#### https://doi.org/10.17323/jle.2024.18411

## Academic Vocabulary Distribution in Applied Linguistics Journal Research Articles: Do SINTA Rankings Matter?

Suhandoko <sup>®1</sup>, Dian Riesti Ningrum <sup>®2</sup>, Andini Dwi Wardani <sup>®3</sup>, Ach. Nobair <sup>®1</sup>, Putroue Keumala Intan <sup>®1</sup>

- <sup>1</sup> UIN Sunan Ampel, Surabaya, Indonesia
- <sup>2</sup> Universitas Airlangga, Surabaya, Indonesia
- <sup>3</sup> Universitas Negeri Surabaya, Indonesia

#### ABSTRACT

**Background:** As a national database for indexing scientific journals, SINTA has considerable significance for the Indonesian academic community as it measures the performance of national journals and increases the visibility of Indonesian journals and researchers internationally. Although studies have been conducted to examine the role of academic vocabulary in scholarly publications, very little has investigated how academic vocabulary has been used in SINTA-indexed applied linguistics journals (SIALJ) research articles and whether there are differences in academic vocabulary coverage across SINTA rankings.

**Purpose:** This study examines the academic vocabulary measure of whether significant differences in academic vocabulary coverage are present in SIALJ research articles across rankings. This examination will offer insights into the linguistic expectations set by the editorial boards of the journals across rankings.

**Method:** Out of 8585 journals indexed by SINTA, we found 72 related to applied linguistics. We chose four journals with the highest impact factor in each ranking to ensure representativeness. We included approximately 250000 running words from each journal in each ranking and obtained 6073379 tokens in total. We used AntWordProfiler to analyse the lexical distribution with GSL and AWL as the base lists.

**Results:** We found that the academic vocabulary coverage in SIALJ research articles accounts for 11.01%, similar to other studies that also found that academic words typically cover at least 10% of academic texts. We also identified that the higher the journal rank, the more coverage of the academic vocabulary. However, our quantitative measurement identified no significant differences in academic vocabulary coverage in SIALJ research articles.

**Conclusion:** The absence of significant distribution disparities across rankings suggests a shared practice of strategies language use in SIALJ, irrespective of their rankings and challenges common assumptions about strategic language use discrepancies among journal clusters.

#### **KEYWORDS**

academic vocabulary, applied linguistics, journals, SINTA, coverage, rankings

## INTRODUCTION

The proliferation of open-access journals in recent years from various professional organizations, universities, independent institutions, and even bogus scientific entities has emerged extensive criticism about the publication quality. Bibliometric indices have emerged as a promising tool for identifying ethical violations in publishing practices (Gureyev & Mazov, 2022). These indices evaluate the publication status, the expertise of its authors, and the quality of their work by analysing citation frequency in the same field (Roldan-Valadez et al., 2019). While producing impactful research through scientific writing requires laborious work, it is widely acknowledged that only 10% of published work has a chance of being cited (Weinstein & Morgan, 2007). This issue is exacerbated by the language barrier, where publications written not in English often receive significantly fewer citations

**Citation:** Suhandoko, Ningrum, D.R., Wardani, A.D., Nobair, A., & Intan, P.K. (2024). Academic vocabulary distribution in applied iinguistics journal research Aaticles: Do SINTA rankings matter? *Journal of Language and Education*, *10*(3), 95-107. https://doi.org/10.17323/jle.2024.18411

**Correspondence:** Suhandoko E-mail: suhandoko@uinsa.ac.id

Received: November 24, 2023 Accepted: May 16, 2024 Published: September 30, 2024



(Arenas-Castro et al., 2024). Bibliometric indices allow researchers to determine the most appropriate journals for their work and monitor publication trends through self-assessment. Thus, contributing to reputable and high-quality journals can enhance the chances of their work being read and referenced (Castillo-Vergara et al., 2018; Donthu et al., 2020; Rey-Martí et al., 2016).

Several factors contribute to the assessment of a scientific journal's quality, including the rigor of the peer-review process, the reputation of the editorial board and reviewers, and the journal's impact factor. Equally important is the quality of language used to convey ideas, as effective communication can significantly influence the academic community. The use of academic vocabulary in scientific writing enhances the accuracy of communication and improves the comprehension of research findings (Awagu, 2021; Choo et al., 2017; Hyland, 2002). However, authors often prioritize linguistic simplicity over accuracy and precision (Aldawsari, 2017; Biber & Gray, 2016), which can compromise the content's accuracy (Breeze, 2008; Robbins, 2016). Therefore, writers need to strike a balance between simplicity and accuracy by carefully selecting appropriate vocabulary (Demir, 2019).

Countless studies have explored the significance of academic vocabulary in scientific writing, revealing that a good command of discipline-specific vocabulary indicates effective communication (Brun-Mercer & Zimmerman, 2015; Choo et al., 2017; Coxhead, 2012). As many scholars suggest, this practice promotes long-term academic performance (Csomay & Prades, 2018; Masrai et al., 2021). Furthermore, academic vocabulary has been found to be positively associated with journal quality (El-Omar, 2014), research impact (Pournia, 2019), and authors' credibility in the discourse practices of their scientific community (Matinparsa et al., 2022; Xodabande et al., 2022). Careful word choice establishes the author's expertise and credibility in the field, which is critical for building readers' trust and validating the argument presented (Hyland, 2013).

While previous literature has acknowledged the importance of academic vocabulary in scientific writing, there has been limited research on how academic vocabulary is used in journal articles, particularly in the context of the SINTA-indexed applied linguistics journal (SIALJ). This noticeable research gap presents us with an opportunity to examine how academic vocabulary is being used in these journals and whether there are significant differences in academic vocabulary coverage across rankings. Based on this background, the study addresses the following research questions: (1) What is the academic vocabulary coverage in SIALJ research articles? (2) How does the distribution of academic vocabulary in SIALJ research articles vary across rankings?

## LITERATURE REVIEW

## **Open Access Journals and Bibliometric Indices**

Numerous bibliometric indices are now accessible online, with both free and paid access options. Some prominent publication databases that employ accessible metrics include Scopus, Web of Science (WoS), PubMed, DOAJ, and SINTA (Science and Technology Index). These journal indexing portals provide comprehensive databases that offer bibliographic information, publication frequency, and impact factor of the journals. Although scholars have doubted the effectiveness of these measurements in determining the quality of publications, they admit that scholars often dream of having their works published in reputable and indexed journals as they tend to have a larger readership, as demonstrated by their bibliometric measurement (Garner et al., 2018; Kandi, 2016; Koushik, 2017). Beyond that, these portals play a significant role in helping researchers identify and evaluate academic literature. The significance of the portals is even more highlighted by their use in bibliometric analysis, which assesses how impactful the researchers and their works are in scientific development (Xiao et al., 2022).

