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Tracing the Use of Cognitive Strategies by Non-English Students in Learning English

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ABSTRACT

The objectives of the current research are to identify and quantify the cognitive strategies non-English students use when working on assignments or solving problems of the English language they are learning and seek to find out non-English students' motivation and background knowledge of English as sustaining factors related to the use of numerous cognitive strategies leading to the success of learning. This research employed a case study qualitative approach. Data were taken from observations and interviews and were analyzed using thematic analysis. Results of this research show that non-English students treated as the subject of this research employed the so-called cognitive strategies in doing all tasks, including auditory representation, repetition, note-taking, resourcing, inferring, translation, and transfer. Although most students had only the so-called instrumental motivation, weak interest, and also, they lacked knowledge of English, yet it is proven that the cognitive strategies they employed have enabled them to do all given tasks. An important implication of this study is that learning should include training and supporting the students to understand the importance of learning strategy.

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1. Introduction

When Active English learning occurs in the classroom or when one is working on tasks of English given by an English teacher, it will regularly appear that learners who actively participate in English classroom learning or do English-given tasks at home, do exert the so-called cognitive strategies (Harmer, 2001, 2015). Cognitive strategies used by students as such can be seen by bare eyes (overt learning strategies) or those that are not visible to the eye (covert learning strategies), and are, however, used by students in their learning activities (Fournier et al., 2019). The use of cognitive strategies in learning will be more profitable if

teachers can design prompts as procedural guidance to make students easier leading to the fulfillment of tasks to do and to what to learn. Students can be temporarily dependent on provided prompts, but later on they are able to build their own internal structure to complete given tasks (Rajasekaran, 2020; Suparman, 2021). A teacher can see how one of the learners does the tasks or solves a problem he faces when doing the tasks. O'Malley & Chamot (1995) in their book "*Learning Strategies in Second Language Acquisition,"* named learning strategies used at the time of active learning or in doing given tasks as "cognitive strategies".

Cognitive strategies refer to the exploitation of certain tactics, certain ways or paths by a learner in working on assigned tasks or to overcome problems encountered or when learning is taking place in the class (Wenden 1987:7), which may, in turn, provide inputs to learners to be internalized and added to the existing knowledge in their long-term memories. Input is like, say for example, a new word, a new sentence pattern, new information and others of the language being learnt, which is added to further enrich the repertoire of knowledge in the memory of individual learners. As a form of a learning strategy, cognitive action is used by learners as a way to control and observe their own learning progress (Bilge & Taylor, 2017).

There are various research on cognitive learning strategies that emphasize different ways that learners take in completing certain learning tasks in the classroom. Wenden & Rubin (1987) identified 6 strategies in language classrooms which consist of clarifying and verifying, guessing or doing inductive exploring, reasoning deductively, practicing, memorizing to remember, and monitoring. Suyitno et al. (2017) highlighted several other cognitive strategies used by BIPA students which are making inferences, modifying concepts in delivering difficult words, thinking aloud, and looking up the meaning of words. In addition to these strategies, Dinsmore & Fryer (2019) argued that the selection of strategies changes over time; shifts also occur in how the same (or different) strategies might be employed by a learner across time depending on other cognitive aspects, such as knowledge, as well as other motivational aspects, such as their interest.

Talok (2006) has conducted research which becomes the foundation of current research for his dissertation writing, with the title *"Learning Strategies Across Cultures of EFL Learners Residing in East Nusa Tenggara (NTT) Province.*" The research was founded upon the concept of learning strategies coined by O'Malley & Chamot (1995). The results of the research ascertain that there are certain procedures that were used by students of the English Language Education Study Program when they worked on the tasks prepared and or when they solved the problems faced in doing these tasks. Talok (2006:138) classified the cognitive strategies of the English students under study, who were from Ende and Timor, representing the city culture, the inland culture of Ende, Flores, and the culture of the Timorese interior.

One of the conclusions built from the findings of the study is that both students from inland cultures, both from Ende and Timor, and those with the same urban culture backgrounds used the following cognitive strategies: resourcing, note-taking, translation, imitation/ repetition, making meaning known in Indonesian, retrieving/recalling. Even so, the frequency of their use of cognitive strategies is different. *Resourcing*, for example, T1a and T1b (representations of students of Timorese inland culture); El1 and El2 (representations of Ende inland culture) have a frequency of 9.5, which means that students with different cultural backgrounds use *resourcing* techniques in high frequency to help themselves in learning. For example, they frequently use such as English-English dictionaries and English textbooks

when working on assigned tasks. The similarities in using the cognitive strategies in learning a language indicates that cultural background may affect the way students work on various tasks in the classroom.

