

Nominalizations in humanities research articles in SINTA- and Scopus-indexed journals by Indonesian authors: An insight of its frequency and indexing matters

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ABSTRACT

Academic writing can be challenging for non-native speakers who do not have a linguistic sense of a particular language. Academic writing has a unique structure that differentiates it from other texts, i.e., it contains clauses modified to convey more compact information. This paper investigates nominalizations in English Humanities Research Articles (EHRAs) by Indonesian authors published in nationally and internationally indexed journals. Forty corpora of EHRAs become the data source of this paper. Specifically, 20 research articles were from a SINTA 2-indexed journal, and 20 were from a Scopus-indexed journal. This paper employs the Sketch Engine application to identify nominalization types these articles used when conveying ideas. A quantitative t-test was employed to determine the significance of nominalization frequency in these articles. The results show that the authors of EHRAs in SINTA-and Scopus-indexed journals used two categories of nominalizations. The t-test indicates no significant difference between the English nominalization in articles from Scopus- and SINTA-indexed journals. Despite no statistically significant difference, the density of the articles is affected by a small percentage of nominalization. This can be attributed to a specific insight into how Indonesian authors' writing structure is no different in these indexed journals. This implies that the authors have achieved the standard proficiency of two categories of nominalization.



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I. INTRODUCTION

Researchers have contended that the imperative of English academic writing disproportionately burdens non-native speakers to produce written works in English for publication (Flowerdew, 2008; Kwan, 2010; Lilis & Curry, 2010; Wellington, 2010; Politzer-Ahles

& Ghali, 2020). It is the effect caused by academic writing that has a different writing system from other genres, which presents structured scientific activities and facts based on appropriate writing methodology (Brotowidjoyo, 1985) carried out empirically (Omidian & Siyanova-Chanturia, 2021) and critically (Safriyani et al., 2020). These activities are packed within academic writing, which requires standard grammar, syntax, word selection, excellent mechanics, paragraph organization, and content to achieve texts for distribution, publication, or education (Yusuf et al., 2019; Sudirman et al., 2021). Moreover, academic writing comprises various forms of discourse in which the activities of 'doing science' are carried out and rests on a combination of theoretical technicality with reasoned argument (Halliday & Matthiessen, 2004). Thus, due to these complications, non-native speakers tend to have difficulty in English academic writing because of using their non-native language, as they struggle with both learning and writing the language simultaneously. However, Hyland (2016) found a shift in publication rates between native and non-native speakers occurred in 2011, with non-natives surpassing natives' publication rates. This shift highlights the increasing presence of non-native speakers in academic writing.

Deploying knowledge in academic writings involves facts, scientific activities, examinations, and theoretical technicalities. One of the effective features is nominalization, which converts verb or adjective classes into the nouns. Biber et al. (1999) stated that a noun can be created with a specific meaning by appending a suffix to a verb or adjective. Thus, nominalization can be considered since, in communication activities, nouns usually carry a fundamental meaning (Thornbury & Slade, 2006), i.e., they contain core information that helps receivers form a clear understanding of a message (Noguti, 2016). Even though it is commonly used in academic writing, its impact on readability and comprehension of texts is still a matter of debate among linguists and researchers. For instance, Baratta (2010) found that nominalization does not play an essential role across the community of Language, Literacy, and Communication (LCC), while Briones et al. (2003) and Cullip (2000) found that nominalizations are essential resources for constructing scientific discourse.

Many studies on nominalization have regarded it as an essential part of writing in various contexts. Nominalization related to the characteristics of various English academic writing (Biber, 1988; Guillen & Ignacio, 1998; Charles, 2003), in the context of writing skill development (Derewianka, 1995; Ventola, 1996), by looking at its use among undergraduate students in various text genres (D, 2014), in newspapers (Biadi & Zih, 2021; Meluzzi et al., 2021), in sample abstracts of English social and exact sciences (Holtz, 2009; Jalilifar et al., 2018; Heidari Kaidan et al., 2021), and tautology study (Vilinbakhova & Escandell-Vidal, 2020).

This study aims to determine the types of nominalizations used by Indonesian authors in their writings between SINTA and Scopus-indexed journals to investigate any differences in nominalization generation, which may depend on standard quality between the two indexed journals. While the other previous study focused on native and non-native speakers' writings only, this study tries to connect whether the nominalization deployment and journal indexing

are interrelated. This study exploits English nominalizations in English humanities research articles by Indonesian authors. With the shift of publication rate from native to non-native speakers, it is interesting to see how non-native speakers use nominalization in articles of different indexed journals. The English humanities research articles were chosen as the object of the study since it is commonly believed that they tend to have more nominalizations than exact science articles due to the nature of their subject matter. (see Heidari Kaidan et al., 2021; Tian & Yuxin, 2023). Humanities deals with abstract ideas and concepts, typically requiring nominalization to express them accurately. On the other hand, exact science articles are generally more focused on concrete observations and tangible data, which may result in fewer nominalizations.

