with the academic demand in graduate studies, any academic write-up of a research study or project will require the inclusion of an abstract. In the same way that any academic scholar engaged in writing a thesis and research article is expected to write an abstract. The importance of writing effective research abstracts cannot be downplayed in the academe. For instance, Suryani and Rismiyanto (2019) explained that the special location of the abstract being first to be read after the title and before the introduction (not to mention its notable existence in any research articles, thesis, dissertations, conference papers, and grant proposals) is related to the significant function of abstract, that is, to represent the content of the text briefly. Likewise, the abstract assumes a pivotal role in any research endeavors, for it offers potential readers or target readers

the choice to assess if an article or study is relevant to their specific needs or if the entire paper is worth reading. Also, Swales (1981) even argued that abstracts serve as a substitute for the entire paper in cases when a full paper is unavailable since they mirror the content and structure of the whole article, calling it a purified reflection of its entirety.

On the same note, Bhatia (1993) refers to the informative function of abstracts, claiming that they present “a faithful and accurate summary, which is representative of the whole article”. Lastly, an abstract is a self-contained, short, and definitive summary describing an academic publication’s full contribution or content. Generally considered the first section of a scholarly article, an abstract is considered “a standalone genre” (Ngai, Singh, & Koon, 2018). In other words, the ability to compose effective abstracts is critical for academic writers, particularly for graduate student researchers, and studying the appropriateness and acceptability of abstract genres to prospective and existing members of the specific academic community is of significant value.

However, while graduate student researchers are aware of the core and mandatory aspects required by abstract writing, the literature reveals that novice writers still have difficulty constructing well-structured abstracts that are appropriate to the norms set by their scientific community. For example, Ren and Li (2011) study showed student writers’ “incomplete appropriation to disciplinary practices” and further disclosed student writers’ limitations in their abstracts, which can be viewed as a sign of their weakness as a novice writer. Moreover, Ella (2020) even claimed that although “student researchers are instructed to adopt the rhetorical and linguistic conventions of abstract writing, their lack of or little experience results in near, if not, absolute failure in accomplishing the daunting task”. As Harris (2006) pointed out, students’ basic writing skills do not readily translate into a successful production of quality, scholarly output.

It can be argued, then, that writing research abstracts differs from writing essays, editorials, or reviews in a way that abstract writing demands highly structured and sophisticated form, style, and content. Some novice and sometimes even expert research writers overlook the considerable attention to detail, substance, and conciseness that should be given to writing abstracts. Consequently, research output that lacks proper structure and formatting may cause reviewers to struggle to assess the work accurately, potentially leading to unfavorable reviews and revision requests. This may lead to missed publishing opportunities in high-impact journals, potentially slowing career advancement. Therefore, this research aimed to categorize the prevalent move patterns in Master’s thesis abstracts within a state university, considering their distribution across academic programs and the associated lexico-grammatical attributes, to assess the suitability and approval of the structure and style in this section for a broader yet specific academic audience.

2 LITERATURE REVIEW

The term genre means “kind of” or “sort of” and comes from the same Latin root as the word genus. In linguistics, genres are, on an important level, composed of linguistic forms and strategic moves— that is, the genre is defined by obligatory elements in structure (Halliday & Hasan, 1991). Other definitions are also given: Martin (1985) considers genre a staged, goal-oriented, purposeful activity in which speakers engage as members of our culture. Simply put, Martin (1985) explains that “genres are how things get done when language is used to accomplish them.” Owing to this, Hyland (2008) defines genre as grouping texts together, representing how writers typically use language to respond to recurring situations. Thus, what defines a genre is its communicative function, which explains its forms and features of language use (Darabad, 2016).

Over the last ten years, there has been a considerable interest in genre-based analysis of different texts. Many scholars have tried to define genre analysis. For instance, Dudley-Evans (1987) asserts that the main goal of genre analysis is pedagogical because it provides a flexible prescription based on analysis that makes suggestions about the layout, ordering, and language appropriate to a particular text. On the one hand, Hopkins and Dudley-Evans (1988) assume that genre analysis is “an explicit description of how texts are organized” . Similarly, Hyland (1992) considers genre analysis as the study of how language is used within a particular context. He believed that genres differ in their goals and structures. In contrast, Bhatia (1991) classifies genre analysis as an

analytical framework that reveals form-function correlations and contributes to our understanding of the cognitive structure of information.

Academic text genre analysis can be done on two levels. Scholars look at how certain grammatical or lexical traits are used in writing at the micro level. In contrast, at the macro level, they may look at patterns of rhetorical structure in academic works across fields. Accordingly, texts are most likely to fulfill their purpose and be successful when they adhere to conventions (Hyland, 2008).