Therefore, since previous studies (Andini & Prastiyowati, 2021; Aravind & Rajasekaran, 2020; Hidayatullah & Dayu, 2017; Luqman, 2020; Rahmawati et al., 2021; Suyitno et al., 2017; Talok, 2006) sought to identify the cognitive strategies of students who basically have the interest and sufficient knowledge in learning a language, the current study aims to fill the gap of finding the cognitive strategies used by non-English students, whom might have a lower motivation and competence in learning a language. Additionally, the current study seeks to identify students' cognitive strategies based on sub-learning strategies classified by O'Malley & Chamot (1995). This category has been used by Talok (2006) to investigate English students' cognitive learning strategies who have similar cultural backgrounds to the students participating in the current study. The use of cognitive sub-learning strategies, apart from several factors, is influenced by the learners' environment (Suyitno et al., 2017). The background possessed by students has an important role in the way they learn (Talok, 2006). In addition, it also aims to uncover motivation, interest, and background knowledge of English which can also become factors in whether or not to help learners make progress in favor of the use of cognitive strategies in learning English (Andini & Prastiyowati, 2021; Ellis, 1997).

The question investigated in the current study is, do general students, in addition to students who study English in the English Study Program, also use cognitive learning strategies when they learn English? This research is geared towards uncovering the cognitive strategies and the frequency that non-English students use when they learn English. Moreover, this research aims to do check on how learners' motivation, interest, and background of the English language impacted the use of cognitive strategies, leading learners of English to the success of their learning of English.

2. Literature Review

2.1 Learning Strategy Concept

Since the 1970s, language research has been more directed at uncovering the role of the mind or brain work of language learners relating to how to acquire knowledge and skills of a language being studied. The function of the mind (mind) or brain work is intended to include a number of efforts when the learner works using certain methods or ways, tactics, and procedures in the context of learning a language that is effective. Language learning strategists have thoroughly researched the processes by which learners operate their brain functions in learning (Brown, 2007). O'Malley & Chamot (1995: 43-53) managed to build a classification of learning strategies used by language learners into three categories, namely: metacognitive, cognitive, and social mediation. Into these three categories, various ways/paths of learning are mapped. Brown (2007) believes that cognitive knowledge and cognitive regulation are closely related. Cognitive knowledge is stable, and it is frequently too late to intervene in pupils' cognitive growth. Metacognition was originally defined as "knowing about knowing." Meanwhile, cognitive regulation entails behaviors aimed at controlling and regulating learning activities.

Wenden (1987:7) has succeeded in building meanings about learning strategies, such as "tactics, potentially conscious plans, consciously employed operations, learning skills, basic skills, functional skills, cognitive skills or language processing strategies." On the other hand, Rubin (in Wenden, 1987:19) succeeded in producing limitations or definitions of learning strategies. Rubin wrote that learning strategies are "any set of operations, steps, plans, which are used by learners to facilitate the acquisition and storage of information, which are used by learners to organize learning and what is learned. Various studies (Andini & Prastiyowati, 2021; Hidayatullah & Dayu, 2017; Luqman, 2020; Rahmawati et al., 2021; Suyitno et al., 2017) highlighted the form of cognitive strategies through reasoning, analysis, note- taking, summarizing, synthesizing, outlining, reorganizing information to develop stronger schemas (knowledge structures), practicing in naturalistic settings, and practicing structures and sounds formal, repeating, analyzing, getting the idea quickly and taking notes.

Rahmawati et al. (2021) stated that learners can swiftly absorb the information presented by the teacher by employing the proper strategy and, hence, will be more motivated to study since they believe they have solutions to their learning challenges, which will also help them comprehend more. In observing 42 students during their speaking class, they found that the use of cognitive strategies has a positive effect on students' performance. Hidayatullah & Dayu (2017) also found that cognitive strategies help students improve their reading comprehension ability in the classroom or when studying independently. However, the selection of strategies often changes over time, and shifts also occur in how the same (or different) strategies might be employed by a learner across time (Dinsmore, 2017).