The present study applies Halliday & Matthiessen's (1999) types of nominalization to discover types of nominalization in English humanities research articles by Indonesian authors and to identify if any difference exists in the frequency of nominalization in articles of SINTA- and Scopus-indexed journals. Our findings contribute to the knowledge of nominalization in Indonesian students' and practitioners' productive and receptive skills in writing, comprehending, and creating material for academic English, specifically for national and international publications.

II. METHOD

This research used qualitative and quantitative methods, with two data sources, i.e., qualitative data in sentences and quantitative data in numeric frequency. The first stage of the analysis was carried out by selecting two journals indexed by Scopus and SINTA. We then chose two journals with similar characteristics, with a minimum of 4000-8000 words for articles by a Scopus-indexed journal and 4000-6000 words by a SINTA-indexed journal. This was done to get a similar word count for the articles from different indexed journals. This study compares two Indonesian-indexed journals; thus, the authors' affiliation can be a benchmark to their Indonesian nativeness. The top-tier indexed journals, nationally and internationally, may show interesting results in nominalization generation in the articles.

Data Collection

The data for this research was taken from 40 English humanities research articles (EHRAs) authored by Indonesians. Respectively, 20 research articles from the Quartile 1 Scopus internationally indexed humanities journal—Studies in English Language and Literature (SiELE)—and the SINTA nationally indexed journal—Retorika—. The selected journals do not represent different quality of the articles, but it must be pointed out that their indexing different. Thus, it cannot be generalized that the result represents most SINTA and Scopus articles. The selected research articles were published in 2022-2023. After being downloaded in their pdf format, they were converted into docx format to ease the omission of unnecessary parts of the article, such as the title, abstract, acknowledgment, and bibliography. The remaining contents of the articles were then uploaded into the corpus software Sketch Engine

to get classified data in the form of words, phrases, and clauses to find its frequency of nominalization usage. It was used to determine the difference in nominalization frequency, the types, and possible characteristics of nominalizations generated by Indonesian authors in two different indexed journals. Additionally, it sought to provide a broader understanding of nominalization trends by examining the appearance of nominal expressions across the articles of the two indexed journals.

Data Analysis

This corpus research utilizes the two corpora of Indonesian authors, precisely their content words. The critical principle of learner corpus research is “to study language patterns through variation” (Subramaniam & Kaur, 2023, p. 179). With a corpus of considerable magnitude, the expectation was to ascertain predilections for the use of nominalization (Holmes, 1997). After entering the selected English humanities research articles (EHRAs) into the Sketch Engine application, which provided a list of generated nouns and their concordances, all instances of nouns were extracted manually by checking the word’s classes and stems in two online dictionaries, the Cambridge and Oxford dictionaries. The manual process of verification involves sketch engine application sub menu, noun. It shows every noun in the articles, then, the list of non-derivative nouns was omitted. They were then classified based on their suffixes to see their types. To clarify their statuses as nominalization, the ambiguous ones depended on their left and right co-texts, as they were taken into account to unpack the potential ‘veiled’ part of speech. There are some potential biases when unpacking the nominalization as it depends on authors subjectivity, but it can be assured that most of them are nominalization by the validity of the corpus tool itself. Halliday (1999) contends that every metaphorical expression must have a congruent counterpart. This study sought to determine if the extracted instances function as nominals by analyzing their congruent domains. Thompson (2004) refers to revealing a grammatical metaphor as “unpacking.” This entails identifying a potential linguistic structure that reflects a particular instance of grammatical metaphor in its respective domain. Unpacking entails the generation of a hypothesis regarding a likely formulation consistent with the intended metaphorical meaning.

The extracted nominalizations were then classified based on Halliday and Matthiessen's (1999) depiction of four categories of nominalizations since they clearly defined the classification rather than others. We subsequently labeled them based on their suffixes, with nouns bearing the suffixes -ity and -ness being designated as type 1. This classification refers to nouns originating from adjectives and expressing their corresponding properties. Additionally, nouns that realize processes featuring suffixes such as -age, -al, (e)ry, -sion/-tion, -ment, -sis, -ure, and -th were tagged into type 2, and nouns derived from prepositions and conjunctions were tagged into types 3 and 4. The methodology used to identify and classify these nominalization instances is crucial for further analysis and interpretation of the data.

