



## Lexical density and syntactic structure on Indonesian and Malaysian applied linguistics Scopus-indexed journal article titles

<sup>1</sup>Elah Jalilah , <sup>2</sup>Zakie Asidiky 

<sup>1,2</sup>English Literature, Sekolah Tinggi Bahasa Asing Yapari, INDONESIA  
Jl. Cihampelas No. 194, Cipaganti, Kecamatan Coblong, Kota Bandung, Jawa Barat 40131

### ARTICLE INFO

#### Article history:

Received: August 5<sup>th</sup>, 2025

Revised: October 8<sup>th</sup>, 2025

Accepted: October 10<sup>th</sup>, 2025

#### Keywords:

Article Journal

Lexical Density

Syntactic Structure

Title

#### Conflict of interest:

None

#### Funding information:

None

#### Correspondence:

Elah Jalilah

[elahjalilah01@gmail.com](mailto:elahjalilah01@gmail.com)

### ABSTRACT

Writing research titles for academic or publication purposes is not easy. The features of titles can be observed in the amount of information they contain and how their structures convey meaning and achieve a particular purpose. Therefore, this study aimed to identify the lexical density level and syntactic structure use in titles of Indonesian and Malaysian Scopus-indexed journals in applied linguistics. It employed a descriptive qualitative research method to analyze 181 article titles using Ure's (1971) theory of Lexical density and Cheng et al.'s (2012) theory of Syntactic structure. It used the data from the two most recent issues of four published journal articles: SIELE, 3L, IJAL, and GEMA. As a result, it shows that 181 titles fall within the range of very high, high, and medium levels of lexical density, with the very high level being the most dominant. Very high lexical density titles are packed with content words, making them highly information-rich. High lexical density titles also deliver precise information, fitting formal academic writing. Medium lexical density titles strike a balance between content and function words, making them less dense yet more approachable. Furthermore, the titles commonly use three syntactic structures: compound, nominal, and V-ing. The compound structure occurs the most in the data. The findings are expected to contribute to enriching the broader understanding of research title writing practices. Thus, it can be used as a reference for the writers to form the title.



©Elah Jalilah; Zakie Asidiky

This is an open access article under the [CC-BY-SA](https://creativecommons.org/licenses/by-sa/4.0/) international license.

### How to cite (APA Style):

Jalilah, E. & Asidiky, Z. (2025). Lexical density and syntactic structure on Indonesian and Malaysian applied linguistics Scopus-indexed journal article titles. *JOALL (Journal of Applied Linguistics and Literature)*, 10 (2), 632-651. <https://doi.org/10.33369/joall.44388>

## **INTRODUCTION**

Writing research titles for academic or publication purposes is not easy. Proper title writing has proven to be challenging (Yang, 2019). Hence, the title of the research must accurately represent its content. Research article titles, especially those published in reputable journals, must be engaging to ensure they are cited by those discussing the same topic. Hyland and Zou (2022) mention that titles are a fundamental element of every academic genre and are crucial in research papers. The title should align with the manuscript's content and effectively persuade readers to read the entire text. Writers should follow discipline-based conventions when writing precise academic titles (Cianflone, 2010). Additionally, articles from scientific journals are frequently referenced in formal works, such as academic writing. As mentioned in Pears and Shields (2025), when selecting a source for a scholarly context, it is recommended to use evidence from credible academic sources, such as books and journal articles.

As a gateway to the contents of a scientific article, its title is usually the first part that viewers read and consider. Formulating the title of a manuscript is crucial for conveying the essence of the research paper to the reader at a superficial glance (Eapen et al., 2025). Titles should clearly and concisely communicate the paper's content without misleading the readers. Readers determine whether the content is relevant to their purposes based on their understanding of the title. According to Tullu (2019), because the title serves as the first impression of a research component, it must be written correctly, accurately, carefully, and meticulously. Writers must try to choose an informative, appropriate, and catchy title for their research article. As noted by Hong and Pham (2024), effective titles benefit both the reader and the writer, as a research article is often seen as the primary vehicle for science communication. The careful forming of a title thus directly impacts a research article's accessibility and reach. Another effort the writer made to create the title was also about its length. Demir (2023) stated that a very short title, however, might not mention enough information to fulfil its main function of informing readers about the content of the study. Therefore, balancing conciseness and informativeness in titles is beneficial for creating an effective title that communicates the research scope without losing clarity.

Choosing the right title terms can be challenging for writers, as it can significantly influence whether a reader decides to continue reading the article. According to Perdomo and Morales (2024), one way to assess the features of a good title is by examining the amount of information it contains. The existing information can be seen from the content words used in the titles. Linguistically, the lexical items or content words are defined as the words that have semantic content and contribute to the meaning of the sentence (Khorina & Handani, 2022). Additionally, by highlighting the main

ideas, a title clarifies the study's focus. As stated in Cheng et al. (2012), writers of research articles need to select syntactic structures for their titles that effectively convey the distinctive substance of their works. Therefore, using a lexical density formula can analyze more information contained in the title as it can measure how densely packed the content words are in the number of running words (Ure, 1971). Moreover, the syntactic structure approach helps understand how these structures are used to convey meaning and achieve a particular purpose within a research context. For that reason, syntactic structure analysis can identify how effectively the titles present the distinctive content of the articles (Moattarian & Alibabae, 2015).

