The Students' Ability in Analysing Simple Sentences Using Immediate Constituent (Ic)

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Abstrak

Studi ini bertujuan untuk menyelidiki kemampuan siswa dalam menganalisis kalimat sederhana menggunakan Konstituen Langsung (KL). Tujuan dari penelitian ini adalah untuk memahami sejauh mana siswa mampu menganalisis kalimat sederhana menggunakan KL dan untuk mengidentifikasi area yang perlu ditingkatkan. Celah penelitian adalah untuk memberikan perhatian lebih pada konstituen langsung dalam kalimat. Metode penelitian kualitatif deskriptif digunakan untuk mengumpulkan data dan menganalisis hasilnya. Data dikumpulkan menggunakan Google Forms, tetapi karena pandemi COVID-19, hanya 15 siswa yang berhasil mengisi formulir. Temuan utama menunjukkan bahwa sebagian besar siswa mampu menganalisis kalimat sederhana di tingkat kalimat (permukaan), tetapi mereka gagal melakukannya di tingkat frasa (dalam). Ini menunjukkan bahwa siswa memiliki pemahaman dasar tentang diagram pohon linguistik tetapi kurang pemahaman yang lebih dalam tentang konstituensi di antara elemen-elemen di dalam diagram. Kesimpulan dari penelitian ini adalah bahwa ada kebutuhan untuk instruksi dan latihan lebih lanjut dalam menganalisis kalimat di tingkat frasa menggunakan KL.

Kata Kunci: Konstituen langsung, Diagram pohon linguistik, Struktur kalimat, Struktur frasa.

Abstract

This study aims to investigate students' ability to analyse simple sentences using Immediate Constituents (IC). The purpose of this research is to understand how well students are able to analyse simple sentences using IC and to identify areas for improvement. The research gap is to put more attention to the immediate constituents within the sentences. A descriptive qualitative research method was employed to gather data and analyse the results. The data was collected using Google Forms, but due to the COVID-19 pandemic, only 15 students managed to fill out the form. The main findings indicate that while most students were able to analyse simple sentences at the sentence level (surface), they failed to do so at the phrase level (deep). This suggests that students have a basic understanding of linguistic tree diagrams but lack a deeper understanding of the constituency among elements inside the diagram. The conclusion of this research is that there is a need for further instruction and practice in analyzing sentences at the phrase level using IC.

Keyword: Immediate constituent, Linguistic tree diagram, Sentence structure, Phrase structure.

INTRODUCTION

In the context of English language education study programs, it is crucial to consider students' language awareness. Language awareness encompasses various domains that contribute to effective language learning and use. These domains include the affective, social, power, cognitive, and performance aspects of language. According to Audriyan and Putri (2021), students exhibit varying levels of awareness in these domains. For instance, 86.67% of students demonstrated emotional awareness related to language. They recognize the impact of language on

their feelings and attitudes. Additionally, 81.62% of students were aware of the social context of language, understanding how language functions within different social settings. The power dynamics associated with language were recognized by 73.13% of students. This awareness extends to understanding language as a cognitive process (75.96%). Lastly, 65.86% of students exhibited awareness of language use in practical contexts.

The importance of language awareness cannot be overstated. It contributes to enhanced learning, better language proficiency, and increased sensitivity toward language nuances. However, students face challenges, including low motivation, unresponsiveness, and difficulties in understanding instructional materials. In summary, nurturing language awareness among English education students is essential. By fostering curiosity, sensitivity, and understanding, educators empower students to become proficient language learners and effective communicators.

Research in the area of sentence comprehension and usage among college students is extensive. One segment of this research focuses on the writing of final year projects by students. A study conducted by Arnaiz, et al. (2021) at a university in Cebu examined the summaries of research papers written by English students. The study found that these summaries typically include the purpose of the study, the methods used, and the findings. Another study by Maulana, et al. (2023) evaluated the ability of undergraduate students to identify different types of sentences, such as simple, compound, complex, and compound-complex sentences. Research also exists on sentiment analysis by Barnes, et al. (2017) which involves understanding the emotions conveyed in sentences. While this research isn't specific to students, it's important because it demonstrates the various applications of sentence analysis.