Table 1. Halliday and Matthiessen’s (1999) classification of nominalization

Nominalization	Conversion	Examples
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Type 1	Adjective	Unstable ->	Instability
Type 2	Verb	Transform ->	Transformation
Type 3	Circumstance	With ->	Accompaniment
Type 4	Conjunction	If ->	Condition

After the data were unpacked, they were marked by individual data based on the document and the line in the Sketch Engine application. The data were marked by codification. SS stands for Scopus and SA stands for SINTA. SS/SA/ doc#/number of document/Line/number of line/, e.g., SA/doc#3/ Line 5. The unpacked sentences were marked by (Number of datum/D), e.g., (2.D). The D code stands for denominalized. Moreover, after the data were analyzed thoroughly, we employed a quantitative calculation provided by www.socstatistics.com using a t-test to determine the significance between nominalization from research articles by SINTA- and Scopus-indexed journals. Thus, two hypotheses are employed in order to define the significance; they are the null hypothesis (H0) and the alternative hypothesis (Ha) as follows:

H0: There is no difference in nominalizations between the articles from the SINTA and Scopus-indexed journals

Ha: There is a higher frequency of nominalizations from the articles of the Scopus-indexed journal than the SINTA-indexed journal.

These hypotheses can then be accepted or rejected by the p-value of the t-test. The null hypothesis will be rejected if the p-value is lower than the correlation coefficient. The coefficient's value was calculated, and the analysis yielded a correlation coefficient of .05, which is acceptable (Cantos, 2002). The identification of nominalization depends on determining the suitable rephrasing for every instance of grammatical metaphor. Halliday (1999) stated that grammatical metaphors are considered different expressions of the same concept. This point needs to be emphasized. Nevertheless, there may be some situations in which it will not be possible to restate something. In some situations, a metaphor cannot be appropriately restated, as demonstrated by the term second-generation. This technical term cannot be unpacked into second-generate. This is one of the situations in which a metaphor cannot be appropriately restated. Halliday and Matthiessen (1999) state that technicalizing a statement culminates in forming a new semantic meaning characterized by absolute semantic variability. Below are some technical term examples derived from some articles:

3. "...a meaningful level; for example, the verb send and receive will share semantic functions (). Therefore, the semantic function can be known from the function of the verb, which has a semantic role. The role of semantics expresses the role that the" (Rafiek & Rustam, 2022, p.1259)

4. "...the novel resemble those of the target language (English), there are still idioms remaining unexplored. Language is a communication system that allows members of various social groups to interact with one another. Language is used in various contexts..." (Mahmud et al., 2022, p.1301)

5. "...of one's language to a much more significant effect, like cementing an invisible hierarchy in society. With this consideration, we are trying to bring a new perspective of empirical research which attempts to investigate the use of slang in..." (Mahmud et al., 2022, p.1302)

The bold expressions in (3) and (5) were not considered nominalizations because of their invariable nature as fixed expressions referencing immutable phenomena. For instance, the term semantic function in example (3) is a technical term with no inherent variability or alternatives. As a result, even though these expressions hold nominal syntax, they do not meet the criteria for nominalization as they lack the capacity for substitution or modification. Example (4) is typically considered to be an instance of nominalization due to the fact that it can be unpacked and replaced with the congruent form. It is possible to replace the generalized singular noun in a communication system with its congruent form, a system to communicate that allows members to..., which changes syntactically, an alternative that is broader and easier to understand.

Due to their predicate as technical terms, a few words have been omitted from English humanities research articles. Nominalized statistical terms, including regression, standard deviation, reliability, and validity, were excluded from the text analysis. Several broad terms, including function, management, generalizability, combination, and engagement, have been recognized as technical terms within the scope of the humanities. Therefore, they are not regarded as nominalizations when employed within the context of this domain.

III. RESULTS AND DISCUSSION

The English nominalization articles are divided into two types: the articles of the Scopus-indexed journal and the SINTA-indexed journal of English humanities research articles (EHRAs). Table 2 shows the number of articles and their total and 1,000-word nominalizations.

Table 2. The frequency of nominalized expressions in humanities research articles per 1000 words

No.	Journal Indexing	Number of Articles	Total word counts	Number of nominalization	Number of nominalization per 1000 words
1.	Scopus indexed	20	74,921	1741	23.24
2.	SINTA indexed	20	59,458	1826	30.71

The frequency of nominalization in English humanities research articles authored by Indonesian authors was ascertained in this study, as illustrated in Table 2. It depicts the frequency and quantity of nominalization expressions per one thousand words. The outcomes revealed a distinction in the use of nominalization between the two categories of articles. Slightly fewer nominalizations were observed in Scopus-indexed journal articles than in SINTA-indexed articles. When comparing the total word count to the nominalization frequency, our research indicates that SINTA-indexed articles demonstrate a slightly higher number of nominalizations than Scopus-indexed articles per 1000 words. This result may be caused by the tendency of authors from SINTA-indexed articles to compact the information more than

authors from Scopus-indexed journal articles, as there is no standard of how many nominalizations needs to be deployed in their articles. Moreover, since there is a standard minimum of how many words count per article, with denser total word count from SINTA-indexed articles, thus this result can be argued. Take note that the density of nominalization does not affect quality of the articles, since excessive use of nominalization may have drawbacks such as dry text and overly-complex sentences, as they may cause difficulty to comprehend the academic articles. Thus, it needs dexterity, creativity and finesse for encoding complex connotation from nominalization (Downing & Locke, 2006).