In the context of Indonesia, SINTA is considered the primary national journal indexing portal that evaluates the quality of academic journals using various metrics, such as citations and h-index. In addition to assessing the quality of national journal's performance, SINTA also serves to increase the visibility of Indonesian journals and researchers in the global arena (Firmansyah & Faisal, 2019; Nandiyanto et al., 2020; Purnomo et al., 2020) as it provides academic branding to both researchers and institutions; thus, it increases their reputation and recognition in the global academic world (Ibrahim & Fadhli, 2021; Muslimin & Basthomi, 2022; Rahardja et al., 2019). Studies have reported that SINTA holds equal significance with more globally acknowledged indexing portals, like Scopus or WoS, as evidentially shown by SINTA-indexed journals' adherence to the high standard of excellence (Tamela, 2020; Wijaya & Bram, 2022; Yadira et al., 2022). Therefore, we can conclude that as a platform for disseminating knowledge and encouraging scholarly contributions, SINTA serves as a catalyst for promoting the recognition of Indonesian academia in the international arena.

## Academic Vocabulary in Scientific Writing

Several factors determine the quality of a scientific journal, including the rigor of its peer-review process, the reputation of its editorial board members, the publication frequency, and the impact factor. The peer-review process is crucial to ensuring that the published articles have met high-quality standards (Wicherts, 2016). The reputation and expertise of the journal's editorial board are also important to ensuring that the article content remains up-to-date and relevant to the journal's scope (Black et al., 1998). The publication frequency indicates the journal's quality by publishing innovative and novel research. Finally, the impact factor indicates that the published articles have a large readership, as evidenced by their citations (Koushik, 2017). However, it is important to not merely see the impact factor of a journal as the only measure of its quality. Assessing the quality of a publication should also consider how the article has conformed with the common practice, especially with the use of discipline-specific vocabulary known as academic vocabulary.

Accurate and appropriate use of academic vocabulary is a key instrument to facilitate researchers' accurate communication of their findings and ideas to their academic colleagues (Choo et al., 2017; El-Omar, 2014). Moreover, the skilful use of academic vocabulary establishes the writer's credibility in their field and increases the accessibility of their works (Awagu, 2021). The use of academic vocabulary ensures that research results are easily understandable and comparable to those of other researchers in the same field. Moreover, Asaad (2024) argues that mastering academic vocabulary, including complex and low-frequency words, is essential for producing high-quality academic writing and is strongly linked to proficient writing skills. Therefore, mastery of academic vocabulary is essential for achieving effective scientific writing and successful research and knowledge dissemination.

Academic writing is renowned for its use of discipline-specific language or academic vocabulary, which is essential in conveying complex ideas and theories. Despite its significance, the use of academic vocabulary in scholarly publications is often undervalued. Some perceive it as too complicated for common readers, leading to a tendency for authors to prioritize linguistic simplicity over precision (Aldawsari, 2017; Biber & Gray, 2016). However, such practice can compromise content accuracy and lead to a loss of credibility in scientific communication (Breeze, 2008; El-Omar, 2014; Robbins, 2016). Thus, striking a balance between technical accuracy and linguistic clarity is principal in academic writing, and writers must carefully measure their use of academic vocabulary to ensure accuracy while maintaining comprehensibility (Arianto & Basthomi, 2021; Demir, 2019; Hyland, 2009). While it may be tempting to simplify language to reach a wider audience, it is essential to maintain the specificity and precision required for scientific communication by carefully selecting the most appropriate and accurate academic vocabulary to convey their ideas effectively (Hinkel, 2003).

The crucial role of academic vocabulary in scientific discourse has prompted Coxhead to develop the Academic Word List (AWL) to standardize academic terminology (Coxhead, 2000). The study demonstrated that 570-word families comprised 10% of all academic text words. In the context of EAP, teachers can enhance the proficiency of learners in scientific communication by prioritizing this list. However, the AWL has limitations as it mainly covers written academic language and may not incorporate all relevant spoken academic vocabulary or apply to specific fields. In response to this issue, various registers and domains have been scrutinized for lexical distribution, including medical science (Chen & Ge, 2007), agriculture (Martínez et al., 2009; Muñoz, 2015), chemistry (Valipouri & Nassaji, 2013; Xodabande et al., 2023), education (Mozaffari & Moini, 2014), nursing (Yang, 2015), environmental science (Liu & Han, 2015), psychology (Safari, 2018; Xodabande & Xodabande, 2020), veterinary medicine (Özer & Akbaş, 2024), and applied linguistics (Khani & Tazik, 2013; Matinparsa et al., 2022; Shabani & Tazik, 2014; Vongpumivitch et al., 2009; Xodabande et al., 2022).

## METHOD

## Corpora

Our study involved the corpus compilation of research articles in applied linguistics, which was drawn from a systematic selection of SINTA-indexed journals ranked between 1 (the highest) and 6 (the lowest). In 2022, out of the 8585 journals indexed by SINTA, we identified 72 that covered applied linguistics, or a combination of applied linguistics, linguistics, and literature written in English. Within this subset, we found four journals ranked first, 22 ranked second, 26 ranked third, eight ranked fourth, five ranked fifth, and seven ranked sixth. To ensure the representativeness of the corpus, we downloaded research articles related to applied linguistics from four journals with high-impact factors to represent each rank. We then converted the articles into plain text for data analysis and removed extraneous text such as journal names, running heads, author names and affiliations, page numbers, DOIs, tables, and references. To achieve balance within the corpus, we selected and included approximately 250000 running words from their current issues. The number of articles included in each journal varies due to the differing lengths of articles across journals. Nevertheless, we continued to download articles and add them to the corpus until each sub-corpus contained approximately 250000 running words. The final corpus comprised 6073379 running words (tokens) and provided a comprehensive and diverse sample of academic texts in applied linguistics. Table 1 presents the selected journals that were included in the corpus.