These studies represent the current understanding of how college students comprehend and use sentences. However, there's still much to learn. Students of a language education faculty are expected to learn more than just the language skills anymore. Looking at most of the university curriculums, an undergraduate student of an English Language Education program should consider studying other areas such as linguistic knowledge, teaching skills and competencies, educational psychology, ICT in education, applied linguistic and literary studies, cultural awareness, community service, and last but not least is research skills. Hence, the students of English Language Education study program of Teacher Training Education Faculty in Tanjungpura University are expected not learning the basic of English language anymore yet further into how to teach and apply the English language. That is why, in this current research, the researcher wanted to find out the undergraduate students' ability in analyzing simple sentences using immediate constituent analysis to give more attention to the immediate constituents which closely related to the students' grammar knowledge.

Immediate Constituents (ICs) play a crucial role in English grammar. They are part of a system of grammatical analysis that divides sentences into successive layers, or constituents, until, in the final layer, each constituent consists of only a word or meaningful part of a word. For example, consider the sentence "The old man ran away." The first division into immediate constituents would be between "the old man" and "ran away." The immediate constituents of "the old man" are "the" and "old man." At the next level, "old man" is divided into "old" and "man". This method of analysis, known as Immediate Constituent Analysis, "helps us understand the structure of sentences, discover their deep meaning, and explore alternative ways of expressing that meaning" (Nordquist, 2019). It's a fundamental tool in linguistics, particularly in the study of syntax, and it's widely used in modern grammatical analysis. Therefore, in essence, Immediate Constituents are closely related to English grammar as they help us break down and understand the structure and meaning of sentences. They are the building blocks that make up phrases, clauses, and sentences, and understanding them can provide valuable insights into how English grammar works.

The researcher believe that this research has a purpose to find out about the students' ability in analysing simple sentences using immediate constituents (ICs). One of the problems in learning English is English grammar because "grammar is a big problem when students learn English as EFL learners and yet it is an important tool in learning the English language" (Ameliani, 2019). Thus, the researcher wanted to find out whether this issue about students lacking the knowledge of English grammar also happened among the students at Tanjungpura University. Consequently, the researcher expected for the best use of the result to contribute in improving the quality of undergraduate students of English Language Education study program.

METHOD

This study employed a qualitative research design to investigate the ability of students in the English Language Education Study Program to analyze simple sentences using IC analysis. 15 undergraduate students from the English Language Education Study Program at Tanjungpura University were recruited. The initial plan was to recruit all the students of English Language Education Study Program yet there was a limitation due to the Covid-19 pandemic. The sample included 3rd semester students from academic year of 2020/2021 as they have taken the phrase structure class in the previous semester according to Pedoman Akademik FKIP UNTAN (2020).

The data was collected by utilizing the google form to avoid physical contact during the Covid-19 pandemic. 5 different simple sentences were curated representing different sentence structure (subject-verb-object, subject-predicate, etc.). Sentences were drawn from textbooks, authentic materials, and language corpora. Each participating student completed a written exercise where they analyzed the provided sentences. Students received a link to a google form containing the sentences. Then, they were instructed to identify the constituents within each sentence and labelled the IC boundaries where constituents are grouped together.

There were some limitations during the research such as small sample size and contextspecific factor where findings may be influenced by the specific education context. In short, the overall process of this research data collection is as illustrated in figure 1.

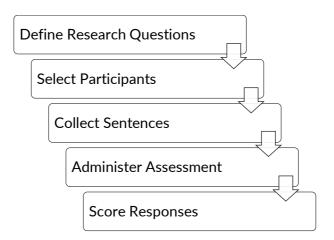


Figure 1. The process of this research

There are no fixed rules on how many steps should be done for an IC analysis. Hence, the researcher relied on the example of IC analysis showing that it is done until the researcher reaches the final layer of the analyzed sentence as shown in figure 2.