Several studies have been conducted to analyze the titles of research papers. Perdomo and Morales (2024) and Wang et al. (2024) identified research and academic article titles with genre analysis. Next, Méndez and Alcaraz (2017) examined the possible differences and/or similarities between scientific letters and research papers in terms of several linguistic and extra-linguistic variables. Also, Apriani and Arsyad (2022) analyzed the average length, syntactic structure, and differences in applied linguistic titles across different Sinta scores. Last, Archibald (2017) stated that the average text length is 10.4 words, and these words comprise a rich array of four main categories of lexicon: domain-specific words, research-related words, verbal expressions, and country/local references. Collectively, all of these studies show that research titles are complex linguistic forms whose structure is closely related to communicative purposes, rhetorical strategies, and disciplinary norms.

Lexical density and syntactic structure play important roles in shaping the clarity and complexity of academic writing. Lexical density measures the amount of content words that add information, while syntactic structure organizes ideas to express the context. By achieving the correct balance between these, authors can produce titles that are informative yet easy to understand. Previous works on titles are diversified, focusing on the length of titles, titles in different genres and disciplines, linguistic variables, and applications. However, few studies have analyzed the lexical density level and syntactic structure categories of research article titles that concentrate on a specific region and field.

Unlike previous studies, this study aimed to fill the gaps by analyzing the lexical density level and syntactic structure categories in several leading Indonesian and Malaysian applied linguistics journal article titles. Accordingly, this study tried to identify and find out (i) the word choice and number by calculating the lexical density from the titles and (ii) forms of the most suitable syntactic structure in the title to interpret the content of the study. By focusing on this particular area and field, the study fills a gap in the literature, which centres on academic communication styles

in Southeast Asia. This study explored not only the structural but also the lexical features of titles, providing a deeper understanding of how researchers in Indonesia and Malaysia convey clarity, identity, and complexity in their research.

The journal article titles used in this data were taken from four Q1 Scopus-indexed journals: SIELE, 3L, IJALS, and GEMA. The reason for choosing Indonesian and Malaysian Q1 journals is that they have the highest impact factor, representing the highest quality and most impactful research. According to D'Souza (2025), Q1 Scopus journals represent the top 25% of publications with the highest impact, featuring the most influential and widely cited research. Moreover, according to a report by Goh (2023), Malaysia and Indonesia are two of the most research-active countries in Southeast Asia, contributing to the growth of knowledge in the Southeast Asian region. While Q2, Q3, Q4, and Non-Quartile journals also publish impactful studies, these journals differ in citation frequency, audience reach, acceptance rate, and editorial scope (Dishant, 2024). Including only Q1 journal article titles represents the title writing used in the most prestigious literature, providing the highest standard of research communication.

Thus, this study examines lexical density and syntactic structure in high-impact Indonesian and Malaysian journal titles to fill a gap in the literature. Understanding these concepts helps writers improve the clarity and impact of their titles, which is important for enhancing effective communication in today's research writing. Hence, there were 2 (two) research questions formulated: (a) What are the lexical density levels of the titles in Indonesian and Malaysian applied linguistics Scopus-indexed journals? Moreover, (b) What are the main syntactic structure types of the titles in lexical density in Indonesian and Malaysian applied linguistics Scopus-indexed journals? This study aims to contribute to a better understanding of how research article titles are constructed. In addition, this study is expected to help the writer create an impactful yet engaging research writing title, making it more appealing and increasing its citations.

## **METHOD**

### **Research Design**

This study employed a qualitative descriptive research method to analyze the data from the article titles. This approach is used to investigate textual information to determine word patterns, their occurrences, and the relationships between them. Wahyuni (2024) defined data collected in qualitative research as words or pictures. Furthermore, the online documentation technique was used to collect the data. As stated in Rose et al. (2019), document data collection includes a range of techniques for gathering information from written documents. The data source used in this

study was obtained from four Q1 Scopus-indexed journal articles in Indonesia and Malaysia, specifically SIELE, 3L, IJALS, and GEMA journals. The data consisted of 181 titles taken from the two latest issues of four Indonesian and Malaysian journals published quarterly. These journals were specifically chosen because they are included in the Q1 journals rank based on Scopus.com. Additionally, as stated by Corder and Foreman (2009) and Apriani and Arsyad (2022), the minimum requirement for the corpus includes 30 titles for analysis. Below are the 181 titles used in this study:

- a. 33 titles from Vol. 12 No. 1 (2025) in the Studies in English and Education (SIELE) journal  
<https://jurnal.usk.ac.id/SiELE/issue/view/2666>
- b. 33 titles from Vol. 11 No. 3 (2024) in the Studies in English and Education (SIELE) journal  
<https://jurnal.usk.ac.id/SiELE/issue/view/2534>
- c. 22 titles from Vol. 31 No. 1 (2025) in the 3L: Language, Linguistics, Literature journal <https://ejournal.ukm.my/3l/issue/view/1804>
- d. 26 titles from Vol. 30 No. 4 (2024) in the 3L: Language, Linguistics, Literature journal <https://ejournal.ukm.my/3l/issue/view/1778>
- e. 14 titles from Vol. 15 No. 1 (2025) in the Indonesia Journal of Applied Linguistics (IJALS) journal  
<https://ejournal.upi.edu/index.php/IJAL/issue/view/Vol%2015%2C%20No%201%20%282025%29%3A>
- f. 16 titles from Vol. 14 No. 3 (2025) in the Indonesia Journal of Applied Linguistics (IJALS) journal  
<https://ejournal.upi.edu/index.php/IJAL/issue/view/3617>
- g. 16 titles from Vol. 25 No. 1 (2025) in the GEMA online Journal of Language Studies <http://ejournal.ukm.my/gema/issue/view/1803>
- h. 21 titles from Vol. 24 No. 4 (2024) in the GEMA online Journal of Language Studies <http://ejournal.ukm.my/gema/issue/view/1775>