In line with this, the research abstract, regarded as a stand-alone genre, has gained attention from many researchers due to its important role in the scientific community. The use of genre analysis, specifically move analysis on research abstracts, could demonstrate how a successful abstract should be structured and written, what it must include (obligatory moves), and what it could include (optional moves). As Eggins (2004) points out, the genre of a text assumes an important role in identifying ways in which a particular text is similar to, reminiscent of, other texts circulating in the culture. She further explains that if a text cannot easily be attributed to a genre, it is, in some ways, problematic. Having considered that Ella (2020) asserts that the researchers' credibility and membership in the specialized discourse community rests upon their strict adherence to acceptable guidelines.

Further, move analysis can also be used to investigate genre linguistic features. In some genres, lexical components such as fixed phrases and collocations dominate. For example, phrases like "This study reveals/investigates/compares" are typically used to start research. However, phrases like "The results of this study indicate/show/prove" are frequently used to explain research outcomes.

Move analysis can be useful in describing a genre's linguistic characteristics; a lexico-grammatical analysis of thesis abstracts can be emphasized. Lexicogrammar (or lexico-grammar) is a language framework in which lexis (vocabulary) and grammar (syntax) are combined. Words and grammatical structures are not considered separate entities at this level but mutually dependent entities, with one level interacting with the other. Likewise, in this particular study, lexico-grammatical analysis is anchored on the Systemic Functional Linguistics (SFL) theory of language (Halliday & Matthiessen, 1985a; Halliday, 1989). SFL views language use as context-dependent, leading to the formation of registers, i.e., language patterns based on their utilization in context. As a result, in SFL, the register is described as "what you are speaking at the time, depending on what you are doing and the nature of the activity in which language is functioning" (Halliday, 1989). Simply put, one of the major concepts of SFL is that lexis (a structured system of signs that serves to organize a language's vocabulary) and grammar (a structured system of choices that serves to organize sequences of signs into texts) are not mutually exclusive but rather create a single lexicogrammar.

Numerous linguistic studies have been conducted on the lexico-grammatical characteristics of research abstracts (RAs). Along with foreign studies, Gerbert (1970) investigates the usage of verbs in Technical Writing in English. He concluded that the present tense is generally used to depict definitions, descriptions, and observations, but the perfect tense is typically employed to describe research procedures. Similarly, the distribution of lexical terms in RAs from various disciplines was also investigated by Inman (1978) and Love (1993). Salager-Meyer (1994) examines how the communicative goals of the various rhetorical portions of medical RAs affect the frequency with which hedges are utilized in each segment. According to her findings, the discourse's basic structure and communicative intent impose the choice of hedging. Meanwhile, at the national level, various studies have investigated the language structure and rhetorical patterns of research abstracts in different academic settings. Bonifacio (2019) performed genre analysis on research abstracts by Central Mindanao University undergraduate students, revealing variations in rhetorical move patterns, optional moves, and linguistic features, indicating potential unawareness of the genre of writing research abstracts among these students.

Roxas (2020) conducted a move analysis of Grade 12 students' research abstracts, finding dominant move patterns such as Introduction-Purpose-Method-Product and Introduction-Purpose-Method-Product-Conclusion, with the "Conclusion" move being less common. Ella (2020) characterized the move structure in undergraduate theses across social science and hard

science disciplines, noting that the introduction in social sciences and the conclusion in hard sciences were optional moves. Furthermore, [Balagtas and Domingo \(2021\)](#) examined graduate theses and dissertations at MMSU-Graduate School, revealing variations in moves, move patterns, and linguistic features in abstracts. Similarly, [Morales \(2012\)](#) compared the conclusion sections of research articles written by Filipino and Japanese authors, revealing intercultural variations in rhetorical preferences, where Filipino authors emphasized contributions to knowledge, while Japanese authors employed a concise summary of main points. Lastly, [Borlongan \(2017\)](#) analyzed acknowledgments in doctoral dissertations written in Philippine English by identifying their structural components. The study revealed nativization in aspects such as an address system distinctive to Filipino and Philippine English, the inclusion of thanks to God, the variable placement of certain steps, and the omission of specific steps.

Considering the diverse genre and move analyses conducted on research abstracts in the global and local academic community, it is remarkable that there is a seeming scarcity of national or local studies in this vein. The findings from these previous studies suggest distinct rhetorical patterns within various academic disciplines, particularly in undergraduate theses. However, it is essential to note that these conclusions may not universally apply, given that these studies were conducted internationally or within restricted contexts with differing variables from those investigated in this study.