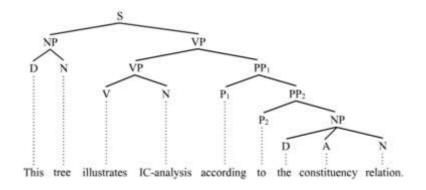


Figure 2. Example of IC Analysis from Sarkar (2022) in BCS Class

According to the IC analysis above, the analyst created a linguistic tree containing seven internal nodes and nine terminal nodes after seven steps. First, S (sentence) was divided into two parts or constituents such as NP (this tree) and VP ("illustrates IC analysis according to the constituency relation"). Second, NP was divided into two constituents such as D (this) and N (tree). Third, VP is divided into two parts such as VP (illustrates IC analysis) and PP1 (according to the constituency relation). Fourth, VP is divided into parts such as V (illustrates) and N (IC analysis). Fifth, PP1 is divided into two parts such as P1 (according) and PP2 (to the constituency relation). Sixth, PP2 is divided into two parts P2 (to) and NP (the constituency relation). Seventh, NP is divided into three parts such D (the) A (constituency) and N (relation).

Descriptive statistics including mean and standard deviation were also calculated for overall performance while students' open-ended responses were transcribed and coded. Emerging themes related to misconceptions, challenges, and strategies during IC analysis were identified. The scoring was based on the accuracy where each correctly identified constituent received a point, partially credit was given for partially correct answers, and no points were deducted for incorrect responses.

RESULTS AND DISCUSSIONS

Fifteen students of the English Language Education Study Program participated in this research and delivered their linguistic tree diagrams to the Google Form. The researcher then observed the immediate constituents within the linguistic tree diagrams to determine how was the students' ability in analyzing simple sentences using IC analysis.

The first sentence in the Google Form is "Collin loves sushi". The following table is the part of speech for Sentence No. 1 and the linguistic tree diagram is shown in Figure 3.

Table 1. Part of Speech in Sentence No. 1

Words	Part of Speech
Collin	Noun
loves	Verb
Sushi	Noun

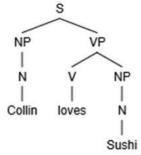


Figure 3. First sentence IC analysis result

Based on Figure 3, the researcher found that the tree diagram started with S then followed by 2 branches which are NP and VP for the sentence level of its IC analysis. Unfortunately, 7 out of 15 students made incorrect tree diagrams. For example, the student's tree diagram in Figure 4 started with TP instead of S and then continued with 2 branches of NP and T'.

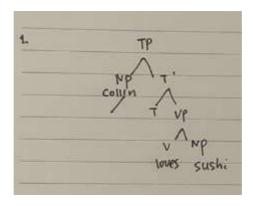


Figure 4. Example of students' mistake

The second sentence in the Google Form is "Peter has met the new boss". The part of speech for each word within the sentence and the tree diagram are shown below respectively.

Table 2. F	Part of S	peech in	Sentence	No. 2
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Words	Part of Speech
Peter	Noun
has	Aux
met	Verb
the	Determiner
new	Adjective
boss	Noun

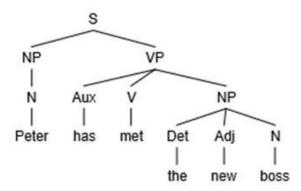


Figure 5. Second sentence IC analysis result

On the sentence level of the tree diagram, the students are expected to begin with S then followed by NP and VP. Then for the level of phrases, the branches should follow the pattern after the first NP and VP as shown in Figure 5. 13 out of 15 students made the correct tree diagrams for sentence level. However, only 1 student could make it to the last branches correctly. The common mistake made by the students is they failed to recognize the part of speech very well. For example, the student's linguistic tree diagram below showed that the student could not recognize the Auxiliary within the sentence correctly.