## Software and Base Lists for Analysis

This research utilized AntWordProfiler to analyse the use of academic vocabulary in SIALJ research articles. Ant-

#### Table 1

Top Four SIALJ Across Rankings

SINTA	JOURNAL TITLE	NO. OF ARTICLES	TOKENS
1	Indonesian Journal of Applied Linguistics	94	256380
	International Journal of Language Education	64	255853
	TEFLIN Journal	47	256094
	Studies in English Language and Education	49	252180
2	English Review: Journal of English Education	60	253610
	Journal on English as a Foreign Language	49	251594
	Lingua Cultura	72	255224
	Register Journal	56	252694
3	ETERNAL (English, Teaching, Learning, and Research Journal)	61	252599
	Premise: Journal of English Education and Applied Linguistics	61	253822
	Metathesis: Journal of English Language, Literature, and Teaching	64	253445
	JELTL (Journal of English Language Teaching and Linguistics	52	250485
4	Getsempena English Education Journal	66	250782
	IDEAS: Journal on ELT and Learning, Ling. and Lit.	71	251289
	Exposure Journal	74	252194
	The English-Education: Journal of English Teaching and Research	78	252374
5	Anglo-Saxon	90	254884
	Wiralodra English Journal	67	255941
	Linguistik Terapan	115	253633
	e-Journal of Linguistics	88	252160
6	ELT in Focus	44	250679
	Journal of English Language Education	90	253111
	Journal Pendidikan Bahasa Inggris Indonesia	59	251913
	Jurnal Serunai Bahasa Inggris	68	250439
	Total	1639	6073379

WordProfiler is a tool designed to profile vocabulary level and text complexity and compare the loaded corpora with a list of reference corpora. The tool includes three base word lists by default: 1000 and 2000 GSL (West, 1953) and the Academic Word List (Coxhead, 2000). Nevertheless, it is possible to evaluate texts against additional vocabulary lists, which can be manually added to the program. In this study, we decided to incorporate supplementary lists into our profiling approach because the General Service List (GSL) and the Academic Word List (AWL) only include words that function as headwords. Research in lexical frequency profiling frequently reveals that non-AWL/non-GSL words can make up more than 13% of the corpus (refer to studies by Chanasattru & Tangkiengsirisin, 2017; Matinparsa et al., 2022; Xodabande et al., 2022; Xodabande & Xodabande, 2020). However, the specific list to which these off-list words belong remains unclear. Therefore, we find it necessary to utilize an additional list, specifically, BNC-COCA lists 31-34, which we adopted from Nation (2012). This additional list enables us to more thoroughly investigate the percentage of words in English texts that are not included in standard lists. The lists encompass proper names, marginal words, transparent compounds, and acronyms.

## **Data Processing**

After importing all sub-corpora into AntWordProfiler, the software provides an overview of vocabulary coverage,

range, and frequency in the GSL/non-AWL and AWL. Firstly, a comprehensive analysis was performed by incorporating corpora from research articles in all SIALJ to determine the overall coverage of GSL/non-AWL and AWL vocabulary. Subsequently, a comparative analysis was undertaken to investigate vocabulary coverage in each SIALJ, based on their respective rankings, to identify any discrepancies in GSL/ non-AWL and AWL vocabulary coverage. Finally, we present the top 50 AWL vocabularies in SIALJ research articles and the top 25 AWL vocabularies in SIALJ in each ranking.

In order to further examine whether the distribution of academic vocabulary in SIALJ research articles varies across rankings, we conducted a one-way analysis of variance (ANOVA) because it is suitable for the specific characteristics of our dataset and research objective. Examining the difference in AWL distribution also compares the AWL distribution by comparing the means of AWL token percentage, AWL type, and AWL headword count, making ANOVA well-suited to handle proportions, counts, and measurements spanning a wide range of values. The ANOVA was conducted to test the null hypothesis  $(H_{0})$ , which states, "There is no significant difference in the distribution of academic vocabulary in SIALJ research articles across rankings." If the p-value was less than the chosen significance level of 0.05, we rejected the null hypothesis, indicating a significant difference in the distribution of academic vocabulary in SIALJ research articles across rankings.

## RESULTS

#### Coverage of Lexical Items in SIALJ Research Articles

Table 2 shows the coverage of lexical items in SIALJ research articles. The table demonstrates the distribution of the 1st GSL/non-AWL in the corpus, covering approximate-

#### Table 2

Lexical Profile of the SIALJ Research Articles

ly 4401027 tokens, which is around 72.46% of the total corpus. Combined with the 2nd GSL/non-AWL, it covers around 4703228 tokens or 77.44% of the total corpus. The Academic Word List (AWL) covers 11.01% of the total corpus, corresponding to 668500 tokens. In this case, the cumulative coverage of GSL/non-AWL and AWL accounts for 88.45% of the total corpus. Notably, 11.55% of the corpus (701651 tokens) is classified as non-AWL/non-GSL. Within this percentage, 1.89% of the words are proper names, predominantly those of authors cited in the articles. Additionally, 0.51% are marginal words, which mainly include alphabets used in bullet lists and exclamations (e.g., hmm, uh, and wah) from interview data presented in the articles. Moreover, 0.64% of the words are transparent compound nouns, such as *feedback*, classroom, and teamwork, while 0.49% comprise acronyms, including efl, esl, and ielts. The remaining 8.02% of the words are not found in GSL, AWL, and supplementary lists and are primarily non-English words from interviews and other discipline-specific vocabulary such as semantic, syntactic, and guttural. Of the 570-word families in Coxhead's AWL, 569word families (99.82%) were found, with the word so-called not being found in the corpus. The absence of the word in the corpus maybe because it is categorized at level 10 in Coxhead's AWL, but it may also be because it is not a content word that expresses specific concepts; instead, it is a phrase to modify or comment on other words or concepts.

Further analysis of the above findings reveals that the ten (10) most frequently used words from the AWL account for a total of 136791 tokens, which is approximately 2.25% of the entire corpus. These words include *research* (35090 tokens), *data* (20786 tokens), *text* (15979 tokens), *analyse* (15171 tokens), *process* (14768 tokens), *strategy* (11514 tokens), *participate* (11401 tokens), *communicate* (10742 tokens), and *method* (9340 tokens). The list of the top 50 academic vocabulary words in SIALJ research articles is presented in Table 3.

The word list shown in Table 3 contains a variety of words that present the key themes and research area in applied

List	Token	Token%	Cum Token%	Туре	Headword Count
1 <sup>s⊤</sup> GSL	4401027	72.46	72.60	3763	998
2 <sup>nd</sup> GSL	302201	4.98	77.44	2819	957
AWL	668500	11.01	88.45	2671	569
BNC-COCA31	114811	1.89	90.34	2378	2266
BNC-COCA32	30938	0.51	90.85	64	32
BNC-COCA33	38972	0.64	91.49	346	270
BNC-COCA34	29724	0.49	91.98	226	222
Not in the list	487206	8.02	100.00	18190	18190
Total	6073379	100.0		30457	23504