Table 3 shows that in English humanities research articles, the utilization of nominalization type 2 varied considerably from the other types. Jalilifar et al. (2018) argued that authors could meet the requirement of depersonalizing discourse by using the second type of nominalization, which involves converting verbs to nouns. This approach highlights the effects and outcomes of action instead of emphasizing its agent. This finding clarifies that Indonesian authors tend to emphasize the processes rather than the actors, which means decreasing subjectivity in the articles. This objectivity can be attributed to the changes that occurred in the development of English academic writing (Biber & Gray, 2013). This transition is characterized by the predominance of nouns over verbs in all academic writing registers (Banks, 2008), which indicates a shift in perspective regarding the nature of academic English.

Table 3. Nominalization Types in Two Indexed Journals

No.	Nominalization types	Scopus indexed	SINTA indexed
1.	Type 1	300	502
2.	Type 2	1,441	1,324
	Column total	1,741	1,826

The t-value is 0.10999. The p-value is .913638. The result is significant at $p < .05$. The t-test indicates no significant difference between the two indexed journal articles' nominalizations. Furthermore, only two categories of nominalization were calculated due to zero frequencies in types 3 and 4, which prevented its calculation. It was because of type 3 and 4 basically were not derivative nouns as they cannot be shown by the corpus tool menu. We observed that by frequency, authors in SINTA-indexed journal articles demonstrate a slight propensity for nominalizing compared to Scopus-indexed journal articles. Furthermore, type 2 nominalization was dominant in articles of the journals indexed by SINTA and Scopus, which indicates that they similarly chose a congruent form of nouns to express processes of verbs in their articles. This phenomenon has substantial implications for the density of English humanities research articles written by Indonesian authors in two indexed journals.

Nominalization type 1

This type of nominalization usually derives from adjectives that express their corresponding properties. This is often done by adding specific suffixes such as *-ity* and *-ness*. These are the samples of nominalization by the articles of SINTA and Scopus-indexed journals, respectively:

(1) SA/doc#2/Line 3 "These items had previously been tried out in other classes that were not sampled in this study to determine their **validity**."

(1.D) These items had previously been tried out in other classes that were not sampled in this study to determine whether they were **valid**.

Validity semantically means 'the state of being legal or officially acceptable' (Oxford Learner's Dictionaries). When this nominalization is unpacked in (2.D), the semantic properties of 'officially acceptable' still can be found in its corresponding adjective. Because the article contains nominalization, the author is assumed to choose a more compact form that does not need additional verbs and change the third-person plural pronoun into a possessive form.

(2) SS/doc#6 "Indonesian authors. Regarding the citation technique, the citation techniques found in the present study had more **similarities** to those in the previous studies related to English RAs published in reputable journals (; ;). However, these findings..."

(2.D) "Indonesian authors. Regarding the citation technique, the citation techniques found in the present study had more techniques that are **similar** to those in the previous studies related to English RAs published in reputable journals (; ;). However, these findings..."

Similar to the earlier nominalization in the article from the journal that SINTA indexes, this excerpt's article from the journal, which Scopus index, shows syntactical and polymorphic changes in the adjective. The part of speech reappearance in the sentence indicates syntactical modifications. In contrast, polymorphic change can be seen by changing the noun suffix 'similarity' to 'similarities' as a plural noun. The denominalized form in (2.D) shows the possibility of the author arranging the sentence without nominalization. By seeing the co-text of the sentence, the adjective needs a noun to be explained, i.e., 'techniques.' It also requires a relative pronoun 'that' and the verb 'are' to be appropriately coherent. These reappearances show how dense the nominalization that the author generated in their article is.

(3) SA/doc#10/Line 5 ".There are many **weaknesses** of online learning that result in their ineffectiveness in receiving online learning, especially the unstable..."

(3.D) ".There are many aspects that are **weak** in online learning that result in their ineffectiveness in receiving online learning, especially the unstable..."

The denominalized form in (3.D) shows that the unpacking process makes the sentence longer by the reappearance of the subject 'aspects,' the relative pronoun 'that' and the verb 'are,' These syntactical changes are proof that by the nominalization, more information can be packed in the sentence.

