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LEXICAL COHESION IN ACADEMIC DISCOURSE: EXPLORING APPLIED LINGUISTICS RESEARCH ARTICLES ABSTRACTS

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ABSTRACT

The publication of Halliday and Hasan (1976) invoked the notion of *cohesionin texts* among discourse analysts. Drawing on this fundamental study, researchers have been exploring cohesion in both monologic and dialogic discourses of different languages (Taboada, 2004; Angermeyer, 2002), genres (Tanskanen, 2006; Hoey, 2005), and registers (Hasan, 1984; Hoey, 1991). The focus of this study was to examine lexical cohesion in abstracts of research articles from the Applied Linguistics. The study aimed to: (1) identify the types and frequencies of lexical ties utilized in writing Applied Linguistics research articles abstracts, and (2) examine how the lexical ties utilized in writing Applied Linguistics research article abstracts contribute to the coherence of the abstracts. The research approach was both quantitative and qualitative, and abstracts of **40** research articles from *Discourse Analysis, Critical Discourse analysis, Contrastive Linguistics* and *Second Language Acquisition* were sampled. The data were culled from online data bases and had a total of 7,660 words. The study employed Halliday and Hasan's (1976) lexical cohesion framework. The analysis revealed 754 lexical ties intersententially, where *Repetition* (54%) was the most preponderant, followed by *Collocation*(14%) and *hyponymy* (11%). The data also demonstrated that lexical cohesion contributes tremendously in the propositional development of all the move structures typical of research article abstract as a genre also used in the Applied Linguistics. To conclude, the researcher drew attention to the need for studies of this nature across disciplines.

Key Words: Abstracts, Applied Linguistics, Coherence,Academic Discourse, Genre, Lexical Cohesion.

1. INTRODUCTION

Cohesion analysis is among the approaches to discourse analysis. The focus of attention in this type of analysis is to examine how parts of texts (spoken & written) are related to give a unified whole. Studies of this nature were initiated by Zellig Harris (1952) in his paper titled "Discourse Analysis" (Beaugrande& Dressler, 1981; John, 2012; Rotimi, 2010; Widdowson, 2004). Harris examined the patterning of texts by looking at the distribution of equivalent morphemes across the sentences. He did this also by applying the notion of "transformations". To Harris, the higher the number of equivalence across sentences in the texts the

more related are the parts of the texts. Harris' attempt was to extend the scope of grammar to also accommodate the analysis of texts – the unit "above the clause or sentence". However, his student Chomsky was able to employ the "transformation" notion for the analysis of sentences in his *transformational generative grammar* (widdowson, 2004; Beaugrande& Dressler, 1981).

It must be highlighted, however, that Harris's approach was quite different from today's cohesion analysis. For example, Harris's analysis did not pay attention to meaning for he was concerned with how similar equivalences share the same environment, today's cohesion analysis pays utmost attention to how parts of texts are semantically related. Fundamental contributions in cohesion studies include Gutwinski (1971) and Halliday and Hasan (1976). Unlike Harris's approach, cohesion analysis focuses on how parts of texts are related semantically so that the whole text appears as semantic unit. This is achieved when cohesive ties and chains are maintained where the presupposing and the presupposed elements are all retrieved and satisfied within the text (Eggins, 2014; Flowerdew, 2013; Halliday & Hasan, 1976).

Halliday and Hasan (1976) divide cohesion into two broad categories: *grammatical cohesion* and *lexical cohesion*. Grammatical cohesion is realized by grammatical items of the closed class – *pronouns, prepositions, demonstratives and auxiliaries*. The sub-categories under grammatical cohesion include*: reference, substitution, ellipsis and conjunctions*. On the other hand, lexical cohesion is realized by the members of the open-class items – *nouns, adjectives, adverbs and (main) verbs*. The categories here include*: Reiteration and Collocation.* Reiteration members include: *repetition*, *synonymy*, *near-synonymy*, *superordinate* and *general words*; Collocation members include: *Hyponymy*, *Antonymy*, *Meronymy*, *Ordered set*, and also Relations that are not Systematic. These categories and relations have today been differently revised and modified by Halliday and Hasan themselves and many other researchers (what we shall see shortly).