#### Table 3

Top 50 Most frequent AWL Items in SIALJ Research Articles

Rank	Words	Frequency	Sub-lists		Rank	Words	Frequency	Sub-lists
1	research	34090	1	_	26	lecture	4631	6
2	data	19786	1		27	technique	4535	3
3	text	14979	2		28	achieve	4504	2
4	analyse	14171	1		29	technology	4473	3
5	process	13768	1		30	structure	4428	1
6	strategy	10514	2		31	factor	4419	1
7	participate	10401	2		32	category	4352	2
8	communicate	9742	4		33	positive	4303	2
9	method	8340	1		34	design	4254	2
10	culture	7483	2		35	function	4233	1
11	respond	7347	1		36	aspect	4179	2
12	conduct	6487	2		37	task	4070	3
13	motive	6412	6		38	role	3953	1
14	context	6038	1		39	theory	3908	1
15	assess	5993	1		40	error	3777	4
16	create	5905	1		41	instruct	3756	6
17	conclude	5816	2		42	approach	3679	1
18	media	5639	7		43	previous	3613	2
19	implement	5379	4		44	involve	3611	1
20	significant	5358	1		45	topic	3599	7
21	interact	5145	3		46	vary	3585	1
22	perceive	4918	2		47	item	3565	2
23	focus	4861	2		48	attitude	3548	4
24	indicate	4829	1		49	consist	3346	1
25	academy	4756	5		50	evaluate	3320	4

linguistics, including language learning and teaching (i.e., *approach, design, instruct, method, strategy, technique*), cultural influences (i.e., *attitude, context, culture, motive*), and the impact of technology (i.e., *interact, media, technology*).

## Distribution of Academic Vocabulary in SIALJ Research Articles across Rankings

Table 4 shows distribution patterns of AWL and GSL/non-AWL in SIALJ across rankings. The study observed that the higher the SINTA ranking, the greater the percentage of the AWL distribution, and conversely, the higher the SINTA ranking, the lower the GSL/non-AWL percentage. The AWL percentage tends to increase with higher SINTA ranking, ranging from 12.04% for SINTA 1 to 10.56% for SINTA 6. In contrast, the GSL/non-AWL coverage increases with lower SINTA rankings, from 74.33% for SINTA 1 to 79.89% for

SINTA 6, indicating that the better the quality of a journal in SINTA, the more academic vocabulary is used. Further analysis revealed that SIALJ journals with a SINTA 1 ranking contain the highest number of AWL word types, totalling 2300 types, and the highest number of word families, which is 567 words. This number gradually decreases to 1934 types and 556-word families for SINTA 6.

Further analysis also found three-word families that do not occur in SIALJ research articles with a SINTA 1 (i.e., *so-called*, *nuclear*, *offset*), five in SINTA 2 (i.e., *bulk*, *invoke*, *offset*, *so-called*, *subsidy*), eight in SINTA 3 (i.e., *cease*, *export*, *federal*, *forthcoming*, *invoke*, *offset*, *revenue*, *so-called*), ten in SINTA 4 (i.e., *adjacent*, *amend*, *commence*, *currency*, *erode*, *export*, *federal*, *forthcoming*, *nuclear*, *so-called*), ten in SINTA 5 (i.e., *albeit*, *currency*, *erode*, *federal*, *fee*, *levy*, *offset*, *regime*, *so-called*, *subsidy*), and 16 in SINTA 6 (i.e., *adjacent*, *aggregate*,

#### Table 4

Distribution of Academic Vocabulary in SIALJ Research Articles Across Rankings

Word lists	SINTA 1	SINTA 2	SINTA 3	SINTA 4	SINTA 5	SINTA 6
AWL token	122829	117523	116964	104696	104302	102186
AWL token %	12.04	11.60	11.58	10.40	10.26	10.16
AWL type	2300	2275	2126	2050	2136	1934
AWL headword	567	565	562	560	560	556

#### Table 5

Top 25 Most Frequent AWL Items in SIALJ Research Articles Across Rankings

SINTA 1	SINTA 2	SINTA 3	SINTA 4	SINTA 5	SINTA 6
research	research	research	research	research	research
participate	data	data	data	data	text
analyse	analyse	participate	analyse	text	data
text	strategy	analyse	process	process	process
data	participate	process	text	analyse	analyse
assess	process	communicate	strategy	communicate	strategy
strategy	text	text	method	strategy	method
process	culture	respond	communicate	technique	communicate
culture	communicate	strategy	motive	method	conduct
respond	context	lecture	respond	function	implement
context	assess	academy	error	conclude	conclude
communicate	method	method	participate	culture	technique
identify	media	motive	conduct	participate	significant
significant	respond	culture	conclude	create	grade
instruct	conduct	create	media	theory	media
motive	interact	implement	culture	media	create
method	lecture	conduct	achieve	context	assess
academy	perceive	technology	create	respond	achieve
interact	technology	perceive	implement	structure	motive
task	indicate	interact	assess	conduct	respond
indicate	motive	significant	factor	clause	participate
factor	focus	media	task	source	design
positive	item	context	focus	identify	perceive
perceive	function	focus	academy	interact	category
focus	category	indicate	context	attitude	hypothesis

albeit, bulk, confine, currency, displace, erode, nuclear, offset, so-called, subsidy, suspend, terminate). Table 5 presents the top 25 AWL in SIALJ research articles for each ranking, with words in bold type indicating that they were found in SIALJ research articles in all rankings. Table 5 shows that 10-word families are found within the top 25 AWL in SIALJ research articles across rankings, namely, *analyse, communicate, data, method, participate, process, research, respond, strategy,* and *text.* These words naturally occur in SIALJ research articles as they are related directly to the research themes in applied linguistics, such as language

acquisition and language teaching. Specifically, these words can be found in the research method section. The consistent and prevalent occurrence of the word research emphasizes its central role as a key element in applied linguistics scholarly discourse. Additionally, words like *data* and *participate* occur consistently in SIALJ research articles, indicating their significance in applied linguistics. The word like *participate* demonstrates engagement and involvement, highlighting the significance of the active role of individuals in applied linguistics studies. Also, the frequent occurrence of the word *data* indicates the attempts to sustain its empirical methods and acknowledgment of the role of data in advancing knowledge within the field.

Furthermore, the consistent use of methodological terms like *analyse* and *text* suggests that SIALJ scholars across rankings continue to maintain rigorous analytical methods and recognize the significance of textual elements in scrutinizing language-related phenomena. In addition, the recurrent use of words like *communicate* and *strategy* in SIALJ across rankings reflects a sustained focus on effective communication and methodical approaches in the field. Finally, the prevalence of culture and context across SIALJ rankings shows the scholars' preferences in studying how languages relate to culture, signifying the field's dedication to in-depth studies across various research levels.

Further analysis also reveals that the identified words occur in the top 25-word list of SIALJ research articles belong to Coxhead's AWL sub-lists 1, 2, and 3, accounting for 3.33% (202,828 tokens) of the total corpus or 33.34% of the academic word found in SIALJ research article. However, some words occur in lower sub-lists in Coxhead's list. For instance, several words occur in sub-list 4 (i.e., *attitude, communicate, error, implement*), sub-list 5 (i.e., *academy/academic, clause*), sub-list 6 (i.e., *communicate, instruct, lecture, motive/motivate*), sub-list 7 (i.e., *grade, media*). This observation suggests that while there is substantial overlap between this AWL list and Coxhead's, the ranking and prominence of certain words differ, emphasizing the strategic lexical composition within the applied linguistics research articles in the SIALJ dataset compared to Coxhead's AWL. The high frequency of certain words within SIALJ research articles, despite their relatively low occurrences in Coxhead's AWL, suggests that these words hold particular significance or relevance within the context of applied linguistics.