### **Instruments and Procedures**

The online documentation technique was used in this study. Documentation, according to Sugiyono (2015), is a method used to obtain information from archives, books, documents, pictures, or any other information that can support the research. This study utilized 181 titles from Q1 Scopus-indexed journal articles. Rose et al. (2019) stated that document data collection includes a range of techniques for gathering information from written documents. There are several steps in collecting the data for this study. First, open the four article journals from the SIELE, 3L, IJALS, and GEMA websites. Next, search for the two most recent issues of the journal on its website. Lastly, copy and input all the titles into the analysis tables, categorizing each issue accordingly.

This study utilized the theory from Ure (1971) on lexical density and the theory from Cheng et al. (2012) on Syntactic structure types. The data were first analyzed by the calculation formula of lexical density proposed by Ure (1971) below:

$$\text{Lexical Density} = \frac{\text{Number of Lexical Items}}{\text{Total Numbers of Words}} \times 100\%$$

After identifying the data ratio, they were then classified into several categories of lexical density proposed by Ure (1971) in Syarif (2019) and Maufiroh et al. (2024). Below is the table of levels for the lexical density:

**Table 1. Lexical Density Classification**

No.	Classification	Range
1.	Very High (Very Dense)	>70%
2.	High (Dense)	61- 70%
3.	Medium (Less Dense)	51-60%
4.	Low (Not Dense)	41-50%

Furthermore, to analyze the categories of syntactic features in journal article titles, the data were classified into five categories. Below are the five categories of syntactic structure:

- a. **Nominal Structure:** It includes one or more nouns (a head or heads), which may be followed by post-modifiers or preceded by pre-modifiers.
- b. **V-ing Phrase Structure:** It forms from one or more verbs in the -ing form, followed by the verb's objects or modifiers.
- c. **Full-sentence Structure:** It consists of both declarative structures and a whole sentence or clause.
- d. **Prepositional Phrase Structure:** It begins with a preposition, which is followed by the object of that preposition.
- e. **Compound Structure:** In this structure, a colon, period, dash, or question mark separates its two sections.

The syntactic structures of entire titles were the primary focus of the first part of the analysis. Because the compound structures were dominant in the data, each part of the title in these structures was analyzed in more detail. The detailed analysis of each part in compound titles used the modified classification theory by Cheng et al. (2012):

1. **Topic: Scope:** In this combination, the primary focus of the study is presented in the first section, followed by details outlining the study's topic.

2. **Topic: Method:** This combination provides the first section, which identifies the primary research question and then provides details on the study design and methods used.
3. **Topic: Description:** This combination presents the first section, which introduces the primary research question, followed by a description or explanation of the issue.
4. **Topic: Source:** In this combination, the main topic of study is stated in the first section, followed by details on the data source, including the participants or the area where the data were collected.
5. **Metaphor: Topic:** This combination begins with a metaphorical expression of the research concern, followed by a statement of the research concern.
6. **Topic: Question:** In this combination, the primary research concern is stated in the first section, followed by an interrogative statement.
7. **Question: Method:** This combination begins with an interrogative statement, followed by the research design or methodology adopted.
8. **Topic: Method + Source:** In this combination, the main focus of the study is presented in the first section, which is followed by details of the research strategy and methods, as well as the data source, including participants or the location where the data was collected.
9. **Metaphor: Question:** This combination presents a metaphorical expression of the research concern, followed by an interrogative statement.
10. **Question: Method + Source:** In this combination, after an interrogative statement, details about the research design and methods are presented, together with information on the data source, including participants and the location where the data was collected.
11. **Name: Method:** In this combination, an acronym is provided first, followed by information indicating the research design and methodology of the study.

### Data Analysis Procedures

This study used a deductive research technique. The research begins with the existing theory, followed by an examination of the data to develop a hypothesis. The deductive technique involves testing or verifying a theory rather than developing it. The researcher advances a theory, collects data to test it, and reflects on its confirmation or disconfirmation based on the results (Creswell, 2018).

Lexical density analysis begins by identifying content and function words in every title. Next, counted the total number of words in the title. Then, the number of content words and titles was calculated using the formula proposed by Ure (1971) for lexical density. Lastly, note down the result of

the calculation, and then describe both the analysis and conclusion after obtaining all the results.

In syntactic structure, the title analysis began by categorizing each title into five categories. In the categorization process, the titles were examined to determine whether they used a colon/question, verb-ing forms, or prepositional phrases, were written in full-sentence form, or started with nominal words. Moreover, for compound structure results, the titles were analyzed using eleven combinations of compound titles as proposed by Cheng et al.'s (2012) s theory. The primary focus and the detailed part of the titles were examined. Finally, the analysis, description, and conclusion were made after all the results were collected.