As the name implies, Lexical cohesionis the type of cohesion achieved through the use of different lexical relations. As highlighted earlier on, this role is played by *nouns, main verbs, adjectives and adverbs*(McCarthy, 1991; Eggins, 2004). Cohesive elements here enter into different semantic relations with other elements in other clauses and sentences across the text. Unlike the reference cohesion, lexical items entering into cohesive relations do not have to have identical referent. Although different cohesion analysts like McCarthy (1988), Hoey (1991), Martin (1992), Taboada (2004), Tanskanen, (2006)etc have today succeeded in coming up with new and modified models of lexical cohesion, Halliday and Hasan's (1976) fundamental model that invoked the whole phenomenon of cohesion, would be employed in the present study. The model has two broad categories: *reiteration and collocation*. Each of these categories has some subcategories under it as follows: Reiteration –repetition, synonymy, near synonymy, superordinate and general class words; Collocation –hyponymy, antonymy, ordered set, part-for-whole, and relations difficult to describe semantically. These are briefly explained as follows:

Reiteration

1. **Repetition**: this is when a lexical item is repeated in subsequent clauses or sentences. The repeated item may appear in a slightly modified form, hence, "exact" or "inexact" repetition. Repetitive items need not refer to the same referent or mean the same thing. It is a very frequent type of cohesion in texts (Hoey, 1991; Gonzalez, 2010; Taboada, 2004; and Tanskanen, 2006).
2. **Synonym**y: as the name suggests, this is the use of lexical items with similar meanings to achieve cohesion. It is one of the areas of controversy among discourse analysts. Some researchers opine that synonymic relations should be determined by the context and no reference should be made to decontextualized meanings (see Gonzalez, 2010 and Tanskanen, 2006, for example)
3. **Near-synonymy**: this is the relation between lexical items that are "near" but not exactly synonymous. Halliday and Hasan instance *road* and *path.* They are also used for cohesive effect in texts.

4. **Superordinate**: this is the relationship between lexical items in which the meaning of one (mentioned later) dominates the meaning of the other (mentioned earlier) in the lexical taxonomy e.g*ascent/task, boy/child etc.*
5. **General words**: these are the types of common nouns and some indefinite pronouns used anaphorically to refer to already-mentioned items in a cohesive way. It is usually preceded by a reference item and it always shares referent with the previously- mentioned item. Flowerdew (2013) explains that different cohesion analysts label *general words* differently as: *type 3 vocabulary (*Winter, 1977), *anaphoric nouns (*Francis, 1986), *shell nouns (*Schmid, 2000), *signalling nouns (*Flowerdew, 2003, 2006, and 2010)

Collocation

It is imperativehere to begin by pointing out that some of the relations identified under this category were later included under reiteration by Hasan (1984) and Halliday (1985) and many other linguists. The worst bone of contention is the claim by same scholars that the label *collocation* is essentially a J.R. Firth's (1957) term, and should not be used for text analysis because it is purely lexicosemantic and also hard to be systematically accounted for. They say it is vague and relations loosely defined. These linguists advocate for a more *contextual* or *discourse-specific* labels (see Gonzalez, 2010; Hoey, 1991a; McCarthy, 1998; Martins, 1992; Tanskanen, 2006). Hasan (1984) herself suggests that collocation should be dropped but Halliday (1985/1994/2014) uses the term again. Halliday's collocation is when cohesion is achieved by the association of lexical items that regularly occur together. Relations identified under collocation in Halliday and Hasan (1976) are discussed briefly as follows:

1. **Hyponymy**: this is the relation between lexical items where *X* is a type of *Y,* situation where a word or group of words fall under a particular superordinate e.g*apple and lemon*are *fruits*; *chair and desk* are pieces of *furniture.*
2. **Antonymy**: where lexical items are in opposition e.g*right/wrong, short/tall.* Some scholars (like Eggins, 2014) refer to this relation as *contrast.*
3. **Ordered Set**: the relation between lexical items denoting entities or ideas that come in order e.g days of the week, months of the year etc.
4. **Part-for-whole**: this is the *meronymy* relation, where e.g*hand* is part of *body,tyre*is part of *car etc.*
5. **Relations difficult to describe systematically**: these are the relations difficult to capture using any of the systematic descriptions. Some of the cohesion analysts employing similar relations in their frameworks –like Martin (1992), Jordan (1984) and Tanskanen (2006) –use the concepts of *frame* and *trigger* to explain these relations. *Frames* are explained as forms of knowledge structures evoked by lexical items, while *triggers* are the surface structural elements materialized to evoke knowledge.