Therefore, O'Malley & Chamot (1995) explained that today many learning strategies have been discovered or created. Even learning strategies can be as many as learners. All learning strategies generally fall into one of the three categories mentioned above, namely metacognitive, cognitive, and social mediation. The three learning strategies are the main strategies, each of which can have several "sub-learning strategies" and sub-learning strategies can have "specific ways, tactics, procedures." These learning strategies relate to various intellectual processes of the learner in relation to "seeking, managing, retaining information, and retrieving information for use."

2.2 Cognitive Learning Strategies

Cognitive strategies refer to some of the intellectual efforts that learners generally use when engaging in active learning, for example, in class. Following are the sub-learning strategies of cognitive strategy, according to O'Malley & Chamot (1995).

Table 1: Cognitive Learning Strategies

No	Sub-learning Strategies	Definition
1	Resourcing	Using target language references such as dictionaries, encyclopedias, textbooks
2	Repetition	Imitating a language model, including overt practice and silent rehearsal
3	Grouping	Classifying words, terminology, or concepts according their attributes or meaning
4	Deduction	Applying rules to understand or produce the second language or makingup rules based on language analysis
5	Imagery	Using visual images (either mental or actual) to understand or to remember new information
6	Auditory Representation	Planning in one's mind the sound of a word, phrase, or longer language sequence

7	Key Word Method	Remembering a word in second language by 1) identifying a familiar word in the first language that sounds like or otherwise resembles the newword 2) generating easily recalled images of some relationship with the first language homonym and the new word in the second language
8	Elaboration	Relating new information to prior knowledge, relating different parts ofnew information to each other, or making meaningful personal associations with the new information
9	Transfer	Using previous linguistic knowledge or prior skills to assistcomprehension or production
10	Inferencing	Using available information to guess meaning of new items, predict outcomes, or fill in missing information
11	Note-taking	Writing down keywords or concepts in abbreviated verbal, graphic,and numerical form while listening or reading
12	Summarizing	Making a mental or oral written summary of new information gained through listening or reading
13	Recombination	Constructing a meaningful sentence or larger language sequence by combining known elements in a new way
14	Translation	Using the first language as a base for understanding and/or producing the second language

3. Research Methodology

3.1 Research Design

This is a case study qualitative approach looking at the case of non-English students' use of cognitive strategies. As qualitative research, data needed for current research were natural, not artificial, and the data were in the form of words, and sentences and not in numerical forms (Bodgan & Biklen, 2000). A display of frequency of use in this study is for the sake of making more precise the qualities that is needed to be clarified, understood, and distinguished (Dornyei, 2007). Researchers had, therefore, to properly prepare learning activities in the form of adequate numbers of exercises to be resources of learning and by which, at the same time, from all given exercises, data were obtained. Furthermore, researchers executed learning activities according to what had been planned. During learning activities as designed, researchers noted down all visible strategies used by the learner. In order to have valid data, researchers, in so many activities, did recurrent observations and made notes on both overt and covert cognitive strategies used by individual students as the research subject. Researchers have conducted all planned activities so that more and more regular cognitive strategies used by individual students as the participants of this study were revealed.

3.2 Participants

A purposive sampling was used to choose the participants of this study. The purposive sampling gives greater opportunities to decide the features of participants needed to gain relevant information related to the focus of the study. Purposive sampling is seen to be more appropriate since the researcher has the opportunity to select certain individuals that may provide 'rich and varied insight' into what is being investigated (Dornyei, 2007). In addition, Arikunto (2005) suggests that purposive sampling can be used when the researcher concerns on some convenience considerations, as in this study, the number of participants due to the COVID-19 pandemic, in order to acquire a certain objective. Therefore, the chosen students were East Nusa Tenggara origins, non-English students taking English class in the running semester, and were able to participate in a face-to-face ESP reading class.

Ten students were contacted and they did express their willingness to be the participants of this research. Nevertheless, two days before the due date, three students declared their resignation. On the day of the activity, as scheduled, only five of the seven students came and participated. There was no reason given by those who resigned. The possible reason why five students did not participate in the activities as planned was that in those days, COVID-19 pandemic did spread throughout the area and did threaten lives of mankind. In addition, the policy issued by the university management was that students must "work from home". After exploring the possible reasons why some students resigned, researchers considered that data of this study could be obtained even though it was only from five students that came and participated.