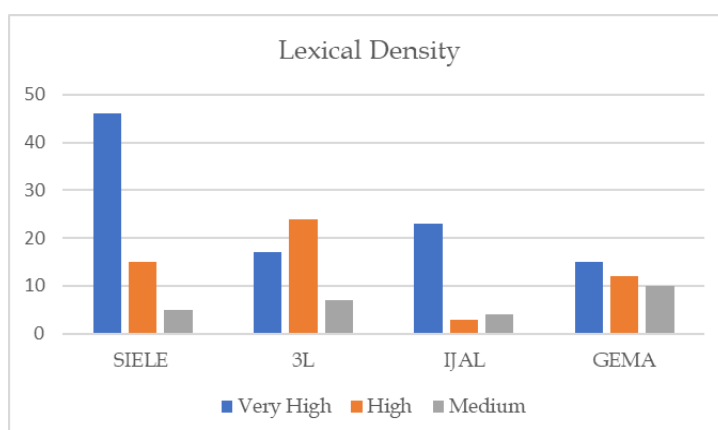
## FINDINGS

After analyzing the data, it is evident that the results answer the two research questions: lexical density level and syntactic structure categories of titles. The findings of the analysis of the lexical density of Q1-indexed Scopus article journal titles are shown below:

**Table 2. Lexical Density Analysis Result**

Article Journal	Level			
	Very High	High	Medium	Low
SIELE 12(1) 2025	46	15	5	0
SIELE 11(3) 2024				
3L 31(1) 2025	17	24	7	0
3L 30 (4) 2024				
IJAL 15(1) 2025	23	3	4	0
IJAL 14(3) 2025				
GEMA 25(1) 2025	15	12	10	0
GEMA 24(4) 2024				
<b>Total</b>	101	54	26	0

According to the results, there are three levels of lexical density in this data, based on 188 titles. Specifically, 101 titles were classified as having a very high lexical density, with a more than 70% lexical density. Next, 54 titles were classified as having a high level of lexical density because they fell within the percentage range of 61% to 70%. Lastly, the remaining 26 titles were classified as having a medium level of lexical density, as they fell within the 51% to 61% range. Moreover, in this data analysis, no title was found to have a low level of lexical density. Below is the chart of lexical density level from the two latest volumes of SIELE, 3L, IJAL, and GEMA journals:



**Figure 1. Lexical Density Analysis Result Chart**

In addition, the average lexical density percentage from the total data set is 71.35%. Therefore, the average lexical density from the 181 titles was considered to be at a very high level. Below are some examples of the data analysis:

### Very High

*Leveraging students' prewriting: Translanguaging in Indonesian higher education context*

Applying Ure's formula, it can be concluded that the percentage of this title's Lexical density is:

- Lexical Density:  $\frac{8}{9} \times 100\% \equiv 88.88\%$

In the title above, there are 8 (eight) content words (leveraging, students', prewriting, Translanguaging, Indonesian, higher, education, context) and 1 (one) function word (in) in a total of 9 (nine) words. Therefore, the total number of content words (in bold) is divided by the total number of words, multiplied by 100%, to get the percentage of Lexical Density, which is 88.88%. This title is categorized as having a very high level of lexical density because its percentage exceeded 70%.

### High

*Learning English in the 'shadow': Patterns and implications of English private tutoring in Vietnam*

Applying Ure's formula, it can be concluded that the percentage of this title's Lexical density is:

- Lexical Density:  $\frac{9}{14} \times 100\% \equiv 64.28\%$

In the title above, there are 9 (nine) content words (Learning, English, shadow, Patterns, implications, English, private, tutoring, Vietnam) and 5 (five) function words (in, the, and, of, in) in a total of 14 words. Therefore, the total number of content words (in bold) is divided by the total number of

words, multiplied by 100%, to obtain the percentage of Lexical Density, which is 64.28%. This title is categorized as having a high level of lexical density because the percentage of lexical density was between 61% and 70%.

### Medium

*How do they interact? Exploring issues of interaction forms in an online writing classroom*

Applying Ure's formula, it can be concluded that the percentage of this title's Lexical density is:

- Lexical Density:  $\frac{8}{14} \times 100\% \equiv 57.14\%$

In the title above, there are 8 (eight) content words (interact, exploring, issues, interaction, forms, online, writing, classroom) and 6 (six) function words (How, do, they, of, in, an) out of a total of 14 words. Therefore, the total number of content words (in bold) is divided by the total number of words, multiplied by 100%, to obtain the percentage of Lexical Density, which is 57.14%. This title is categorized as having a medium level of lexical density because the percentage falls between 51% and 60%.