Following the publication of Halliday and Hasan (1976), different cohesion models continue to emerge, but most of these are simply modifications of this first model. Responding to criticisms labelled against their model, both Halliday and Hasan have revised the model. Hasan's revised model was in 1984 and she modified the categories as follows: *Generalization category* and *Instantial category*. According to this model, lexical relations under Generalization include: repetition, hyponymy, synonymy, meronymy, antonymy; while Instantial category deals with those relations previously discussed under collocation.Hasan's (1984) study was on children's narratives. In this revised model, she avoids including *collocation*. She shows how lexical items inter into cohesive relations in ties and chains. A single item cannot realize cohesive effect, when the two are established they make a tie. A chain is where we have at least three ties related. She also explains how coherence is achieved as a result of *cohesive harmony.* Cohesive harmony is when there is interaction between the chains in the text. This cohesive interaction is when at least two members of different chains inter into cohesive relations with members of other chains. She identifies two tokens: *relevant* and *peripheral*. While *relevant tokens* are part of chains, *peripheral tokens* are not part of chains, and the higher the number of

relevant tokens in a text, the more coherent is the text. Reverse is also the case.

On the other hand, Halliday's revision was in 1985 and it has three categories: *Repetition, Synonymy (*having sub-relations as synonymy, superordinate, hyponymy, meronymy, co-hyponymy, co-meronymy, antonymy) and *Collocation.*There is also a model by Michael Hoey (1991). Hoey attaches greatest importance to lexical items compared to grammatical elements because he argues that they are more cohesive than the grammatical elements. But he includes grammatical elements like pronouns in his analysis. Hoey (1991) was concerned with non-narrative texts and he shows how lexical items enter into cohesive *bonds* and also relate with other items in networks (or net). These nets, according to Hoey, bring together central sentences and give them unity. The same author develops a lexical theory called *lexical priming (2005)* where he opines that lexical items are *primed* either *positively for cohesion* or *negatively to avoid cohesion.* To Hoey (2005), as language users, we are also primed to see cohesion in texts based on our familiarity with lexical items.

It is appropriate to highlight the fact that both written and spoken texts are analyzed using the lexical cohesion models. In other words, even oral conversations are transcribed and analyzed to see how different parts of the texts move together as meaningful wholes (see, for example, Gonzalez, 2011; Taboada, 2004; Widdowson, 2004; Tanskanen, 2006). These models are also employed to study cohesion in languages other than English, or to compare languages (see, for example,Enkvist, 1975 (Finnish & English); Kallgren, 1979a, 1979b (Swedish); Danes, 1987 (Czech); Taboada, 2004 (English & Spanish)). Using the cohesion analysis, different studies are being conducted, and different findings have been emerging from these studies.

Taboada (2004) is a comparative study between English and Spanish conversations. Because the focus of her study was to examine the resources employed by interlocutors in 'building coherence and cohesion', Taboada used three types of frameworks: *genre analysis* (Bhatia, 1986), *rhetorical structuretheory* (Mann & Thompson, 1988), and *cohesion analysis* (Halliday & Hasan, 1976). However, we limit our concern here with only the *cohesion* aspect of the research.

Taboada adapted and modified Halliday's 1976 model, we can see that *conjunction* is omitted and the lexical cohesion relations are modified where new labels are used and others shifted. Like Halliday's model, this model also has two broad categories: *grammatical cohesion* and *lexical cohesion.* Under grammatical cohesion, the sub-categories include: *Reference* (R1. Personal, R2.Demonstrative & R3.Comparative), *Substitution* (S1.Nominal, S2.Verbal & S3.Clausal), *Ellipsis* (E1.Nominal, E2.Verbal, E3. Clausal); *Lexical cohesion* has two sub-categories: *Reiteration* (L1a. Exact, L1b. Rephrased, L2. Synonymy, L3.Superordinate, L4.Subordinate, L5.General word)& *Collocation* (which has no sub-categories here).

On the findings of her study, Taboada discovers that exact *repetition* is the most frequent cohesive tie in both English and Spanishconversations. But, while in English *demonstrative reference* is the next most frequent, followed by *inexact repetition* and then *superordinate*, *collocation* relation is the next most frequent in Spanish, followed by *demonstrative reference and inexact repetition* which is finally followed by *superordinate.* When English uses negligible amount of *substitution*, Spanish uses none. There was no even a single instance of *substitution* in the Spanish corpus. In all, Spanish has a higher number of links (620) compared to English (464), but both languages use exactly the same ratio of cohesive ties per word. Taboada draws attention of researchers to investigate whether *nominal substitution* is 'ruled out' in Spanish. This is because speakers mostly use ellipsis instead.