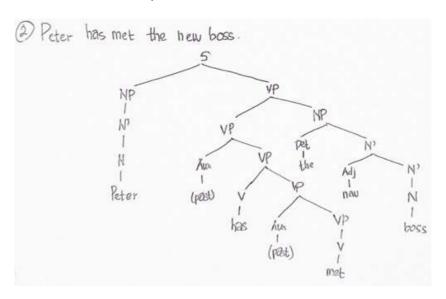


Figure 6. Example of students' mistake

The third sentence in the Google Form is "The boy with a red shirt kicked the ball". The part of speech of each word within the sentence and the linguistic tree diagram are shown below respectively.

Table 3. Part of	Speech in	Sentence	No. 3
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Words	Part of Speech
The	Determiner
Boy	Noun
With	Preposition
Α	Determiner
Red	Adjective
Shirt	Noun
Kicked	Verb
The	Determiner
Ball	Noun

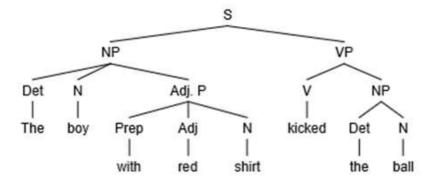


Figure 7. Third sentence IC analysis result

As seen in the above linguistic tree diagram, this sentence should start with S then followed by NP and VP. After that, NP was divided into 3 branches which are Det., N, and Adj. P while VP was divided into 2 branches which are V and NP. The students' tree diagrams for this sentence showed that 8 students made it correctly at the sentence level division. However, all 15 students failed to finish their tree diagrams correctly. Most students failed to recognize the Adjective Phrase after the first NP while some other students still failed at the sentence level. For example, the following students' tree diagrams failed at both sentence and phrase level.

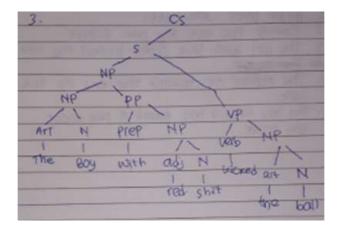


Figure 8. Example of students' mistake

The fourth sentence mentioned in the Google Form is "The jogger ran toward the end of the lane". The following table is the part of speech for each word within this sentence and the linguistic tree diagram is shown after the table.

Table 4. Part of Speech in Sentence No. 4

Words	Part of Speech
The	Determiner
Jogger	Noun
Ran	Verb
Toward	Preposition
The	Determiner
End	Noun
Of	Preposition
The	Determiner
Lane	Noun

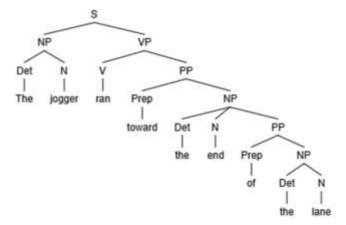


Figure 9. Fourth sentence IC analysis result

Based on Figure 9, the tree diagram for this sentence started with S then followed by NP and VP for the division at the sentence level. 14 students made it correctly and 1 student made it incorrectly at this level. Then at the level of phrases, 14 students made it incorrectly. The most common mistake made by students is they failed to recognize the PP within the sentence as shown in the student's tree diagram example below.

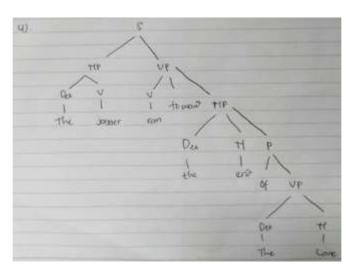


Figure 10. Example of students' mistake

The fifth sentence in the Google Form is "The child with a raincoat found the cat under the tree". The part of speech for each word within the sentence and the tree diagram are shown below respectively.