3 METHODOLOGY

A descriptive research design was employed following the genre-based analysis of the rhetorical/move structure of Master's thesis abstracts employed in this study. The corpus of this study comprised 43 randomly selected abstracts written in English by Master's graduates in the nine Master's programs of a state university from 2011 to 2020. The programs included are the following: Master of Public Administration (MPA), Master of Business Administration (MBA), Master of Arts in Educational Management (MAEM), Master of Arts in Mathematics Education (MAME), Master of Arts in English (MAE), Master of Arts in Teaching Biology (MATB), Master of Arts in Teaching Chemistry (MATC), Master of Arts in Teaching Physics (MATP), and Master of Arts in Industrial Education (MAIE). A total of 11,740 words and 439 sentences were manually examined to identify the corpus's existing lexico-grammatical features and move structures.

Also, the corpus of the study was compiled and collected manually from the thesis section of the University library. Prior to the building of the corpus, the faculty researcher sought approval to access unpublished master's theses of the university through a communication letter addressed to the university librarian. Upon approval, a list of unpublished master's theses was created or requested for each curricular program available. Then, fishbowl simple random sampling was conducted to identify the five samples for each program. The criteria employed for the compilation of the corpus are the following: (1) the abstracts must be written in English; (2) the thesis must be written by Master's students from 2011-2021; and (3) there must be at least four to five theses included under each Master's degree program. The abstracts collected were coded. Lastly, to data privacy requirements, the data were securely disposed of right after raw data were tabulated and significant findings were identified.

3.1 Data Processing

Data were analyzed using [Hyland \(2000\)](#) five-move model for genre analysis. Table 1 shows Hyland's framework adapted from [Darabad \(2016\)](#), which includes the Introduction (I), Purpose (P), Method (M), Product (Pr), and Conclusion (C). The approach used to examine the rhetorical moves is the "top-down" approach, where the content of the abstracts was scrutinized.

Table 1. Hyland’s Five-Move Model (Darabad, 2016)

Move	Function
Introduction	Establishes the context of the paper and motivates the research
Purpose	Indicates purposes, outlines the aim behind the paper
Method	Provides information in design, procedures, data analysis, etc.
Product	Indicates results and the argument
Conclusion	Points to the application or wider implications and interpretation scope of the paper

In order to answer research question 1, this study’s basic unit of move analysis was the sentence. However, when a sentence with a phrase and/or clause indicates another move (Pho, 2008; Tseng, 2011), that clause and/or phrase was coded as one analytical unit. Each sentence, clause, and phrase was coded manually to identify the existing move structures in the abstracts. The codes (I) for Introduction, (P) for Purpose, (M) for Method, (Pr) for Product, and (C) for Conclusion were used. Likewise, the frequency of occurrence and distribution of moves at the sentence level were identified. Hence, the number of moves in the whole corpus was presented.

Moreover, frequency count, average, and percentile were employed to identify the most common moves. The Master’s program identified the frequency and percentile of these moves. Moreover, following Kanoksilapatham (2005) labeling, moves that recorded 100% occurrences in the abstracts were tagged as “obligatory,” while moves with 60-99% occurrences were tagged as “conventional,” and a move was labeled as “optional” if it appeared less than 60% of the corpus. Results were then presented using bar graphs from Microsoft Excel for easy interpretation and discussion. Next, to answer research question 2, the move-tags were again further analyzed in sequence and linearity. The move tags identified in the corpus were further classified according to their description following a two-move, three-move, four-move, or five-move model type. Also, in order to measure linearity, the criteria in Table 2 was adapted from Can, Karabacak, and Qin (2016) and were employed.

Table 2. Linearity of Move Types

Type	Description
Linear	contain all five moves and follow the expected sequence (I, P, M, Pr, C)
Semi-linear	composed of fewer than the five move types but still follows the expected sequence with one or two omitted move type
Non-linear	composed of moves that did not follow the expected order

Lastly, to answer research question 3, the following analyses were conducted:

Analysis of Grammar Features

The analysis aimed to identify the preferred verb tense and voice used in each move of an abstract. The analysis procedure was as follows: First, the procedure involved aligning the move’s verb tense and voice with the representing sentence. If a move was expressed through a clause or phrase, it was excluded from the data. In cases where a move consisted of sentences in both present and past tenses, both tenses were considered. Next, when examining models and nominalization, the manual selection process identified total tokens following Biber (1988) criteria for nominals with suffixes like -sion/-tion, -ment, -ness, and -it. Similarly, the modal analysis involved the manual selection and token identification of nominals. This analysis in the context is rooted in the traditional grammar classifications and usage descriptions of modal auxiliary verbs, as detailed in established English grammar

references (Leech & Svartvik, 1975; Quirk, Greenbaum, Leech, & Svartvik, 1985; Greenbaum & Quirk, 1990; Downing & Locke, 1992). Modal verbs were categorized into three groups based on their frequency of application: the first group encompassed modal verbs such as can, could, may, and might, typically used to convey possibility; the second group involved other modal auxiliary verbs mainly indicating obligation or necessity, like must, should, and ought; the third group include predictive modals, incorporating verbs such as will, would, and shall.