One striking finding of Taboada's study is that the conversations analysed do not exhibit *cohesive harmony* – what Hasan (1984) describes as a necessary property of coherent texts, but the dialogues, according to the researcher, seem quite coherent! The chains running in the conversations hardly interact. However, Taboada draws a conclusion that different texts require different degrees of *cohesive harmony.*

Tanskanen (2006) was concerned with how cohesion is used to achieve coherence in different

text types: *two-party conversations*, *prepared speech*, *mailing list*, *3-party conversations*, *andacademic writing*. To Tanskanen, when discourse producers produce texts and use cohesive elements as signals for the discourse receivers to interprete the singals and decode information from the texts, the two are both *collaborating towards coherence.* Tanskanen's model is a modified form of Halliday & Hasan (1976). She has two categories in the model: *Reiteration* (simple repetition, complex repetition, substitution, equivalence, generalization, specification, co-specification, and contrast) and *Collocation* (ordered set, activity-related collocation and elaborative collocation).

Tanskanen discovers that in all her corpus, *reiteration* and *collocation* are used to achieve cohesion, and all texts have longer and shorter *chains.* Most striking finding is how *two-party conversations* have highest density of cohesive ties while *academic writing* the lowest. Collocation frequency (10 to 16.5) was also lower than reiteration (90 to 146). Tanskanen concludes that cohesion is rarely achieved through collocation.

Gongalez (2010) studied*lexical cohesion in multiparty conversations.* The researcheranalysed broadcast discussions to examine the interaction between cohesion and coherence, and also to explore how lexical cohesion can be a measure in genre and register analysis. Gonzalez model gives prominence to *context*, and also considers how collaborative lexical cohesion can be. It comprises five meaning relations: *Repetition, Synonymy, Opposition, Inclusion, and Associative cohesion.* This researcher challenges existing model and advances her *integrated* model that is *discourse-specific* and makes no reference to *decontextualized* meanings of lexical items. In this model, relations are defined based on the particular contexts or texts being analysed – words may relate differently in different texts, for example. Gonzalez employed the same model in her analysis of telephone conversation (2011).

This multiparty conversation analysis is both quantitative and qualitative. Extracted from the international corpus of English, broadcast discussions of 15,683 words were accessed. In this corpus, 11,199 lexical ties were identified and the most frequent is *repetition.* They include: *Repetition* (59%), *Associative cohesion* (24%) and *Inclusion relation* (8.2%). Most ties occur *remote-mediated* (81.8%), and over speaker's turns (90.7%). The ties are sensitive to *genre-specific* factors and the collaboration in topic management.

In her report, Gonzalez draws some conclusions based on the findings of her study: that broadcast conversations are rich in lexical cohesive ties based on their nature of being controlled opinion expressions for intended audience; that lexical cohesive devices serve as triggers used to evoke different *frames* for understanding; that ties are used to establish connections across turns and this implies the *genre* characteristics of the conversations where speakers always try to understand and be understood.

On the other hand, academic discourse has also been an area of prolific studies. Academic texts of different spoken and written genres or part-genres have been explored and many interesting findings have emerged (see, for example, Ahmad, 1997; Anthony, 1999; Bhatia, 1997; Lewin et al., 2001; Samraj, 2005; Swales, 1990; Tanskanen, 2006). However, among the recognized genres in the academic discourse community is the research article. This particular genre characteristically contains a number of genre units, or part-genres as parts of its internal structure. Each of the part-genres within the research article has a well-defined purpose, and is organized in a specific way (Swales, 1990; Dudley-Evans, 1997; Bhatia, 1997). Research article genre units like Introduction, Abstract, and Discussion have been variously researched by scholars from different research fields like English for Specific Purposes (ESP), English for Academic Purposes (EAP), and Discourse Analysis.