In addition to the qualitative observation of how academic vocabulary is used in SIALJ research articles across rankings, we conducted a quantitative analysis to examine further whether the differences observed in our qualitative observation are also evident in quantitative measurements. In order to examine whether there is a significant difference in the coverage of academic words in SIALJ research articles across rankings, we conducted an analysis of variance (ANOVA) to test the significance of variations in academic vocabulary coverage across SINTA rankings. AWL coverage percentage, AWL types, and AWL headwords were chosen for the analysis.

Table 6 shows the results of normality tests on the three data sets using the Kolmogorov-Smirnov and Shapiro-Wilk tests, showing that the p-values for all datasets in all tests are greater than 0.05. This value suggests that all datasets have a sufficiently normal distribution, and, therefore, an analysis of variance (ANOVA) can be conducted to measure whether there is a statistically significant difference in academic vocabulary coverage in SIALJ across rankings. The result of the ANOVA calculation is presented in Table 7.

#### Table 6

Normality Test Results for Academic Vocabulary in SIALJ Research Articles Across Rankings

	Koln	nogorov-Smi	rnov		Shapiro-Wilk			
	Statistic	df	p-value	Statistic	df	p-value		
AWL Token	0.369	6	0.299	0.841	6	0.234		
AWL Types	0.276	6	0.300	0.948	6	0.726		
AWL Headword	0.269	6	0.300	0.968	6	0.880		

#### Table 7

ANOVA for Academic Vocabulary in SIALJ Research Articles Across Rankings

Source of variation	Sum of squares	df	Mean Square	F	p-value	F crit
SINTA ranks	33602.39	5	6720.478	1.101877	.417176661	3.325835
Error	60991.17	10	6099.117			
Total	14701625	17				

The table shows that the p-value associated with SINTA ranks is 0.417176661, greater than the generally used significance level of 0.05. Therefore, we fail to reject the null hypothesis, suggesting no significant difference in academic vocabulary distribution in SIALJ research articles across rankings. A smaller F-statistic relative to the critical F-value (3.325835) further supports the conclusion of non-significance. The F-statistic of 1.101877 indicates that the observed variability between SINTA rankings is insignificant. In summary, the p-value and the F-statistic lead us to accept the null hypothesis and conclude that there is no statistically significant difference in the distribution of academic vocabulary in SIALJ research articles across rankings.

## DISCUSSION

The importance of academic vocabulary in scholarly communication has been firmly established in the literature. Academic vocabulary is critical in ensuring that the research findings are communicated accurately and effectively within the academic community (Awagu, 2021; Choo et al., 2017). The consistent use of academic vocabulary enhances the clarity and coherence of academic discourse (Arianto & Basthomi, 2021). Moreover, the ability to adeptly use academic vocabulary is significant for establishing credibility and promoting inclusivity in scholarly communication (Matinparsa et al., 2022).

In this study, we examined the coverage and distributions of academic words in SINTA-indexed applied linguistics journal (SIALJ) research articles. We aimed to determine the extent to which academic vocabulary is utilized within these journals and to explore whether there are significant differences in vocabulary usage across different SINTA rankings.

Our findings of an 11.01% coverage of Coxhead's AWL in SIALJ research articles align with the results of other studies suggesting that academic words typically cover at least 10% of academic texts (Hyland & Tse, 2004; Khani & Tazik, 2013; Vongpumivitch et al., 2009). Regarding applied linguistics, our research shows a nearly identical AWL coverage to that found by Xodabande et al. (2022), who reported an 11.46% coverage in reputable applied linguistics journals. Further examination also found that among the top 50 AWL words identified by Xodabande et al. (2022), 24 items were also present in our study. The list of headwords includes academy, acquire, analyse, approach, assess, communicate, context, culture, data, factor, focus, instruct, interact, item, motive, participate, process, research, role, strategy, structure, task, text, and theory. Beyond this, our analysis of the Academic and Applied Linguistics Word List (ALAWL) by Xodabande et al. (2022) revealed 378 common headwords with our study. This shared academic vocabulary indicates a significant consistency within SIALJ research articles and the broader field of applied linguistics.

Our observation of an 11.01% coverage of Coxhead's AWL in SIALJ research articles aligns with the notion of a discipline-specific vocabulary, where specific terms become integral to academic discourse dependent on "contextual environments which reflect different disciplinary practices and norms" (Hyland & Tse, 2004, p. 251), irrespective of journal clusters or rankings. This terminological uniformity is deemed crucial to enhance clarity in facilitating communication within the academic community (Hyland & Tse, 2004). It pedagogically benefits English language teaching by helping learners better understand published applied linguistics academic texts they need to read (Khani & Tazik, 2013). Moreover, a consistent academic vocabulary in several lists, especially related to applied linguistics, establishes and maintains disciplinary identity (Nation, 2001) and promotes accessibility and inclusivity (Martínez et al., 2009).

The study also found that several vocabularies in SIALJ research articles mostly occur in Coxhead's AWL top three sub-lists, covering approximately 3.33%. This finding corroborates the observation of Vongpumivitch et al. (2009) that the top word lists in applied linguistics research articles accounted for 3.60%, suggesting that the top word list in SIALJ research articles also exhibits high frequency in other applied linguistics word lists. This consistency not only enhances the clarity and coherence of academic discourse within SIALJ but also reflects the commitment of Indonesian academia to linguistic convention, scholarly communication standards, and the overall quality of research. Meticulous attention to language use also implies a commitment of journal editorial boards to robust selection and editorial process, establishing it as a reputable journal in the academic landscape.

However, we also notice that some vocabulary is found in considerable numbers in SIALJ research articles despite having low frequency in Coxhead's AWL. Words such as attitude, communicate, motive, and media are particular to applied linguistics, particularly in the context of language teaching and learning. This phenomenon corroborates the assertion of scholars in diverse disciplines who challenge the conventional notion of a one-size-fits-all academic word list and emphasize the need for developing field-specific academic vocabulary (Khani & Tazik, 2013; Kwary & Artha, 2017; Xodabande & Xodabande, 2020; Yotimart, 2021).