Furthermore, below is the result of the syntactic structure analysis of Q1-indexed Scopus article journal titles:

**Table 3. Syntactic Structure Analysis Result**

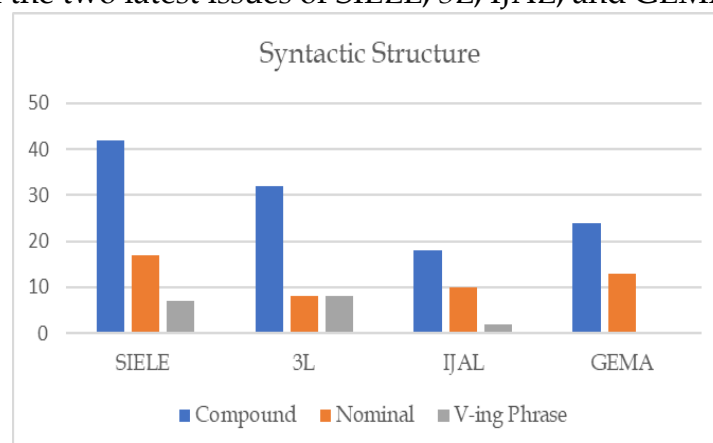
Article Journal	Compound	Nominal	Level V-ing Phrases	Full- Sentences	Prepositional Phrases
SIELE 12(1) 2025	42	17	7	0	0
SIELE 11(3) 2024					
3L 31(1) 2025	32	8	8	0	0
3L 30 (4) 2024					
IJAL 15(1) 2025	18	10	2	0	0
IJAL 14(3) 2025					
GEMA 25(1) 2025	24	13	0	0	0
GEMA 24(4) 2024					
<b>Total</b>	116	48	17	0	0

The results above show four syntactic structure types in the 181 Q1-indexed Scopus article journal titles. The most common types found are compound types, with 116 titles. Next, the second most common type found is the nominal type, with 48 titles. This analysis's third most common type is V-ing phrases, with 17 titles. In addition, no full-sentence and prepositional phrase structure types were found in this study. In addition, below is the result of the compound titles classification:

**Table 4. Compound Title Combination Analysis Result**

Article Journal	Very High
Topic:Scope	44
Topic:Method	23
Topic:Method + Source	20
Topic:Source	15
Metaphor:Topic	6
Question:Method + Source	5
Topic:Description	2
Topic:Question	1
Question:Method	0
Metaphor:Question	0
Name:Method	0

The results from both parts of all compound titles identified eleven types of combinations, as shown in the table above. The top eight combinations are Topic:Scope, Topic:Method, Topic:Method + Source, Topic:Source, Metaphor:Topic, Question:Method + Source, Topic:Description, and Topic:Question. The data above shows no Question:Method, Metaphor:Question, and Name-Method category. Below is the chart of syntactic structure from the two latest issues of SIELE, 3L, IJAL, and GEMA journals:



**Figure 2. Syntactic Structure Analysis Result Chart**

The chart shows that compound, nominal, and -ing phrase structures were used to form the title, with the Compound structure occurring the most in the data. Below are some examples of the data analysis:

### Compound Structure

Topic:Scope

<i>Leveraging students' prewriting:</i>	<i>Topic</i>
<i>Translanguaging in Indonesian higher education context</i>	<i>Scope</i>

From the title above, it can be concluded that it is categorized into a compound structure. This is due to using a colon (:) to separate two parts. "Leveraging students' prewriting" serves as the first part, indicating the topic of the study, followed by the second part, "Translanguaging in Indonesian higher education context", which implies a scope.

Topic:Source

<i>Challenges in implementing English-only instruction:</i>	<i>Topic</i>
<i>Insights from EFL student teachers in Taiwan</i>	<i>Source</i>

From the title above, it can be concluded that it is categorized into a compound structure. This is due to using a colon (:) to separate two parts. "Challenges in implementing English-only instruction:" is the first part, which indicates the topic of the study, followed by the second part, "Insights from EFL student teachers in Taiwan", which suggests the source.

Topic:Method

<i>The portrayal of Rohingya refugees in Indonesian news media:</i>	<i>Topic</i>
<i>A corpus-assisted critical discourse analysis</i>	<i>Method</i>

From the title above, it can be concluded that it is categorized into a compound structure. This is due to the use of a colon (:) to separate two parts. "The portrayal of Rohingya refugees in Indonesian news media" is the first part, which indicates the topic of the study, followed by the second part, "A corpus-assisted critical discourse analysis," which suggests the method.

Topic:Method + Source

<i>Expressive speech acts during disasters:</i>	<i>Topic</i>
<i>A pragmatic analysis of the Aceh tsunami oral history archive</i>	<i>Method + Source</i>

From the title above, it can be concluded that it is categorized into a compound structure. This is due to the use of a colon (:) to separate two parts. "Expressive speech acts during disasters" serves as the first part, indicating the topic of the study, followed by the second part, "A pragmatic analysis of the Aceh tsunami oral history archive", which implies the method and source.

Metaphor:Topic

<i>Larger than life:</i>	<i>Metaphor</i>
<i>Linguistic aspects as a strategy for provoking hedonism in car slogans</i>	<i>Topic</i>

From the title above, it can be concluded that it is categorized into a compound structure. This is due to the use of a colon (:) to separate two parts. "Larger than life" serves as the first part in a form of metaphorical expression, followed by the second part, "Linguistic aspects as a strategy for provoking hedonism in car slogans", which implies a topic of the study.

#### Question+Method + Source

<i>Is the throne still for the people?</i>	<i>Question</i>
<i>A sociocultural linguistic analysis of Menanam adalah Melawan</i>	<i>Method + Source</i>

From the title above, it can be concluded that it is categorized into a compound structure. This is due to the use of a question mark (?) to separate two parts. "Is the throne still for the people?" is the first part, which implies a question as an interrogative statement, followed by the second part, "A sociocultural linguistic analysis of Menanam adalah Melawan", which suggests the method and Source.