Analysis of Abstract Lexical Features

The analysis involved several steps: First, lexical density measures like abstract length, word count in each move, and the number of sentences were determined using MS Word’s Word Count feature and manual counting. Descriptive statistics, including frequency counts, means, standard deviations, and percentages, were applied in the lexico-grammatical analysis, with data represented graphically for clarity. For assessing move structure characteristics, the number of moves, lexical features (e.g., abstract length, word count, sentences), and the identification of nominals and modals, the faculty researcher and an inter-rater were involved, with inter-rater reliability assessed using a percentage agreement method with over 75% agreement. However, the researcher conducted the analysis of move structure organization and grammatical features like verb tense and voice.

4 RESULTS AND DISCUSSIONS

This section presents the key findings concerning the move structures and lexico-grammatical features found in Master’s thesis abstracts. It delves into the overall characteristics, including abstract length, word distribution across moves, the predominant verb tense for each move, usage of voice, modals, and nominalization of Master’s thesis abstracts. Features of the Move Structures of Master’s Thesis Abstracts The results from the analysis of five-move distribution in Master’s thesis abstracts, categorized by Master’s degree programs, reveal a preference for a four-move structure across all the programs represented in the corpus, including MATC, MATB, MAME, MAEM, MAE, MATP, MBA, MPA, and MAIE. As shown in Table 3, a mere five abstracts (11.6%) encompassed all five move types, while 32 abstracts lacked at least one move (74.4%). These findings align with Hyland’s (2004) results, which reported a considerably lower percentage (5%) across various disciplines. This trend is also mirrored in Balagtas and Domingo (2021) genre analysis of Mariano Marcos State University graduate research abstracts.

Table 3. Frequency of Three, Four, and Five Moves in Master’s Thesis Abstracts

Model	f	%
Three-move	6	14.0
Four-move	32	74.4
Five-move	5	11.6
Total	43	100

Table 4 shows the results of examining the frequency of occurrence and distribution of moves in 1182 move-tags (the total number of move-tags in the corpus). When ranked from highest to lowest, Pr ranked first with 446 frequency counts or 37.7% of the 1182 tags. This was followed by C with 30.4%, P with 16.1%, and M with 147 counts or 12.4%. I had the least occurrence among the five moves, with only 40 frequency counts or 3.4%.

Table 4. Frequency of Occurrence and Distribution of Moves in the Abstracts at Sentence Level

Model	f n = 1182	%
I	40	3.4
P	190	16.1
M	147	12.4
Pr	446	37.7
C	359	30.4

4.1 The Conventional and Optional Moves

The frequency and percentage of moves in the abstracts are presented in Table 5. As shown in the table, P and C were the most common moves among the five, accounting for 95.3 percent of all moves. Also, the P and C became a conventional move in thesis abstracts after the typicality category was set to 60-99 percent usage (Kanoksilapatham, 2005). Similarly, with 93 percent and 88.4 percent frequencies, Pr and M moves were categorized under the same typicality. However, only 20.9 percent of thesis abstracts recognized the need to establish the paper's context and motivate the research, or the I (Introduction), which was then labeled as an optional move in the thesis abstracts.

Table 5. Optional and Conventional Moves in Masters' Thesis Abstracts

Moves	f n=43	%	Typicality
I	9	20.9	optional
P	41	95.3	conventional
M	38	88.4	conventional
Pr	40	93.0	conventional
C	41	95.3	conventional
Combi	5	11.6	N/A

Furthermore, the findings of the analysis of the typicality of moves in Masters' thesis abstracts across programs reveal significant variances. Thesis abstracts for Master of Arts in Teaching Chemistry (MATC) indicated P, Pr, and C as obligatory moves with 100% occurrences and M as conventional moves (75%), respectively. P and C were obligatory moves, while M and Pr were conventional moves in the MATB program. In MAME, M, Pr, and C are obligatory moves, whereas P was tagged as conventional. Also, it was found that two (40%) out of five abstracts for MAME contained more than one move in a sentence. The excerpts below illustrate dual moves in a sentence:

- (1) This quasi-experimental study [M] tested the effects of using Flip-flop Unit Circle on the performance of high school students in Trigonometry [P].
- (2) In the summative test, which is composed of 40 40-item multiple-choice tests [M], the experimental group got a mean score of 17.82 and the control group 14.13 [Pr].