The presence of these specialized terms may be attributed to the unique contextual environments within which applied linguistics operates, as well as the genre-specific conventions that govern academic writing in this field. As Hyland and Tse (2004) have noted, disciplinary vocabularies adapt to "a locally appropriate theoretical and methodological framework" (p. 246). In this case, Hyland's (2004) concept of genre pedagogy is highly relevant as it suggests that academic writing is required to follow genre-specific conventions that general word lists may not fully represent; therefore, the development of field-specific lexicons is necessary (Khani & Tazik, 2013; Martínez et al., 2009; Valipouri & Nassaji, 2013; Xodabande et al., 2022). Xodabande et al. (2023) contend that a replication study, building on previous research about the development of wordlists for specific disciplines, may effectively achieve this purpose.

Further quantitative analysis reveals an absence of significant distribution disparities across various SINTA rankings, challenging the findings of Arianto and Basthomi (2021), who noted a heightened strategic language use among authors in high-quality journals. Possible explanations could be that journal editors prioritize novel contributions rather than how authors strategically present their research with accurate language. This may also suggest that all journals, regardless of their ranking in a journal database, equally emphasize the importance of strategic language use in applied linguistics research; thus, all authors are required to adhere to the notion that disciplinary vocabularies adapt to specialized needs, contributing to the identity and coherence of the field (Biber & Gray, 2016; Hyland & Tse, 2004).

This study has implications for editorial and peer review standards and EAP teaching. The study may inform editorial boards and peer reviewers that acknowledging the consistent application of strategic, discipline-specific language has challenged the notions that journals with high reputations necessarily need more refined language use. Instead, the findings suggest that editorial boards have a more egalitarian approach to linguistic expectations in their publications. While maintaining a discipline-specific register in publications is significant, the editorial boards and peer reviewers should also focus on effective communication rather than subjecting authors to prestige-based linguistic norms. Furthermore, our findings of the shared practice of academic vocabulary use across SINTA rankings suggest that EAP educators tailor their instruction by introducing academic vocabulary to ensure students are adept at scholarly discourse within their field.

While our study has shown the commitment of Indonesian academia to linguistic conventions and the meticulous attention of journal editorial boards in maintaining reputable standards, we acknowledge that the study focused on SIALJ research articles in which the findings may not fully capture the entirety of academic vocabulary use within broader applied linguistics field. Also, the study's reliance on a specific timeline for analysis may not capture potential shifts in academic vocabulary over time, especially given the evolving nature of multidisciplinary research trends, particularly considering the increasing use of AI in scientific publications. Future research should also expand the scope by including more journal samples and using larger corpora to comprehensively depict how academic vocabulary is used in SIALJ research articles. Moreover, a focused approach to examining the corpus of Indonesian authors could offer a more accurate description of how Indonesian applied linguistics researchers use academic vocabulary.

## CONCLUSION

This study has examined the lexical landscape of SIALJ research articles and provides insights into the distribution and characteristics of academic vocabulary across different rankings. We identified substantial coverage of Coxhead's AWL in SIALJ research articles, aligning with the broader academic literature regarding the prevalence of academic words in scholarly texts. The substantial overlap between SIALJ and Coxhead's AWL and other applied linguistics-related word lists underscores the consistent and discipline-specific nature of academic discourse in SIALJ research articles and applied linguistics in general. Furthermore, our examination of SINTA rankings found an intriguing pattern: higher-ranked journals exhibit greater AWL distribution, not significantly, especially upon quantitative measurement. The findings challenge the notion of a discrepancy in strategic language use among journals of varying quality, suggesting that strategic language use is a shared practice across SIALJ, irrespective of their rankings. Additionally, the prevalence of specific field-related terms with lower occurrences in Coxhead's AWL highlights unique linguistic needs and preferences within applied linguistics journals, notably influenced by the current trends in research topics within the field at the time of the study. The study contributes to the ever-evolving understanding of academic vocabulary, emphasizing the significance of discipline-specific lexicon in scholarly communication. Future research should investigate the evolving nature of academic vocabulary within applied linguistics, particularly in light of the increasing prevalence of AI-generated publications, which may significantly alter the landscape of academic vocabulary. Additionally, expanding the scope to include more journals and larger corpora could provide a more comprehensive understanding of academic vocabulary use across different contexts.

## ACKNOWLEDGMENTS

We would like to thank the editors and the anonymous reviewers for their insightful comments.

# DECLARATION OF COMPETITING INTEREST

None declared.

## AUTHOR CONTRIBUTIONS

**Suhandoko:** conceptualization; collected the data; analyzed the data; wrote the paper.

**Dian Riesti Ningrum:** collected the data; analyzed the data; reviewing and editing.

## REFERENCES

- Aldawsari, H. (2017). *The challenges of learning academic vocabulary among postgraduate Saudi students at New Zealand universities*. Auckland University of Technology. https://openrepository.aut.ac.nz/bitstream/handle/10292/10754/AldawsariH. pdf?sequence=4&isAllowed=y
- Arenas-Castro, H., Berdejo-Espinola, V., Chowdhury, S., Rodríguez-Contreras, A., James, Raja, N. B., Dunne, E. M., Bertolino, S., Nayara Braga Emidio, Derez, C. M., Drobniak, S. M., Fulton, G. R., L. Francisco Henao-Diaz, Kaur, A., Catherine, Malgorzata Lagisz, Medina, I., Mikula, P., Narayan, V. P., & O'Bryan, C. J. (2024). Academic publishing requires linguistically inclusive policies. *Proceedings - Royal Society. Biological Sciences/Proceedings - Royal Society. Biological Sciences*, 291. https://doi.org/10.1098/rspb.2023.2840
- Arianto, M. A., & Basthomi, Y. (2021). The authors' research gap strategies in ELT research article introductions: Does Scopus journal quartile matter? *Journal of Language and Linguistic Studies, 17*(4), 1743–1759. https://doi.org/10.52462/jlls.127
- Asaad, H. Q. M. (2024). The role of morphological awareness in L2 postgraduates' academic writing: Is vocabulary knowledge a mediating variable? *Cogent Education*, *11*(1). https://doi.org/10.1080/2331186X.2024.2327787
- Awagu, I. V. (2021). Language in academic writing: Features and topical issues. *Linguistics and Literature Studies*, *9*(2), 49–56. https://doi.org/10.13189/LLS.2021.090201
- Biber, D., & Gray, B. (2016). Grammatical complexity in academic English: Linguistic change in writing. Cambridge University Press.
- Black, N., Van Rooyen, S., Godlee, F., Smith, R., & Evans, S. (1998). What makes a good reviewer and a good review for a general medical journal? *JAMA*, *280*(3), 231–233. https://doi.org/10.1001/JAMA.280.3.231
- Breeze, R. (2008). Researching simplicity and sophistication in student writing. *International Journal of English Studies, 8*(1), 51–66.
- Brun-Mercer, N., & Zimmerman, C. B. (2015). Fostering academic vocabulary use in writing. The CATESOL Journal, 27(1), 131–148.
- Castillo-Vergara, M., Alvarez-Marin, A., & Placencio-Hidalgo, D. (2018). A bibliometric analysis of creativity in the field of business economics. *Journal of Business Research*, 85, 1–9. https://doi.org/10.1016/J.JBUSRES.2017.12.011
- Chanasattru, S., & Tangkiengsirisin, S. (2017). Thw word list distribution in social science research articles. *Arab World English Journal (AWEJ), 8*(4), 412–429. https://doi.org/https://dx.doi.org/10.24093/awej/vol8no4.28
- Chen, Q., & Ge, G. chun. (2007). A corpus-based lexical study on frequency and distribution of Coxhead's AWL word families in medical research articles (RAs). *English for Specific Purposes*, *26*(4), 502–514. https://doi.org/10.1016/J.ESP.2007.04.003
- Choo, L. B., Lin, D. T. A., Singh, M. K. M., & Ganapathy, M. (2017). The significance of the academic word list among esl tertiary students in a malaysian public university. 3L: The Southeast Asian Journal of English Language Studies, 23(4), 56–65. https://doi.org/10.17576/3L-2017-2304-05
- Coxhead, A. (2000). A new academic word list. TESOL Quarterly, 34(2), 213-238. https://doi.org/10.2307/3587951
- Coxhead, A. (2012). Academic vocabulary, writing and English for academic purposes: Perspectives from second language learners. *RELC Journal*, *43*(1), 137–145. https://doi.org/10.1177/0033688212439323
- Csomay, E., & Prades, A. (2018). Academic vocabulary in ESL student papers: A corpus-based study. *Journal of English for Academic Purposes*, 33, 100–118. https://doi.org/10.1016/J.JEAP.2018.02.003
- Demir, C. (2019). The needless complexity in academic writing: Simplicity vs. flowery language. *The Reading Matrix: An International Online Journal, 19*(2).
- Donthu, N., Kumar, S., & Pattnaik, D. (2020). Forty-five years of Journal of Business Research: A bibliometric analysis. *Journal of Business Research*, 109, 1–14. https://doi.org/10.1016/J.JBUSRES.2019.10.039
- El-Omar, E. M. (2014). How to publish a scientific manuscript in a high-impact journal. *Advances in Digestive Medicine*, 1(4), 105–109. https://doi.org/10.1016/j.aidm.2014.07.004