(4) SS/doc#7/Line 7". From the aforementioned findings, we realized that providing audio feedback remains debatable regarding its **effectiveness**."

(4.D) ". From the aforementioned findings, we realized that providing audio feedback remains debatable regarding how it is **effective**."

The syntactical components of the sentence (4.D) have undergone minimal modifications compared to sentence (4). The unpacked form needs a relative pronoun referring to the NP, which is the main point of the sentence. The pronoun 'it' refers to the noun phrase 'audio feedback,' which, in this case, the unpacked form takes more words rather than the nominalized form. Additional syntactic parts, such as the adverb and the verb, are needed to make the sentence cohesive. Moreover, the nominalization experienced back-formation by the omission of the suffix *-ness*, then the denominalized form, i.e., in the form of adjective function as predicative.

Nominalization type 2

This type of nominalization usually originates from verbs and expresses their corresponding properties. Morphologically, it has the characteristic which usually takes the suffix *age*, *-al*, *(e)ry*, *-sion/-tion*, *-ment*, *-sis*, *-ure*, and *-th*. These are the samples of nominalization by the articles of SINTA and Scopus-indexed journals, respectively:

- (5) SA/doc#12/Line 8 "...from its context, both linguistically and in terms of socio-cultural practises. Hala El Saj (2012) researched the **usage** of personal pronouns on Oprah Winfrey's show in a conversation with Jordan's Queen Rania. Oprah Winfrey uses personal
- (5.D) "...from its context, both linguistically and in terms of socio-cultural practises. Hala El Saj (2012) researched personal pronouns that are **used** on Oprah Winfrey's show in a conversation with Jordan's Queen Rania. Oprah Winfrey uses personal..."

The unpacked form (5.D) from nominalization in (5) makes the sentence longer. It is because of the additional relative pronoun 'that' which refers to the noun 'personal pronouns.' The unpacked form needs both a pronoun and a to-be to elaborate on the sentence's subject using the verb 'use,' which makes the sentence less dense than the nominalization form. Moreover, the cohesiveness of the sentence will vary depending on many perspectives. Still, since the nominalized form was found to be written by an Indonesian author, it can be assumed that the nominalized form tends to be used rather than the unpacked form that is being rearranged above.

- (6) SS/doc#2 Line 1 "Adverbial clauses, in particular the ones using connectives as shown in (9), facilitate the **linkages** among ideas for the establishment of coherent texts (Fang, 2006)."
- (6.D) Adverbial clauses, in particular the ones using connectives as shown in (9), facilitate the ideas that are **linked** to each other for the establishment of coherent texts (Fang, 2006)."

There is a slight difference in length between the nominalization form and the unpacked form in (6.D). The reason is that the adverb 'each other' pertains to the noun 'the ideas.' To elaborate on the subject of the phrase, the unpacked form requires both a relative pronoun and a to-be together with a past participle and a preposition. This makes the statement less complex compared to the nominalization form. Furthermore, the coherence of the phrase may differ depending on various viewpoints. However, considering that the nominalized form was observed, it may be inferred that it is generally preferred over the above rearranged unpacked form.

- (7) SA/doc5/line2 "..., including using religion and belief as a tool to dominate and discriminate

against marginalized groups in the form of **refusal** to build houses of worship. The rejection by community groups using power in the regions based on agreements,..."

(7.D) "..., including using religion and belief as a tool to dominate and discriminate against marginalized groups in the form of people who **refuse** to build houses of worship. The rejection by community groups using power in the regions based on agreements,..."

Semantically, the nominalization 'refusal' means 'the act of refusing to do or accept something' (Cambridge Dictionary). When it is back derived into its corresponding verb, i.e., refuse, it needs an explicit subject to be apprehended. Thus, the reappearance of the subject 'people' and the relative pronoun 'who' contribute to the slightly increased word count of the unpacked sentence, making the nominalization denser when compared.

(8) SS/doc#11/Line 9 ".This book delivers a very spot-on way of its story and characters' **portrayal.**"

(8.D) ".This book delivers a very spot-on way of its story and how the characters are **portrayed.**"

According to (8.D), the sentence becomes slightly longer when the unpacked form is used instead of nominalization in (8). The nominalization, specifically 'portrayal,' encompasses more characteristics than its corresponding verb, 'portray.' To get a comparable meaning as the nominalization form, the unpacked form should provide more details on the qualities, such as using an adverb that relates to the verb 'portrayed.' This scenario reduces the density of the congruent form. Furthermore, the sentence's cohesion may differ. It may be inferred that the nominalized form is preferred over the rearranged unpacked form mentioned above.