3.3 Instruments

The data were collected through classroom observation and interview. Observation is a definite and specific method for collecting data and gathering information about all activities that are the object of the research study (Patton, 2014). By using the non-participatory observation method, the researchers observed not the teaching but the materials used by the teacher and the students' engagement in the classroom. During the interview, the researchers focus on confirming the students on strategies they use on the online meeting and to find out their motivation in learning English. For the purpose of having sufficient data, the teacher decided to add adequate activities. Exercises were made so numerous that the required data could be obtained since data must meet the requirements, namely the regularity of data and the adequacy of data. The ensure the validity of the data, member checking was made involving the students to check for the accuracy and resonance of the findings and interpretation.

3.4 Data Gathering and Data Analysis Procedures

In relation to data gathering, the teacher and researchers decided to schedule four days divided into two days of online data gathering and another two days in offline data gathering. In first two days in the online sessions, students were asked to listen to a text read out loud three times. In the other two days of the offline data gathering, reading texts were given to individual students. The text read aloud or given to students contained three activities: reading aloud, vocabulary learning, and answering comprehension questions, which they had to perform. In these three main activities, the researchers were able to find data needed for this research. For the scheduled activities of data gathering, there were 6 reading texts provided by the teacher. From these 6 reading texts, there were 18 exercises, divided into 12 in the online activities and another 6 in the offline activities. When they were working on a given task, researchers carefully observed to see specific ways, techniques, and procedures used by individual students. In every observation, overt cognitive strategies were written down by researchers. Meanwhile, data related to techniques or ways that were not visible (covert), most specifically in the first two online activities, were asked later on after the tasks were done. It was a post-factum interview done by researchers.

The data collected were first tabulated in tables in line with three main activities, namely strategies in reading aloud, strategies in learning vocabulary, and strategies in comprehension. The process of thematic analysis in case studies begins by elaborating a short description of each theme. In order to assure the validity and reliability of this process, the interpretations were checked and modified where necessary (Dornyei, 2007). The theme

description includes the list of the sub-strategy and activities and the information from the respondents' in relation to the research questions. In each table identified cognitive strategies were presented and each strategy was accompanied by specific strategies. By specific strategies, researchers refer to actions individual subject was doing when accomplishing given tasks. In relation to data for motivation and background knowledge of English, which were obtained from interviews were transcribed and narrated.

3. Findings

3.1. Cognitive strategies in use

There were 4 days allocated for data gathering; 2 days were allocated for online meetings and another 2 for offline meetings. By this, it was considered that time that time was adequate for collecting needed data. There were 6 reading texts prepared for data gathering. On day 1, the first day of online data gathering, two reading texts, each with three main activities as previously stated, were prepared and given to students. On day 2, the second day of online data gathering, another two reading texts with the same activities, as in texts one and two in the first online day activities, were also scheduled. Day 3, was the first offline day for data gathering; a text with the same activities was given to the subject. On day 4, the second day of the offline data gathering, still another text was scheduled with a similar amount and types of activities prepared and given to the participants.

The identified cognitive strategies are categorized based on the strategies students used during the process of reading the texts, learning vocabulary, and comprehension. The following are Tables showing cognitive strategies in use by learners in this study.

Table 2: Cognitive Strategies in Reading Aloud

Students	Cognitive Strategies	Specific Strategies
T1	auditory representation	- listening to out loud text
		- sounding as listened
	repetition	- reread notes
		- another self-reading
	note taking	- write some sounds of words in the text
T2	auditory representation	- listening to out-loud text
	repetition	- sounding as listened
		- reread notes
		- another self-reading
	note taking	- note some sounds of words in the text
T3	auditory representation	- listening to out-loud text
		- sounding as listened
	repetition	- reread notes
		- another self-reading
	note taking	- notes on some sounds of words in the text
T4	auditory representation	- listening to out-loud text
		- sounding as listened
	repetition	- reread notes
		- another self-reading
	note taking	-note some sounds of words in the text
T5	auditory representation	- listening to the out-loud reading
	repetition	- reread quickly
	notetaking	-write ideas of the text heard