#### Topic:Description

<i>Exploring 'English' in an EMI nursing program:</i>	<i>Topic</i>
<i>Native English varieties, ELF, and translingual practices</i>	<i>Description</i>

From the title above, it can be concluded that it is categorized into a compound structure. This is due to the use of a colon (:) to separate two parts. "Exploring 'English' in an EMI nursing program" serves as the first part, indicating the topic of the study, followed by the second part, "Native English varieties, ELF, and translingual practice", which implies a description of the topic.

#### Topic:Question

<i>AI-powered language learning:</i>	<i>Topic</i>
<i>A blessing or a curse for English language education?</i>	<i>Question</i>

From the title above, it can be concluded that it is categorized into a compound structure. This is due to the use of a colon (:) to separate two parts. "AI-powered language learning" serves as the first part, indicating the topic of the study, followed by the second part, "A blessing or a curse for English language education?" which implies a question.

### **Nominal Structure**

*Redefinition of human-centric skills in language education in the AI-driven era*

The word “Redefinition” is a noun used as the head of the title; therefore, this title is categorized as a nominal structure. This title effectively addressed the information by including specific post-modifiers, qualifying the head nouns. “Of human-centric skills in language education in the AI-driven era” is employed as the post-modifier in this title.

### **V-ing Phrase Structure**

*Addressing the role of structured extensive listening among low-proficiency Thai learners of English*

This title is classified as a V-ing phrase structure title, as it uses the Verb-ing form, “Addressing”. The V-ing word functioned as a gerund or noun form of a verb. It highlights the activity of the research study, represented by the V-ing form. It is followed by objects/modifiers of the verb, which is “the role of structured extensive listening among low-proficiency Thai learners of English”.

## **DISCUSSION**

From the result, 181 titles contained a high number of content words, which indicates a high lexical density. This aligns with the study by Archibald (2017), which shows that academic titles tend to exhibit high lexical density as writers strive to make titles informative and concise to attract readers. It can also have a significant influence on the decision to read or cite. Similarly, Morales et al. (2020) stated that a high lexical density enables the author to convey a substantial amount of information about the study concisely. As evidence, the result agrees with previous studies by Perdomo and Morales (2024) and Morales et al. (2020), which concluded that article titles have a high range of lexical density. This supports Halliday and Martin (2005) in Sari (2021)’s concept that lexical density indicates how information-rich a text is.

Furthermore, besides lexical density, this study found compound, nominal, and V-ing phrase structures were used to form the title, with compound structures being the most frequent. The frequent use of Compound structure aligns with Cheng et al.’s (2012) observation that applied linguistics titles employ this structure to cleverly deliver not only the general topic but also a specific aspect of research, such as scope, research method, or data source. The compound structure titles found data by mentioning the subject of the study and breaking down the specific context, separated by a colon or question mark. Therefore, writers can include two foci in forming the titles to contain as much information as possible. Apriani and Arsyad (2022) similarly stated that a compound

structure indicates that the authors prefer expressing the content and scope of their research in two sections.

Comparing types of compound title combinations, the study identified a greater variety than the one by Anthony (2001), who identified five types of combinations (Name-Description, Topic-Scope, Topic-Method, Description-Name, and Topic Description). This suggests that research in the applied linguistics discipline is more lexically and thematically diverse. The top eight most common combinations in the compound titles are Topic:Scope, Topic:Method, Topic:Method + Source, Topic:Source, Metaphor:Topic, Question:Method + Source, Topic:Description, and Topic:Question. Also, there are no combinations of Question:Method, Metaphor:Question, and Name:Method, which shows that applied linguistics has more variation in forming the titles. The results reveal that Topic and Scope combine most frequently in applied linguistics. It shares the same conclusion with Cheng et al. (2012), who note that in applied linguistics, there is a wider variety of combinations, indicating a broader range of research topics and aspects of concern in this discipline.

Additionally, the dominance of Topic:Scope and Topic:Method combinations same the similar statement with Cianflone (2010) and Morales et al. (2020) that the function of the first part of the title is to inform about the topic, while the second part is to offer more specific information about the topic, scope (participants, sample, environment, place, and area), or method of the study.

The second most common structure found in this data is the nominal structure, which appeared in 49 out of 181 titles. The nominal titles from this data consisted of a noun or noun phrase as the head, indicating a single focus of the study, with the addition of pre- and/or post-modifiers intended to provide specific information concisely. Moreover, Biber and Gray (2010) stated that noun heads qualified by modifiers form are more economical and allow for faster and more efficient reading. Compared with Moslehi and Kafipour (2022), medical titles surpassed linguistic titles in all nominal categories, with post- and premodified syntactic elements of the nominal structure being the most prevalent in both professions.

The third most common structure identified in this data analysis is the V-ing phrase structure, which shares a similar result with Apriani and Arsyad (2022) stated that the V-ing phrases also occurred in all groups of journals of applied linguistics, although not as frequently as the other two types of title features (nominal and compound). The head, which is the V-ing phrase, highlighted the study's activity or process. This structure conveys a sense of continuity and expresses ongoing activity (Morales et al., 2020).