(9) SA/doc#17/line 1. "The unwillingness of Wargawijaya and Ki Ageng Senon served as the motive for Mangun's **bravery** to show off."

(9.D) "The unwillingness of Wargawijaya and Ki Ageng Senon served as the motive for Mangun, who is **brave** enough to show off."

The datum (9.D) indicates that the congruent form of the nominalization in (9) resulted in the modification of the adjective "bravery." Due to the nominalization describing the subject 'Mangun,' since this subject is explicit, the nominalization tends to reduce the word count less than the nominalization that does not have an explicit subject. Only two reappearances occur in the part of speech: the relative pronoun 'who' and the verb 'is.' This suggests that even slightly shorter nominalization is still possible for dense sentences.

(10) SS/doc#5/line 4. "Those who answered 'yes' then continued with **inquiries** on the traditional fishery vocabulary."

(10.D) "Those who answered 'yes' then continued with the traditional fishery vocabulary that is **inquired.**"

Interestingly, the morphological change happened in the congruent form due to making appropriate sentences. Moreover, just like the other nominalizations' congruent forms, it also has

the characteristic in which they get the reappearances of a preposition or pronoun + a to-be before the denominalized form, which experiences back derivation. Furthermore, as nominalization makes the sentence more abstract by using abstract nominal, the congruent form brings the clearance of the subject addressed in the sentence.

(11) SA/doc#16 /line 10. "Meanwhile, the accusation subject only appears for 5 times. The **domination** of Joko Widodo's party can be seen from the social actors inside the article which 40.70% of social actors are related to..."

(11.D) "Meanwhile, the accusation subject only appears for 5 times. Joko Widodo's party that **dominates** politics can be seen from the social actors inside the article which 40.70% of social actors are related to..."

Similar to the excerpt in (7.D), the denominalized form in (11.D) shows that if the nominalization already describes a noun, the unpacked version can have a similar word count or slightly increase. Since there is already the noun phrase 'Joko Widodo's party' that is described by the nominalization "domination," when it is unpacked, the co-text of the sentence is used and results in the reappearance of the object "politics." This characteristic of nominalization that already has a noun to be described does not seem to affect the density of the sentence but still emphasizes abstraction.

(12) SS/doc#1/line1. "Acehnese has several different dialects even between neighboring villages, which may sometimes cause **communication** difficulties

(12.D) "Acehnese has several different dialects even between neighboring villages, which may sometimes cause their people difficult to **communicate**."

Creating proper phrases caused the morphological shift to occur in the congruent form. Moreover, just like the other nominalizations' congruent forms, they also have the characteristic of getting additional prepositions or pronouns before the denominalized form, i.e., a result of experiencing back derivation. This is one of the proofs that nominalization compacts information by omitting the subjective function of a sentence. The noun 'communication' semantically means 'the act of communicating with people' (Cambridge Dictionary). In this process, our mental lexicon recognizes the existence of the particular information's sender and recipient (people). This abstraction by nominalization makes our tacit knowledge active when hearing or using the word. Thus, when it gets back-derivation by the omission of suffix *-tion*, it needs a noun, 'participant,' in communicating. Furthermore, nominalization makes sentences more abstract by using abstract nominal; however, the congruent form brings the clearance of the subject addressed in the sentence.

(13) SA/doc8/Line25 "..., BIPA students generally believe that explicit is more suitable for them. This is evidenced by the respondents' **agreement** with the statement that when teaching grammar, teachers must discuss grammar rules explicitly (80%)."

(13.D) "..., BIPA students generally believe that explicit is more suitable for them. This is evidenced by the respondents who **agree** with the statement that when teaching

grammar, teachers must discuss grammar rules explicitly (80%)."

The denominalized form in (13.D) demonstrates the sentence's morphological and syntactical alterations. The noun 'agreement' can be derived into its verb form 'agree' by removing the suffix *-ment*. Furthermore, semantically speaking, the term 'agreement' refers to the situation in which people have the same opinion, approve of, or accept something" (Cambridge Dictionary). This semantic definition explicitly states that it requires entities to approve or accept something, so it necessitates the involvement of individuals. When the noun is unpacked, a verb must accurately express what occurs with the noun. Since the nominalization already describes a noun, only the reappearance of the relative pronoun occurs. The level of coherence between two sentences may vary, but the existence of nominalization implies its dominance in packing more information.

(14) SS/doc#16/Line 7 "...pragmatics examines speakers' meaning according to contexts and the social distance determining the participant's **involvement** in specific conversations."

(14.D) "...pragmatics examines speakers' meaning according to contexts and the social distance determining the participant who **involves** in specific conversations."