Interestingly, all moves except the I-move (0%) were regarded as obligatory moves (100%) for the MAEM. Conversely, for MAE, both Pr and C were regarded as obligatory moves, while P (80%) and M (60%) were conventional moves. Likewise, P, M, and C moves were found to be obligatory moves for MATP, but Pr (75%) was only classed as conventional. Next, thesis abstracts for MBA and MPA shared similar findings; both categorized P, M, and Pr moves as obligatory and C (80%) as a conventional move.

In the case of MAIE, P and C were obligatory moves, while M and Pr moves were tagged as conventional. There were also three (60%) occurrences of dual moves in a sentence. Finally, consistent with the above findings, the I-move was considered optional, with 0-50% occurrences across programs. This means that the Master's thesis abstract writers recognize the value of establishing the purpose of study at the onset of the abstract and providing an interpretation of the findings and recommendations at the end. On the other hand, the I-move (Introduction) was the first to be eliminated by almost all authors, suggesting the dispensable value ascribed to this move. Although Hyland (2008) claims that the introduction and conclusion moves are "essentially persuasive" in the abstracts, only the latter appears to be applicable in the Master's thesis abstracts investigated in this study.

4.2 Organizational Movement Patterns

Table 6 illustrates the arrangement of move types in Master's thesis abstracts. In total, 32 out of 43 (74.4%) abstracts demonstrated a semi-linear pattern, characterized by less than five move types, albeit following the anticipated sequence with one or two omitted moves. Following this, nine abstracts (20.9%) adhered to a linear pattern, encompassing all five moves and adhering to the expected sequence (I, P, M, Pr, C). Lastly, two abstracts (4.7%) were non-linear, featuring moves arranged in a sequence that deviated from the expected order.

Considering the outcomes of this study, it is plausible that the authors' perspectives and writing styles contribute to the variations in move-type structuring. Additionally, the organization of move structures may be influenced by the diverse conceptualizations of the study and its objectives in presenting research results, as previously noted. However, it should also contemplate the potential influence of exposure to previously written thesis abstracts that feature similar move patterns, which could elucidate the prevalence of semi-linear type.

Table 6. Linearity of Move Types in Masters' Thesis Abstracts

Linearity Level	f	%	Rank
Linear	9	20.9	2
Semi-linear	32	74.4	1
Non-linear	2	4.7	3
TOTAL	43	100	

Moreover, the overview of specific move sequences evident in Masters' thesis abstracts is shown in Table 7. According to the results, the pattern P-M-Pr-C (Purpose-Method-Product-Conclusion) had 25 occurrences among the eight move sequences found, followed by the linear sequence I-P-M-Pr-C (Introduction-Purpose-Method-Product/Result-Conclusion) with nine frequency counts. The P-Pr-C and P-M-C move sequences are next on the list, with three and two frequency counts, respectively, but the remainder of the patterns were only seen once.

Table 7. Specific Move Sequences in Master's Thesis

Move Sequence	f
P-M-Pr-C**	25
I-P-M-Pr-C*	9
P-Pr-C**	3
P-M-Pr-M-C***	1
P-M-Pr-P+M-P+M-C***	1
P-M-Pr**	1
P-M-C**	2
M-Pr-C**	1

Note: * = linear, ** = semi-linear, *** = non-linear

4.3 Lexical Features of Master's Thesis Abstracts

The descriptive statistics of the lexical features of thesis abstracts, such as the length of an abstract, the number of sentences in an abstract, and the number of words in each move, are provided in Table 8.

The following are the quantitative results of the analyses: first, the mean length of the abstracts for each program varies, with MBA abstracts (1020.20 words) being the longest and MATP with 524.50 words being the shortest. Second, there were significant differences in the number of abstract sentences according to the program. When ranked from highest to lowest mean scores, MAIE abstracts ranked first with an average of 38.80 sentences, while MAE abstracts ranked lowest with a mean of 21.40 sentences. Third, about the number of words in each move by program, thesis abstracts, particularly MBA programs, used a significant number of words (mean of 560.60 words) in writing the Pr move or results of the study. In contrast, MATP abstracts employed an average of 153.75 words for this move.