			Words		Part o	of Spe	ech	_
			The		Dete	rmine	r	_
			Child		Noun			
			With		Prepo	osition	า	_
			Α		Dete	rmine	!	_
			Raincoat		Noun			_
			Found		Verb			_
			The		Dete	rmine	r	_
			Cat		Noun			_
			Under		Prepo	osition	า	_
			The		Dete	rmine	r	_
			Tree		Noun	1		
				S				
	NP						VP	
Det The	N child	Prep	PP NP		V found	N Det	PN	Prep
ine	Crint				TOUTIO		ï	

Table 5. Part of Speech in Sentence No. 5

Figure 11. Fifth sentence IC analysis result

raincoat

under

Det

the

tree

Based on Figure 11, the expected linguistic tree diagram should start with S then followed by NP and VP. All students have made it correctly (See Appendix 6). However, the problem showed in the division of NP which should be Det, N, then PP. In the students' tree diagrams, all of them failed to recognize the Immediate Constituent of the first NP as shown in the example below.

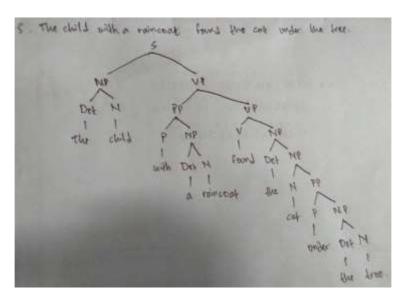


Figure 12. Example of students' mistake

The total number of students as this research participant were 15 students. Thus, the number of students who made correct linguistic tree diagrams is compiled in the table below respectively.

Table 6. Total number of students who made correct linguistic tree diagrams

No.	The given sentences	Total number of students who made correct tree diagrams		
		Sentence level	Phrase level	
1.	Collin loves sushi.	8	8	
2.	Peter has met the new boss.	13	1	
3.	The boy with red shirt kicked the ball.	8	0	
4.	The jogger ran toward the end of the lane.	14	1	
5.	The child with a raincoat found the cat under the tree.	15	0	

Based on the result above the researcher then converted the result into percentage as in the table below to determine how good was the students' ability in analyzing simple sentences using IC. The formula is adapted from the original percentage formula $\% = \frac{\text{Value}}{\text{Total Value}} \times 100$. The researcher then adapted it into $\% = \frac{\text{Students with correct tree diagrams}}{\pi} \times 100.$ Total students

Table 7. Total number of students who made correct linguistic tree diagrams (in percentage)

No.	The given sentences	Total number of students who made correct tree diagrams (%)		
		Sentence level	Phrase level	
1.	Collin loves sushi.	53,3%	53,3%	
2.	Peter has met the new boss.	86,6%	6,6%	
3.	The boy with red shirt kicked the ball.	53,3%	0%	
4.	The jogger ran toward the end of the	93,3%	6,6%	
	lane.			
5.	The child with a raincoat found the cat under the tree.	100%	0%	

From the table above, most of the students are good in analysing simple sentences on the sentence level yet they mostly failed to make it on the phrase level. The researcher relied on the immediate constituents within the students' linguistic tree diagrams because it showed the students' understanding of the structure within a sentence. The major divisions of a syntactic structure are immediate constituents (Crystal, 2008). Examining the immediate constituents of a linguistic tree may lead to how it was created.

CONCLUSIONS

In this research, the primary objective was to assess the third-semester students' ability to analyze simple sentences using IC (Tree Diagram) analysis. Based on previous research findings and discussions, the researcher arrived at the following conclusions that the third-semester students in the English Language and Education Study Program demonstrated proficiency in analyzing simple sentences using IC at the sentence/surface level. However, they encountered challenges when attempting to analyze simple sentences using IC at the phrase/deep level. Additionally, the students exhibited a lack of sufficient knowledge about their linguistic tree. Although the students were familiar with the concept of a linguistic tree diagram, they were not fully aware of the constituency among elements within the diagram.

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