Andini Dwi Wardani: collected the data.

Ach. Nobair: collected the data.

**Putroue Keumala Intan:** performed statistical analysis and interpretation.

- Firmansyah, E. A., & Faisal, Y. A. (2019). Bibliometric analysis of islamic economics and finance journals in Indonesia. *Al-Muzara'ah*, 7(2), 17–26. https://doi.org/10.29244/JAM.7.2.17-26
- Garner, R. M., Hirsch, J. A., Albuquerque, F. C., & Fargen, K. M. (2018). Bibliometric indices: defining academic productivity and citation rates of researchers, departments and journals. *Journal of Neurointerventional Surgery*, *1*0(2), 102–106. https://doi.org/10.1136/NEURINTSURG-2017-013265
- Gureyev, V. N., & Mazov, N. A. (2022). Bibliometrics as a promising tool for solving publication ethics issues. *Heliyon, 8*(3), e09123. https://doi.org/10.1016/J.HELIYON.2022.E09123
- Hinkel, E. (2003). Simplicity without elegance: Features of sentences in l1 and l2 academic texts. *TESOL Quarterly*, *37*(2), 275–301. https://doi.org/10.2307/3588505
- Hyland, K. (2002). Options of identity in academic writing. ELT Journal, 56(4), 351–358. https://doi.org/10.1093/ELT/56.4.351
- Hyland, K. (2004). Disciplinary discourses: Social interactions in academic writing. The University of Michigan Press.
- Hyland, K. (2009). Academic discourse: English in a global context. Continuum.
- Hyland, K. (2013). Writing in the university: Education, knowledge and reputation. *Language Teaching*, 46(1), 53–70. https://doi.org/10.1017/S0261444811000036
- Hyland, K., & Tse, P. (2004). Metadiscourse in academic writing: A reappraisal. *Applied Linguistics*, 25(2), 156–177. https://doi.org/10.1093/APPLIN/25.2.156
- Ibrahim, C., & Fadhli, R. (2021). Performance of Indonesia's World-Class University efficiency with bibliometrics (scientific strength) approach and data envelopment analysis. *Webology*, 18(1), 32–50. https://doi.org/10.14704/WEB/V18I1/ WEB18003
- Kandi, V. (2016). Journal publications, indexing and academic excellence: Have we chosen the right path. *American Journal of Infectious Diseases and Microbiology*, 4(3), 52–55. http://dx.doi.org/10.12691/ajidm-4-3-1
- Khani, R., & Tazik, K. (2013). Towards the development of an academic word list for applied linguistics research articles. RELC *Journal*, 44(2), 209–232. https://doi.org/10.1177/0033688213488432
- Koushik, A. K. (2017). Indexing and impact factor: Judging the quality of a journal. *Journal of Health & Medical Informatics, 8*(4), 1000285. https://doi.org/10.4172/2157-7420.1000285
- Kwary, D. A., & Artha, A. F. (2017). The academic article word list for social sciences. *MEXTESOL Journal*, 41(4), 1–11.
- Liu, J., & Han, L. (2015). A corpus-based environmental academic word list building and its validity test. English for Specific Purposes, 39, 1–11. https://doi.org/10.1016/J.ESP.2015.03.001
- Martínez, I. A., Beck, S. C., & Panza, C. B. (2009). Academic vocabulary in agriculture research articles: A corpus-based study. *English for Specific Purposes, 28*(3), 183–198. https://doi.org/10.1016/J.ESP.2009.04.003
- Masrai, A., Milton, J., El-Dakhs, D. A. S., & Elmenshawy, H. (2021). Measuring the contribution of specialist vocabulary knowledge to academic achievement: Disentangling effects of multiple types of word knowledge. *Asian-Pacific Journal of Second* and Foreign Language Education, 6(1), 1–15. https://doi.org/10.1186/S40862-021-00114-5/FIGURES/3
- Matinparsa, H., Xodabande, I., Ghafouri, M., & Atai, M. (2022). Academic vocabulary in applied linguistics research articles: A corpus-based replication study. *Research Square*. https://doi.org/10.21203/rs.3.rs-2092705/v1
- Mozaffari, A., & Moini, R. (2014). Academic words in education research articles: A corpus study. *Procedia Social and Behavioral Sciences, 98*, 1290–1296. https://doi.org/10.1016/j.sbspro.2014.03.545
- Muñoz, V. L. (2015). The vocabulary of agriculture semi-popularization articles in English: A corpus-based study. *English for Specific Purposes*, *39*, 26–44. https://doi.org/10.1016/J.ESP.2015.04.001
- Muslimin, A. I., & Basthomi, Y. (2022). Bibliometric analysis on an Indonesia english education department academic staffs' productivities and its potential for national accreditation stance. *Journal of Scientometric Research*, 11(2), 254–261. https://doi.org/10.5530/JSCIRES.11.2.27
- Nandiyanto, A. B. D., Biddinika, M. K., & Triawan, F. (2020). How bibliographic dataset portrays decreasing number of scientific publication from Indonesia. *Indonesian Journal of Science and Technology*, 5(1), 154–175. https://doi.org/10.17509/IJOST. V5I1.22265
- Nation, I. S. P. (2001). How good is your Vocabulary program. *ESL Magazine*, 4(3), 22–24.
- Özer, M., & Akbaş, E. (2024). Assembling a justified list of academic words in veterinary medicine: The veterinary medicine academic word list (VMAWL). *English for Specific Purposes*, 74, 29–43. https://doi.org/10.1016/J.ESP.2023.12.002
- Pournia, Y. (2019). A study on the most frequent academic words in high impact factor English nursing journals: A corpus-based study. *Iranian Journal of Nursing and Midwifery Research, 24*(1), 11. https://doi.org/10.4103/IJNMR.IJNMR\_190\_17