Next, MAIE abstracts exhibit the highest average of 331.20 words in describing C move or conclusion, which describes the application or wider implications and interpretation scope of the paper, and the least from MATB with a mean of 140.80 words. Meanwhile, when the P move or the outline of the aim/objectives of the study was examined, results indicated that MAEM had the highest mean score of 168.80 words, and MBA got the lowest average rating of 85.80 words among the nine programs. In addition, regarding reporting the research design, procedures, data analysis, and the like or M-move, thesis abstracts for MAME had the highest average score of 118 words. In comparison, the MATC program had the lowest mean of 47.50 words. Lastly, in I-move or contextualizing and presenting the background of the paper, MATC achieved the highest mean of 44.75 words. Surprisingly, the abstracts under MAEM, MATP, and MAIE programs entirely omitted this move.

Table 8. Lexical Density of Master's Thesis according to Program

Indicator	Program	Mean	SD	Min	Max
Length*	MATC	596.25	501.28	294	1343
	MATB	555.80	246.73	303	946
	MAME	649.40	254.05	328	1017
	MAEM	774.20	260.06	444	1159
	MAE	621.60	187.51	383	783
	MATP	524.50	286.72	218	893
	MBA	1020.20	529.69	727	1960
	MPA	911.40	407.67	418	1437
	MAIE	898.00	734.23	498	2202
Sentences	MATC	23	15.36	14	46
	MATB	22.20	7.56	14	32
	MAME	25.60	10.31	12	39
	MAEM	29.20	10.99	16	44
	MAE	21.40	6.80	15	32
	MATP	22.75	11.24	11	38
	MBA	35.60	15.52	19	57
	MPA	28.20	13.14	14	49
	MAIE	38.80	35.65	19	102
I*	MATC	44.75	52.14	0	98
	MATB	35.40	51.72	0	114
	MAME	7.60	16.99	0	38
	MAEM	0	0	0	0
	MAE	7.60	16.99	0	38
	MATP	0	0	0	0
	MBA	2.20	4.92	0	11

	MPA	43.80	59.98	0	110
	MAIE	0	0	0	0
P*	MATC	127.25	106.10	33	277
	MATB	99.00	65.81	41	202
	MAME	157.00	101.54	0	248
	MAEM	168.80	14.52	150	188
	MAE	93.60	32.75	59	140
	MATP	97.50	71.44	22	160
	MBA	85.80	39.44	31	132
	MPA	133.40	65.11	21	191
	MAIE	124.60	60.59	27	166
M*	MATC	47.50	41.92	0	95
	MATB	102.40	80.01	0	168
	MAME	118.00	27.64	95	163
	MAEM	77.80	37.92	37	138
	MAE	50.40	51.40	0	113
	MATP	87.75	24.68	57	117
	MBA	79.00	65.65	22	178
	MPA	60.20	26.73	39	103
	MAIE	67.60	40.89	0	106
Pr*	MATC	229.00	317.19	33	703
	MATB	195.20	109.50	44	319
	MAME	213.40	126.06	93	395
	MAEM	241.00	108.62	138	418
	MAE	244.80	122.63	132	390
	MATP	153.75	113.05	33	279
	MBA	560.60	325.09	249	1056
	MPA	400.60	209.88	228	633
	MAIE	402.60	557.48	0	1378
C*	MATC	151.00	113.42	32	282
	MATB	140.80	88.87	28	262
	MAME	163.80	141.77	23	400
	MAEM	303.60	165.86	37	446
	MAE	233.40	95.03	115	345
	MATP	199.50	154.19	75	404
	MBA	315.80	220.09	0	617
	MPA	286.80	337.17	0	686
	MAIE	331.20	266.82	59	720

*The unit of these categories is the number of words

4.4 Grammatical Features of Masters' Thesis Abstracts

The results of the grammatical features chosen for quantitative analyses of the thesis abstract corpus are reported in the succeeding sections.

4.5 Modals

The proportional frequency of occurrence of modals in the abstract corpus varies by discipline, as seen in Table 9. Overall, possibility modals had the highest average usage of 70 (22.3%), followed by necessity modals with 67 tokens or an average of 17.5 percent, then predictive modals with 33 tokens or 11 percent. When examined according to individual occurrences by modal types, the necessity modal 'should' had the highest frequency, with 42 out of 67 necessity modal tokens. The

possibility is that the modal 'may,' on the other hand, was used 32 times out of 70 tokens, while the predictive modal 'will' was used 20 times out of 33 predictive modal tokens. Furthermore, one noteworthy finding is that the necessary modal 'ought' does not appear in the thesis abstracts. Finally, when modal usage was studied across disciplines and then ordered from the highest frequency count to the lowest, the top three programs that often use modals were MBA and MAIE with 32 counts and MPA with 25 counts. Conversely, MAME had the lowest usage of modals, with only two occurrences out of 170 modal tokens.