The denominalized form in (14.D) contains the noun phrase 'participant's involvement,' which can be analyzed as comprising two distinct nouns, 'participant' as an attributive noun and 'involvement' as a modified noun. Subsequently, the process of nominalization can be reverted by removing the suffix *-ment* from the word 'involvement,' resulting in the verb 'involve.' Furthermore, once unpacked, a noun must be specified by a verb that aligns with the actions involving the word. Since the sentence already has an animate subject, expressly a participant, no additional animate subject reappears after being unpacked in the congruent form. The only modification in the congruent form pertains to including a relative pronoun corresponding to the animate noun. The coherence between two sentences may vary, but the presence of nominalization indicates the authors' dominance in packing implicit information.

(15) SA/doc#0/line 6 ". It employed Corpus-Assisted Discourse Study (CADS) as the basis for the **analysis** of linguistic patterns and thematic clusters within a large corpus of text."

(15.D) ". It employed Corpus-Assisted Discourse Study (CADS) as the basis of linguistic patterns and thematic clusters that are **analysed** within a large corpus of text."

The excerpt (15.D) shows a similar characteristic of nominalization that already has a noun to be described, i.e., the density of the text does not change significantly. The corresponding verb, analyse, means 'to study or examine something in detail to discover or understand more about it' (Cambridge Dictionary). Thus, this verb needs the action's actor or the object as the target. The sentence already has objects, i.e., "linguistic patterns and thematic clusters," so no reappearance of any part of speech is needed. Only syntactical changes occur, such as the reappearance of the relative pronoun and the to-be, to connect the object and the verb.

(16) SS/doc#0/line 2 ". The habits of using Indonesian reduplication adjectives, which denote something done repeatedly and used for **emphasis**, tend to make Indonesian learners apply

this rule to English.”

- (16.D) The habits of using Indonesian reduplication adjectives, which denote something done repeatedly and are used to **emphasize** something, tend to make Indonesian learners apply this rule to English.”

The unpacked form (16.D) shows the phrase's morphological and minor syntactic modifications. The noun 'emphasis' can be converted into the verb 'emphasize' through back-derivation by eliminating the suffix -sis. Furthermore, once it is unpacked, the verb's preposition is changed and gets the reappearance of the object 'something,' which is related to the subject of the co-text. Since the phrase already has an inanimate subject, 'something,' the sentence looks redundant because of the noun repetition as the verb's object. The level of coherence between two sentences can vary, but the existence of nominalization implies its usage in the articles.

- (17) SA/doc#17/line 1”...either Mangun, along with his descendants up to the seventh line, not to bring the kris he gave in a war, as a result of his **failure** in killing King Ardiwijaya, Mangun's own grandfather.”

- (17.D) either Mangun, along with his descendants up to the seventh line, not to bring the kris he gave in a war, as a result of he who **failed** in killing King Ardiwijaya, Mangun's own grandfather.”

The nominalization in (17) shows that it describes the properties of its possessive pronoun 'his.' Semantically, failure means 'the fact of someone or something not succeeding' (Cambridge Dictionary). This property can be carried out by its corresponding verb, i.e., 'fail,' which needs the change of possessive pronoun into a third-person pronoun and the reappearance of the relative pronoun. Since the nominalization already describes pronouns, the density of the sentence may not be affected.

- (18) SS/doc#7/ line 1 “. Furthermore, Liu and Qu (2014) assumed that the mixture of diverse semiotic modes enables the audiences (e.g., students) to alter their perceptions of information.”

- (19) (18.D) “. Furthermore, Liu and Qu (2014) assumed that the diverse semiotic modes that are mixed enable the audiences (e.g., students) to alter their perceptions of information.”

The nominalization in (18) describes the noun 'diverse semiotic modes' condition. Semantically, mixture means “a substance made from a combination of different substances” (Cambridge Dictionary). This property can be carried out by its corresponding verb, i.e., 'mix,' which needs a syntactical change in the congruent form. By the reappearance of the relative pronoun “that” and the to-be “are,” thus it takes a longer sentence to convey a similar meaning to the nominalization. The case of this nominalization, i.e., with an explicit subject or object, slightly increases the sentence's density.

- (20) SA/doc#17/line 1 “...warn the descendant of Wirasaba to have self-control over their evil intentions, such as their desire to avenge for the death of their ancestors.”

(21) (19.D) "...warn the descendant of Wirasaba to have self-control over their evil intentions, such as their desire to avenge their ancestors who were dead."

The excerpt (19.D) shows a similar characteristic of nominalization, which already has a noun to be described, i.e., resulting in the density of the text that does not change significantly. The corresponding adjective, dead, means 'not living' (Cambridge Dictionary). Thus, this adjective needs an actor of the action, an object, or a patient as the target. Since there is already the object in the sentence, i.e., "their ancestors," there is no need for the reappearance of the subject in the sentence. Only syntactical changes occur when the relative pronoun and past participle connect the object and the adjective.