- Purnomo, B. C., Munahar, S., Pambuko, Z. B., & Nasrullah, H. (2020). Biodiesel research progress in Indonesia: Data from Science and Technology Index (Sinta). *Technology Reports of Kansai University*, *6*2(06), 2997-3005.
- Rahardja, U., Purnama Harahap, E., Ratna Dewi, S., & Tinggi Manajemen Informatika dan Komputer Raharja JI Jendral, S. (2019). The strategy of enhancing article citation and H-index on SINTA to improve tertiary reputation. *TELKOMNIKA (Telecommuni-cation Computing Electronics and Control),* 17(2), 683–692. https://doi.org/10.12928/TELKOMNIKA.V17I2.9761
- Rey-Martí, A., Ribeiro-Soriano, D., & Palacios-Marqués, D. (2016). A bibliometric analysis of social entrepreneurship. *Journal of Business Research*, 69(5), 1651–1655. https://doi.org/10.1016/J.JBUSRES.2015.10.033
- Robbins, S. P. (2016). Finding your voice as an academic writer (and writing clearly). *Journal of Social Work Education*, 52(2), 133–135. https://doi.org/10.1080/10437797.2016.1151267
- Roldan-Valadez, E., Salazar-Ruiz, S. Y., Ibarra-Contreras, R., & Rios, C. (2019). Current concepts on bibliometrics: A brief review about impact factor, Eigenfactor score, CiteScore, SCImago Journal Rank, Source-Normalised Impact per Paper, H-index, and alternative metrics. *Irish Journal of Medical Science*, 188(3), 939–951. https://doi.org/10.1007/S11845-018-1936-5/MET-RICS
- Safari, M. (2018). Do university students need to master the GSL and AWL words: A psychology word list. *Journal of Modern Research in English Language Studies*, *5*(2), 101–122. https://doi.org/10.30479/JMRELS.2019.10266.1275
- Shabani, M. B., & Tazik, K. (2014). Coxhead's AWL across ESP and Asian EFL journal research articles (RAs): A corpus-based lexical study. *Procedia Social and Behavioral Sciences*, *98*, 1722–1728. https://doi.org/10.1016/J.SBSPRO.2014.03.599
- Tamela, E. (2020). Move structure analysis on research article abstracts in national and international scopus indexed journals. *Proceedings of the International Conference on English Language Teaching (ICONELT 2019), 434*, 12–17. https://doi.org/10.2991/ ASSEHR.K.200427.004
- Valipouri, L., & Nassaji, H. (2013). A corpus-based study of academic vocabulary in chemistry research articles. *Journal of English for Academic Purposes*, *12*(4), 248–263. https://doi.org/10.1016/J.JEAP.2013.07.001
- Vongpumivitch, V., Huang, J. yu, & Chang, Y. C. (2009). Frequency analysis of the words in the Academic Word List (AWL) and non-AWL content words in applied linguistics research papers. *English for Specific Purposes*, 28(1), 33–41. https://doi.org/10.1016/J.ESP.2008.08.003
- Weinstein, J. N., & Morgan, T. S. (2007). Threats to scientific advancement in clinical practice. *Spine*, 32(11 SUPPL.). https://doi.org/10.1097/BRS.0B013E318053D4FC
- West, M. (1953). A general service list of English words. Longman, Green & Co.
- Wicherts, J. M. (2016). Peer review quality and transparency of the peer-review process in open access and subscription journals. *PLOS One, 11*(1), 1–19. https://doi.org/10.1371/journal.pone.0147913
- Wijaya, L. E., & Bram, B. (2022). Rhetorical structures of introduction sections in Sinta-indexed journals. *Jurnal Onoma: Pendidikan, Bahasa, Dan Sastra, 8*(1), 181–188. https://doi.org/10.30605/ONOMA.V8I1.1659
- Xiao, Z., Qin, Y., Xu, Z., Antucheviciene, J., & Zavadskas, E. K. (2022). The journal buildings: A bibliometric analysis (2011-2021). Buildings, 12(1), 37. https://doi.org/10.3390/BUILDINGS12010037
- Xodabande, I., Atai, M. R., Hashemi, M. R., & Thompson, P. (2023). Developing and validating a mid-frequency word list for chemistry: A corpus-based approach using big data. Asian-Pacific Journal of Second and Foreign Language Education, 8(32). https://doi.org/10.1186/s40862-023-00205-5
- Xodabande, I., Torabzadeh, S., Qafouri, M., & Emadi, A. (2022). Academic vocabulary in applied linguistics research articles: a corpus-based study. *Journal of Language and Education*, *8*(2), 154–164. https://doi.org/10.17323/JLE.2022.13420
- Xodabande, I., & Xodabande, N. (2020). Academic vocabulary in psychology research articles: A corpus-based study. *MEXTESOL Journal, 44*(3).
- Yadira, A., Zein, T. T., & Setia, E. (2022). The analysis schematic structure of research article from journal indexed by Sinta. *East Asian Journal of Multidisciplinary Research*, 1(5), 825–842. https://doi.org/10.55927/EAJMR.V1I5.572
- Yang, M. N. (2015). A nursing academic word list. *English for Specific Purposes*, 37(1), 27–38. https://doi.org/10.1016/J. ESP.2014.05.003
- Yotimart, D. (2021). Academic vocabulary in sport tourism news: A corpus-based study. *Journal of Language and Linguistic Studies*, *17*(3), 1527–1535. https://doi.org/10.52462/jlls.110