Table 9. Frequency of Occurrence of Modals Across Programs in the Abstract Corpus

Modal	Graduate Programs									2*TOTAL
	MATC	MATB	MAME	MAEM	MAE	MATP	MBA	MPA	MAIE	
Possibility modal										
can	1	3	0	4	2	2	2	3	7	24
may	1	4	1	0	8	5	2	6	7	34
might	0	1	0	0	0	0	0	0	0	1
could	1	1	0	2	1	3	1	1	1	11
Necessity modal										
ought	0	0	0	0	0	0	0	0	0	0
should	4	2	1	2	4	8	7	4	10	42
must	1	1	0	2	0	1	10	7	3	25
Predictive modal										
will	0	5	0	0	1	2	5	4	3	20
would	0	4	0	2	1	0	4	0	1	12
shall	0	0	0	0	0	0	1	0	0	1
TOTAL	8	21	2	12	17	21	32	25	32	170

4.6 Verb Tense of Thesis Abstract Moves

The frequency of the verb tense in each move is presented in Table 10. The data show that the present tense is the preferred tense in the I – Introduction move, Pr – Product move, and C – Conclusion move. Meanwhile, the past tense of the verb was used predominantly in P – Purpose move and M – Method move. One worth noting is three occurrences of tense combination (present, past, and vice versa). The following excerpts illustrate this claim:

- (1) The internet is the main facilitator of e-marketing, and it would be worthwhile to undertake a study on its adoption and use among selected business establishments (BEs) in Catanduanes.
- (2) Furthermore, although the experimental group performed higher than the control group in formative test no.8...the mean performance of the experimental group in the formative tests falls under 'fairly satisfactory'
- (3) The overall findings revealed that the means of the experimental and control groups were significantly different... further suggesting that students...

Further, as seen in the table, even when writing the same move type, the abstracts employ a variety of tenses. For instance, at least four tenses were identified in writing the Pr and C moves. In addition, in Pr move, the preference for simple present tense (254 or 53.6%) over simple past tense (214 or 45.1%) was relatively minor, given that the total difference between the two tenses is only 37. Similarly, simple future tense was often employed in Pr and C moves. Some examples are given below:

- (4) ... the open waters, assessment, and identification of riparian flora will play an important role in protecting water quality and the rich biodiversity of a river's ecosystem...
- (5) Likewise, the stakeholders will receive high regard that they deserve being supporters of the various programs of the schools.

Table 10. Verb Tense Frequency in Each Move

Tense	I	%	P	%	M	%	Pr	%	C	%
Present	18	72.0	20	20.4	13	9.2	254	53.6	221	67.8
Past	6	24.0	77	78.6	128	90.8	214	45.1	95	29.1
Future	1	4.0	0	0.0	0	0.0	5	1.1	9	2.8
Present + Past	0	0.0	1	12.5	0	0.0	1	0.2	1	0.3

4.7 Voice in Each Move

Table 11 shows the number of passive and active constructs in thesis abstracts, broken down by move kinds and programs. Active constructions are generally more common in all move types except the M move, where passive construction is more common. There were 19, 60, 362, and 251 active constructions in the I, P, Pr, and C movements. On the other hand, M move had 84 tokens of passive constructs out of 144 constructions documented. When compared across disciplines, using passive and active constructions by move types was consistent and followed a similar pattern: an active construction preference. This holds for the I, P, Pr, and C moves. However, in the case of the M move, where passive construction was preferred over active construction, there was a noticeable difference in the trend of the three identified programs: MAE, MPA, and MAIE, with 11, eight, and nine frequency counts in favor of active construction.

Table 11. The Voice of Each Move

VOICE	Graduate Programs									TOTAL
	MATC	MATB	MAME	MAEM	MAE	MATP	MBA	MPA	MAIE	
I										
ACTIVE	5	7	2	0	1	0	0	4	0	19
PASSIVE	4	1	0	0	1	0	1	2	0	9
A+P								1		1
P										
ACTIVE	8	9	3	10	5	7	8	6	4	60
PASSIVE	3	2	5	0	3	2	2	4	6	27
										0
M										
ACTIVE	3	5	6	8	11	4	6	8	9	60
PASSIVE	5	16	12	8	8	11	11	5	8	84
										0
Pr										
ACTIVE	30	28	40	33	21	23	56	47	84	362
PASSIVE	3	9	1	6	13	3	21	12	12	80
A+P					1		1			2
C										
ACTIVE	14	20	24	39	21	21	49	23	40	251
PASSIVE	8	5	7	18	15	9	13	17	16	108
A+P		1			1		2			4

4.8 Nominalizations

The raw frequencies and percentages for nominalizations in the corpus are displayed in Table 12. It can be noticed that the number of instances of nominalizations varies considerably, depending on the discipline. The MBA recorded the highest number of nominalizations in all programs with 223 frequency counts (22.3%) out of 999 nominalization tokens, followed by MAEM with the second highest number of nominalizations with 108 counts (10.8%). On the contrary, MATC had the lowest occurrence of nominalizations, with only 55 nominalizations or 5.5 percent.