Studies on research articles introduction, like Swales and Najjar (1987), Fredrickson and Swales (1997), Ahmad (1997), Crookes (1986), Samraj (2005), Lewin et al. (2001) for example, have reported different findings on the genre. For instance, Ahmad (1997) reports that research articles introductions written by the Malays generally do not state the research niche. Anthony (1999) discovers that research article introductions written by engineers contain additional moves than

those identified by Swales (1990), namely definitions of terms, examples of concepts, and assessment of the study in question. On the other hand, Bhatia (1993) described the research article abstract as *the article synopsis*. It has unique macro-organization, and it serves specific communicative purposes. The characteristic moves found in article abstracts generally include: *purpose of the study, methodology, results, and conclusion* (Bhatia 1993; Samraj, 2005). Studies on research article abstracts, both within and across disciplines, have also examined different aspects of the genre (see, for example, Bhatia, 1993; Huckin, 2001; Hyland, 2000; Melander et al. 1997). For example, Huckin (2001) reports, among other findings, that *biomedical* articles abstracts do not usually state the *purpose of the study*. Melander et al.'s (1997) study on abstracts from three disciplines shows how different *Linguistic* and *Biology* abstracts in the American context are in terms of their organization. Samraj (2005) reports that research article abstracts from *Conservation Biology* contain some moves that are characteristic of the introduction, such that the abstracts here also have certain persuasive functions fulfilled by the introductions. However, studies on research article abstracts have so far not focused on the roles of *lexical cohesion*; while lexical cohesion and genre have bi-directional relations and each genre exhibits its unique pattern of lexis. This type of cohesion has also been shown to enable texts producers to achieve coherence and other discourse characteristics (Morris and Hirst, 1991; Hoey, 1991; Hasan, 1984; Tanskanen, 2006). The present study seeks to take care of this research niche. The research could add to the existing literature on lexical cohesion in texts by unravelling the contributions lexical cohesion makes in abstract writing. Therefore, the purpose of this study is to explore lexical cohesion in Applied Linguistics research articles abstracts. Significantly, students and novices in the field of applied linguistics would be shown how lexical items are utilized in constructing abstracts in the field.

1.2 Objectives of the Study

The study is guided by the following objectives:

i. to identify the types and frequencies of lexical ties utilized in writing Applied Linguistics research articles abstracts
ii. to examine how the lexical ties utilized in writing Applied Linguistics research article abstracts contribute to the coherence of the abstracts

1.3 Research Questions

i. What are the types and frequencies of lexical ties utilized in writing Applied Linguistics research articles abstracts?
ii. How do the lexical ties utilized in writing Applied Linguistics research article abstracts contribute to the coherence of the abstracts?

2. METHODOLOGY

2.1 Design: this study employs *mixed-mode design.* It is quantitative because we identify the types, frequencies, and percentages of the lexical cohesive ties used by the Applied Linguists in writing their research articles abstracts. It is also qualitative because we assess how the use of these ties contributes to the attainment of *coherence* in the abstracts.

2.2 Sampling: the study employs *purposive sampling.* Only articles written in the field if Applied Linguistics are sampled for the analysis. The data were sampled from Discourse Analysis, Critical Discourse Analysis, Contrastive Linguistics, and Second Language Acquisition

2.3 Data collection: the data for this study was comprised of **10** journal articles abstracts each from the four research fields identified, making a total of **40** abstracts. The corpus had a total of 7,660 words and 292 sentences. The data were obtained fromonline the data bases especially from universities websites.

2.4 Analysis framework: the study draws on Halliday and Hasan's (1976) lexical cohesion model. This framework has the following relations:General words, Repetition, Superordinate, Synonymy, Near-synonymy, Collocation, Antonymy, Meronymy, Co-meronymy, and Hyponymy.

2.5 Analysis procedure: based on this framework, cohesive relations are established only *inter-sententially. Intra-sentential cohesion,* according to Halliday and Hasan (1976) is provided by the *structural relations* (not cohesive because they

operate only within the same sentence).Therefore, in keeping with this, and also going by the nature of the data as composed of mainly simple sentences, we analyze cohesion only across the sentence and not within the same sentence. In this analysis, texts are first segmented into sentences and each sentence is coded with number. Then, items entering into cohesive relations are underlined and lines are drawn to connect items that are cohesively related (as in Hoey, 1991). Cohesive units can be either simple or complex. Simple cohesive units are realized by single-item lexical items, w3hile complex lexical units are realized by multi-items lexical items like phrases, word-groups, or idioms (see also Eggins, 2004; Martin, 1992). Therefore, cohesive relations can exist between not just single words, but also groups of words (or phrases). Lexical units are also not orthographically restricted. This allows numerals also to be cohesive too.