It is concluded that from the two latest volumes in SIELE, 3L, IJAL, and GEMA journal article titles, compound, nominal, and V-ing phrase structures occurred to form the title. Aligns with Apriani and Arsyad (2022), who stated that these three structures were found in applied linguistics journal articles from accredited national journals with different Sinta scores. Apparently, from these 181 titles, there is no full-sentence and prepositional phrase structure. Soler (2007) indicated that it may not be as suitable as a compound or nominal structure for the social sciences. This result aligns with the conclusions of studies by Haggan (2004) and Moattarian and Alibabae (2015), which indicate that full-sentence and prepositional structures are the least frequent types. The full-sentence title construction shows a tendency to be a disciplinary peculiarity of Biology research paper titles. Meanwhile, in Linguistics, titles are surprisingly shorter than in other disciplines, and compound titles show a tendency to be a generic peculiarity Soler, 2007).

## **CONCLUSION**

As a result of the analysis, it is concluded that the titles fall within the range of very high, high, and medium levels of lexical density, with the very high level being the most dominant. Very high lexical density titles contain very dense content words, making them more information-rich. High lexical density titles similarly deliver the dense amount of precise information, making them fit for formal academic writing. Lastly, medium lexical density titles balance between content and function words, making them less dense but still more approachable. The finding indicates the title contained as much information (content words) as possible to inform and attract readers. The higher the percentage of lexical density, the denser the title is due to the presence of content words. In addition, the frequent use of punctuation such as colons and question marks in compound structures highlights a strategic approach to attract readers. Common combinations that include Topic:Scope and Topic:Method reflect the combination of two key elements to provide clear and detailed information. Overall, the preference for compound structure demonstrates a practical approach to delivering complex ideas clearly and attractively in applied linguistics.

Furthermore, this study shows that the density of a title is closely related to its syntactic structure. Writers tend to use specific sentence patterns to convey more meaning in fewer words. The writer can consider the word choice and number by calculating the lexical density from the title. Therefore, the title has a dense meaning but in fewer words. These functions might be beneficial for providing insight for research or academic title writing.

Based on the results of this study, several suggestions are proposed for future research. Future studies can conduct a more in-depth analysis by combining the correlation of title length, the connection of the title with the research question, and other factors to examine the characteristics of a title. Additionally, it is recommended to use data from different genres, disciplines, and educational levels for the variation in future studies. This is useful for filling the gaps in the title analysis study.

## REFERENCES

- Anthony, L. (2001). Characteristic Features of Research Article Titles in Computer Science. *IEEE Transactions on Professional Communication*, 44(3).
- Apriani, N., & Arsyad, S. (2022). The Linguistic Characteristics of Article Titles in Applied Linguistics Published in Accredited National Journals of Different Sinta Scores. *ENGLISH FRANCA: Academic Journal of English Language and Education*, 6(2), 219. <https://doi.org/10.29240/ef.v6i2.5445>
- Archibald, A. J. B. (2017). A Linguistic Analysis of Conference Titles in Applied Linguistics. *International Journal of Foreign Language Teaching & Research*, 5(18).
- Biber, D., & Gray, B. (2010). Challenging stereotypes about academic writing: Complexity, elaboration, explicitness. *Journal of English for Academic Purposes*, 9(1), 2–20. <https://doi.org/10.1016/j.jeap.2010.01.001>
- Cheng, S. W., Kuo, C.-W., Kuo, C.-H., Cheng, S. W., Kuo, C.-W., & Kuo, C.-H. (2012). Association for Academic Language and Learning. *Journal of Academic Language & Learning*, 6(1).
- Cianflone, E. (2010). Scientific titles in Veterinary Medicine research papers. *English for Specific Purposes World*, 9(30), 1–8.
- Corder, G. W., & Foreman, D. I. (2009). Nonparametric statistics for non statistician: A step-by-step approach. John Willey and Sons.
- Creswell, J. W., & Creswell, J. D. (2018). *Research Design: Qualitative, Quantitative and Mixed Methods Approaches* (fifth). SAGE Publications, Inc.
- Demir, D. (2023). Syntactic structures of Turkish research article titles in medicine and engineering. *African Educational Research Journal*, 11(3), 403–412. <https://doi.org/10.30918/AERJ.113.23.068>
- Dishant. (2024, November 22). *Guide to journal rankings: What are quartiles – Q1, q2, q3 & Q4 journal*. Editage USA Official Blog. <https://www.editage.us/blog/guide-to-journal-rankings-what-are-quartiles-q1-q2-q3-q4-journal/>
- D'Souza, R. (2025, March 19). *From Q1 to Q4: Understanding journal quartiles for effective journal selection*. Enago Academy.