Table 12. Nominalizations in Thesis Abstracts

		Graduate Programs								TOTAL
	MATC	MATB	MAME	MAEM	MAE	MATP	MBA	MPA	MAIE	
f	55	102	86	108	71	59	223	159	136	999
%	5.5	10.2	8.6	10.8	7.1	5.9	22.3	15.9	13.6	

Finally, Table 13 shows the distributions of nominalizations in thesis abstracts according to the individual suffixes, such as raw frequencies and percentages. As shown in the table, the nominalization suffix -tion/-sion appeared to be the most preferred among the suffixes identified, with 603 tokens out of 999 or 60.36%. In contrast, the suffix -ness was noted to be the least preferred nominalization suffix, with just 60 frequency counts or six percent. The other nominalization suffixes, -ment and -ity, appeared fairly preferred by MA students, with 223 and 113 occurrences in the corpus, respectively.

Table 13. Frequency of nominalizations ending in suffixes -tion/-sion, -ment, -ness, and -ity in CatSU master's thesis abstracts

Nominalization Suffix	f	%
-tion/-sion	603	60.36
-ment	223	22.32
-ness	60	6.00
-ity	113	11.31
Total	999	100%

5 CONCLUSIONS

Masters' thesis abstracts have a four-move structure rather than a five-move one. The Introduction/I-move is likely optional in these abstracts, but all four moves (P, M, Pr, C) were considered conventional. The bulk of the abstracts were semi-linear, starting with P (Purpose) and ending with C (Conclusion), with I (Introduction) being deleted frequently. The lexico-grammatical features of master's thesis abstracts in a state university exhibit the following characteristics: (a) the abstract length of Master's thesis abstracts in the corpus is over twice the suggested abstract length by various citation systems, thereby departing from the conventional norm or failing to meet the standard abstract format requirement of the academic community; and (b) the authors' modal choice, verb tense use, use of voice forms, and employment of nominalization are influenced by the nature of the discipline and its related communicative demands (contextual factors), as well as the authors' emphasis and aim in writing the abstract.

6 PEDAGOGICAL IMPLICATIONS

The current study's findings present interesting implications for academic writing instruction and research. The rhetorical structure and some linguistic elements of thesis abstracts should be introduced into academic writing courses to educate graduate and postgraduate students to participate in the research world. Students in such courses must be aware of the rhetorical

framework or generic structure of research abstracts in their disciplines and some key linguistic elements. Such knowledge is necessary for students to succeed in their studies and academic careers. There appears to be a disconnect between technical writing literature suggestions and real practice. Many research paper writing handbooks include a general definition of an abstract and an example abstract. In order to provide novice writers with useful instruction on abstract writing, teaching/learning materials need to explicitly show students how to structure an abstract and how to realize the structure linguistically. Beginner writers must understand not just the prototypical moves of an abstract in their discipline but also how to write each move so it is linguistically acceptable. Such information must come from corpus-based research findings and address the distinctions between disciplines to achieve the goal.

In other words, firstly, move analysis demonstrates how a successful abstract should be structured and written, what it must include (obligatory moves), and what it could include (optional moves). Secondly, gaining knowledge and understanding of the rhetorical structure and writing norms of different genres not only helps students produce discourse but also makes them more discerning when comprehending and critically evaluating texts. Thirdly, raising awareness of – and explicitly teaching – the linguistic features of abstracts can help ESL writers overcome language difficulties (Nguyen, 2014). Moreover, move analysis enhances teachers' understanding of genre, which may create more appropriate and effective teaching resources. Finally, as observed by Hyland (2008), "writing is a practice based on expectations". Thus, move analysis encourages all practitioners to grasp better the patterns that drive effective communication.

Based on the preceding pedagogical implications, it is suggested that the findings of this study be used to write a format manual for writing thesis abstracts in a state university and establish criteria for Research and Development Services publications. Finally, the outcomes of this study could be used to develop a Graduate School extension activity for all graduate programs in the university.

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