3. RESULTS AND DISCUSSION

Results: The following table shows the types of lexical ties, their frequencies and also percentages of usage in the Applied Linguistics research articles abstractsanalysed:

Table 1. Frequencies and percentages of lexical ties used in the Applied Linguistics abstracts

Cohesive tie	Frequency	Percentage
General nouns	11	1.5
Repetition	410	54
Superordinate	09	1.2
Synonymy	54	7.1
Near-Synonymy	20	2.6
Antonymy	20	2.6
Meronymy	36	4.7
Co-meronymy	04	0.5
Hyponymy	84	11
Collocation	106	14
Total:	**754**	

The data of this study demonstrated that Applied Linguistics research article abstracts are lexically cohesive. In writing these abstracts, lexical items operated like threads used in weaving the different ideas or propositions raised in the abstracts. The authors skillfully utilized lexical units to develop their propositions, and also to conveytheir messages in varied tones in their expressions across the stretches of the abstracts. They achieved this mainly by repeating key words (like *study, data, research, language, speakers, writers, and so on*), use of collocates from the fields of linguistics and research (like *research/findings, study/method, researchers/report,* and so forth), employment of inclusively related lexis and semantically similar terms (like *study/research, researchers/scholars, findings/results,* and so on). In other words,the data analyzed revealed that authors mostly achieved coherence by repeating key words/terms and uses of words that often co-occurin the fields of language studies or research. Therefore, employment of lexical ties enabled the abstract writers to link the ideas expressed in the different sentences of the texts, such that the ideas flowed from sentence to sentence for the readers to easily follow with understanding. Therefore, lexical cohesion contributes significantly to the coherence of research article abstracts in the Applied Linguistics discipline.

DISCUSSION

With the total of 7, 660 words and 754 cohesive links, the corpus had10.15 cohesion ratio. It is therefore interesting to comment on what the findings of this study demonstrate. It can be seen that the abstracts of Applied Linguistics articles as analyzed in this study were lexically cohesive, and the writers employed variety of cohesive ties in achieving this. Because it occurred more than 50%, Repetition was the most frequent cohesive tie in the corpus. Following repetition, Collocation(104%) and Hyponymy(11%) were the next most frequent types of lexical cohesion in the abstracts. Previous studies of cohesion on different genres and part-genres of the academic discourse have reported findings similar to the findings of this study. Lewin et al. (2001) explored lexical cohesion and move in the Introduction and Discussion sections of Social Science Research (SSR) articles. The researchers observe that repetition and synonymy contribute up to 99% of the cohesive relations in the texts. They also believe that researchers concentrate on these types of cohesion in order to achieve clarity, precision, and definitions in their writings. Mirzapour and Ahmadi (2011) researched lexical cohesion in English and Persian research articles. They discover that in both English and Persian

articles, repetition, collocation and synonymy are the most frequent types of lexical cohesion in the corpus. But, while English articles tend to exhibit repetition and collocation, the Persian articles tend to exhibit repetition and synonymy. Mohammed-Sayyidina (2010) studied cohesion in academic texts produced by Arab EFL writers. The study reveals that repetition is the most frequent cohesion used by these writers. Some cohesion studies that focused on other texts types and different genres also interestingly report repetition as the most frequent type of cohesion in their corpus. Examples include Gonzalez (2010) on telephone conversations; Taboada (2004) on English and Spanish conversation; and Hoey (1991a) on patterns of lexis in non-narrative texts.

On the cohesively rich nature of these abstracts, this goes a long way in revealing how the writers make their meanings clear especially by repeating key words, using collocates, hyponyms and synonyms. With these abundant and genre-driven cohesive signals provided by the discourse producers, the discourse receivers would certainly find the texts quite coherent. We have earlier commented on the generic rationale (or purpose) of writing abstracts in research papers (that of giving readers a preview of the focus, method, findings, and conclusions of research studies), it can be seen how these linguistic signals built on the surface text can facilitate how readers would grasp the messages conveyed. Therefore, it is well to conclude that the use of these ties contributes to the attainment of generic coherence of the Applied Linguistics research articles abstracts.

4. CONCLUSION

This study reveals the patterns of lexical cohesion typical of the Applied Linguistics research articles abstracts. This genre unit of academic discourse is also shown to utilize lexical cohesion in building coherence. The researcher suggests similar studies using larger corpus across different disciplines.

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