- Eapen, K. C., Koikkara, K. A., & Keshava, S. N. (2025). Mastering the Art of First Impressions: Tips to Write a Title, Abstract, and Keywords for a Medical Manuscript. In *Indian Journal of Radiology and Imaging* (Vol. 35, pp. S53–S57). Thieme Medical Publishers, Inc. <https://doi.org/10.1055/s-0044-1792039>
- Goh, J. (2023). *East Asia's Research Activity in Review*.
- Haggan, M. (2004). Research paper titles in literature, linguistics and science: dimensions of attraction. *Journal of Pragmatics*, 36(2), 293–317. [https://doi.org/10.1016/S0378-2166\(03\)00090-0](https://doi.org/10.1016/S0378-2166(03)00090-0)
- Halliday, M. A., & Martin, J. R. (2005). *Writing Science: Literacy and Discursive Power*. Taylor and Francis.
- Hong, N. B., & Pham, H. (2024). A Contrastive Analysis of Rhetorical Structures of English and Vietnamese Linguistic Research Articles. *3L: Language, Linguistics, Literature*, 30(1), 191–207. <https://doi.org/10.17576/3L-2024-3001-14>
- Hyland, K., & Zou, H. (Joanna). (2022). Titles in research articles. *Journal of English for Academic Purposes*, 56, 101094. <https://doi.org/10.1016/j.jeap.2022.101094>
- Khorina, M., & Handani, W. Z. (2022). Comparing the Lexical Density of Spoken and Written News. *Linguistics and English Language Teaching Journal*, 10(2).
- Maufiroh, Y. L., Hussien, B. T. E., & Femilia, P. S. (2024). Lexical Density of Reading Materials in An English Textbook: A Content Analysis. *Journal of Language Intelligence and Culture*, 6(2), 165–174. <https://doi.org/10.35719/jlic.v6i2.104>
- Méndez, D. I., & Alcaraz, M. Á. (2017). Titles of Scientific Letters and Research Papers In Astrophysics: A Comparative Study of Some Linguistic Aspects and Their Relationship with Collaboration Issues. *Advances in Language and Literary Studies*, 8(5), 128. <https://doi.org/10.7575/aiac.all.v.8n.5p.128>
- Moattarian, A., & Alibabae, A. (2015). Syntactic Structures in Research Article Titles from Three Different Disciplines: Applied Linguistics, Civil Engineering, and Dentistry. *Teaching English as a Second Language*, 34(1), 27–50.
- Morales, O. A., Perdomo, B., Cassany, D., Tovar, R. M., & Izarra, É. (2020). Linguistic structures and functions of thesis and dissertation titles in Dentistry. *Lebende Sprachen*, 65(1), 49–73. <https://doi.org/10.1515/les-2020-0003>
- Moslehi, S., & Kafipour, R. (2022). Syntactic structure and rhetorical combinations of Iranian English research article titles in medicine and applied linguistics: A cross-disciplinary study. *Frontiers in Education*, 7. <https://doi.org/10.3389/feduc.2022.935274>

- Pears, R., & Shields, G. (2025). *Cite Them Right* (13th ed.). Bloomsbury Publishing.
- Perdomo, B., & Morales, O. A. (2024). Titles of Architecture Research Articles in English and Spanish: Cross-language Genre Analysis for Disciplinary Writing. *3L: Language, Linguistics, Literature*, 30(4), 344–360. <https://doi.org/10.17576/3L-2024-3004-23>
- Rose, H., McKinley, J., & Baffoe-Djan, J. B. (2019). *Data collection research methods in applied linguistics* (First). Bloomsbury Publishing.
- Sari, N. E. (2021). An Analysis of Lexical Density and Grammatical Intricacy on Scientific Articles in Journal of English Education Volume 4, Number 1, 2019, Published By Usn Scientific Journal, Indonesia. *Jurnal Griya Cendikia*, 6(2).
- Soler, V. (2007). Writing titles in science: An exploratory study. *English for Specific Purposes*, 26(1), 90–102. <https://doi.org/10.1016/j.esp.2006.08.001>
- Sugiyono. (2015). *METODE PENELITIAN KOMBINASI : Mixed Methods* (7th ed.). ALFABETA.
- Syarif, H. (2019). LEXICAL DENSITY V.S. GRAMMATICAL INTRICACY: How Are They Related? *Atlantis Press*, 276.
- Tullu, M. (2019). Writing the title and abstract for a research paper: Being concise, precise, and meticulous is the key. In *Saudi Journal of Anaesthesia* (Vol. 13, Issue 5, pp. S12–S17). Wolters Kluwer Medknow Publications. [https://doi.org/10.4103/sja.SJA\\_685\\_18](https://doi.org/10.4103/sja.SJA_685_18)
- Ure, J. (1971). *Lexical density and register differentiation*. Cambridge University Press.
- Wahyuni, S. (2024). *Qualitative Research Method: Theory and Practice* (Third). Penerbit Salemba.
- Wang, Z., Jabar, M. A. A., & Jalis, F. M. M. (2024). A Systematic Literature Review on Academic Title Studies in Genre Analysis. *World Journal of English Language*, 14(6), 111. <https://doi.org/10.5430/wjel.v14n6p111>
- Yang, W. (2019). A diachronic keyword analysis in research article titles and cited article titles in applied linguistics from 1990 to 2016. *English Text Construction*, 12(1), 84–102. <https://doi.org/10.1075/etc.00019.yan>

## THE AUTHORS

<sup>1</sup>**Elah Jalilah** earned her undergraduate degree in English Literature from Sekolah Tinggi Bahasa Asing Yapari. Her interest centres on the discipline of linguistics, specifically in relation to Systemic Functional Linguistics (SFL). Her goal is to pursue a master's degree in linguistics. She can be reached at elahjalilah01@gmail.com.

<sup>2</sup>**Dr. Zakie Asidiky, M.Hum.**, is an Associate Professor of Linguistics in the English Literature Department at Sekolah Tinggi Bahasa Asing Yapari. His research covers Systemic Functional Linguistics (SFL), Multimodality, Critical Discourse Analysis (CDA), Pragmatics, and Genre Analysis.