(22) SS/doc#9/line 2 ". Eventually, it allowed them to designate the strengths and weaknesses of implementing genre-based multimodal text analysis. These are aligned with Moon's (2001) concept,..."

(23) (20.D) ". Eventually, it allowed them to designate the points that are strong and weak in implementing genre-based multimodal text analysis. These are aligned with Moon's (2001) concept,..."

Since the conjunction connects two parallel nominalizations ', ' when one nominalization is back derived, the other will follow. The adjectives 'strong' and 'weak' are conceptually properties of something; in this case, the points become the noun modified by these two adjectives. The reappearance of this noun then changes the preposition after the adjectives and increases the word count in the congruent form.

The Frequency and Percentage of Nominalization based on The Suffixes

Table 2. shows the difference in the total word count of nominalization between articles from SINTA and Scopus-indexed journals, with less total word count in the articles from the Scopus-indexed journal compared to the SINTA-indexed journal. To get a deeper insight into how the frequency and percentage of the nominalization created by Indonesian authors in two indexed journals, the result can be seen in the two tables below:

Table 4. Nominalization suffixes in SINTA-indexed journal

No.	Types of suffixes	Frequency	Percentage
1.	-ure	4	0.003
2.	-al	5	0.008
3.	-(e)ry	16	0.039
4.	-age	32	0.043
5.	-th	45	0.060
6.	-ness	71	0.094
7.	-sion	73	0.099
8.	-sis	221	0.29

Nominalizations in humanities research articles in SINTA- and Scopus-indexed ...

9.	-ment	234	0.31
10.	-ity	288	0.57
11.	-tion	837	1.12
	Total	1826	3.07

Table 4. shows that articles in the journal that SINTA indexes showed the frequency of nominalization from the lowest to the highest frequencies, with -ure as the lowest one found and -tion as the highest. This implies that most of the nominalizations in the articles were dominated by the conversion of verbs that represent action into nouns that represent concept. In order to know the percentage of the nominalization in the articles, the nominalization and the total words are calculated. The calculation then revealed that the SINTA-indexed journal articles have 3,07% nominalization.

Table 5. lists the frequency of nominalizations in the articles from the Scopus-indexed journal, as well as their percentage, are listed. The frequency of nominalization is arranged from the lowest to highest frequencies, with -ure as the lowest one found, -ness as the median, and -tion as the highest. This result is similar to articles from the SINTA-indexed journal. Meanwhile, the suffixes (-ery, -age, -al, -sion, -ment, -th, -ity, and -sis) vary by articles from the two indexed journals. This implies that most of the nominalizations in the articles were dominated by the derivation of verbs that represent action into nouns, which represent concepts by the domination of type 2 nominalization. In order to know the percentage of the nominalization in the articles, the nominalization and the total words were calculated. The calculation then revealed that the Scopus-indexed journal articles have slightly higher nominalization than those from SINTA-indexed journals with 2,32%.

Table 5. Nominalization suffixes in Scopus-indexed journal

No.	Types of suffixes	Frequency	Percentage
1.	-ure	4	0.007
2.	-(e)ry	7	0.021
3.	-age	34	0.057
4.	-al	37	0.062
5.	-sion	42	0.070
6.	-ness	109	0.18
7.	-ment	150	0.25
8.	-th	163	0.27
9.	-ity	191	0.32
10.	-sis	242	0.40
11.	-tion	762	2.08
	Total	1741	2.32

These results imply that nominalizations by two different indexed journal articles show how Indonesian authors convey their knowledge in English academic writing. Even though there is no statistically significant difference in the calculation result, they show a similar characteristic to following a native English perspective in writing for academics in their language.

IV. CONCLUSION

The two different groups of articles from journals being studied demonstrated compact information in their articles. SINTA- and Scopus-indexed articles show similar nominalization frequency, indicating that Indonesian authors have similar proficiency levels. Still, a slight percentage differentiation affects the information density of articles from SINTA- and Scopus-indexed journals. Even though its density usage still debatable among researchers, as they may have drawbacks when used excessively, such as too-complex sentences which affects readability and understandability, but the benefits of conciseness, objectivity, cohesiveness when they are used appropriately also cannot be denied. The result of this study may help future researchers to get insight of how many nominalizations these indexed articles deployed, which helps Indonesian authors understand how it is used appropriately in academic field. The current limitation of this study is the data, which consists of only English-language humanities research articles written by Indonesian authors in two different indexed journals, and the limited suffixes of nominalizations. It is recommended that future research examine the nominalizations used in various subject articles such as science with more quantitative approach with various indexed journals in order to know how nominalization appears in various academic writing.

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