Table 3: Cognitive strategies in solving meaning of vocabulary and sentences

Students	Cognitive Strategies	Specific Strategies
T1	repetition	-read again text, see again notes
	note taking	- write difficult words on papers
		- write sentences not well heard on papers
		- write the text on papers
	resourcing	- use digital dictionary (HP) and hard copy of dictionary
	translation	-Google translate
	inferring	- give the meaning of a word or sentence
T2	repetition	- read notes made, read aloud words
	note taking	- write difficult words on papers
		- write sentences not well heard on papers
	resourcing	-write the text on papers
		- use digital dictionary (HP) and hard copy of dictionary
	translation	- Google translate
	inferring	- give the meaning of a word or sentence
T3	repetition	- read text again, see again notes
	note taking	- write difficult words on papers
		- write sentences not well heard on papers
	resourcing	- write the entire text on papers
	translation	- use digital dictionary (HP) and hard copy of dictionary
		-Google translate
	inferring	- give the meaning of a word or sentence
T4	repetition	- read text again, see again notes
	note taking	- write difficult words on papers on papers
		- write not well heard sentences on papers
		- write the entire text on papers
	resourcing	- use digital dictionary (HP) and hard copy of dictionary
	translation	- Google translate
	inferring	- give the meaning of a word or sentence
T5	repetition	- quick glance on notes and texts
	note taking	-write some words on papers
	resourcing	- write meaning of words on the text
		- quick reading the text again
	Inferring	- give meaning words and sentences without dictionaries

Table 4: Cognitive strategies in comprehension

Students	Cognitive Strategies	Specific Strategies
T1	repetition	- reread text for TF and Multiple Choice
	resourcing	- still looking for the meaning of word in HP, dictionary or written on papers
	inferring	- make answers to questions
	translation	- Google translate
	note taking	- write meaning of words
T2	Rrepetition	- reread text for TF and Multiple Choice
	resourcing	- still looking for the meaning of word in HP, dictionary or on what has already written down
	inferring	-make answers to questions
	translation	- Google translate
	note taking	-write meanings of some words
T3	Rrepetition	- reread text for TF and Multiple Choice

	resourcing	- still looking for a recorded word on HP, dictionary or what were written
	inferring	- make answers to questions
	translation	- Google translate
	note taking	- write down meanings some words
T4	Repetition	- reread text for TF and Multiple Choice
	resourcing	- still looking for a recorded word on HP, dictionary or what were written
	inferring	- make answers to questions
	translation	- Google translate
	note taking	- write meanings of some words
T5	repetition	- skim the text again - at a glance look at the made notes
	inferring	- make answers to questions
	transfer	- establishing comprehension with the help of existing knowledge
	note taking	Write some words without corresponding meanings

From the data tabulation as in three tables above, Table 2 showing three cognitive strategies, **auditory representation, repetition,** and **note taking** were used. In auditory, all did "listen to out loud reading"; in repetition, all did "sound out some words, reread notes made, read again text (T5 did just a glance to the text); and in note taking, T1, T2, T3, T4, did "note some words to be sounded again", yet T5 did not but he "noted some main ideas of text read". All were obtained both by interview (mainly in online days) and observation (in offline days).

In Table 3, all students employed 4 cognitive strategies, namely **repetition, note taking, resourcing, and inferring**. Data also show that T1, T2, T3, T4 employed translation, in addition to the four mentioned strategies and T5 did employ repetition strategy yet it was in the form of just a quick reading or glance to texts or written notes. T1, T2, T3, T4 did quite thorough reading, but not with T5. He just did a quick glance at the text and moved to do other activities asked of them to do. T5 did not have notes on difficult words of English as other students. These were obtained from both interviews and observations in online and offline days.

In Table 4, T1, T2, T3, T4, T5 employed the same cognitive strategies, namely **repetition, resources, note taking,** and **inferring**. But they are different in other strategies. T1, T2, T3, T4 employed **"translation"**. They used Google Translate to change text in English into texts in Bahasa Indonesia. Several times they only translated a sentence or a phrase they were difficult to understand into Bahasa Indonesia. Meanwhile, T5 did not use Google Translate. T5 employed **"transfer"**. T5 was able to make meaning of what were asked, even the meaning of the text being read, by making use of what he grasped from hearing or reading. T5 appeared to have background knowledge of English which has helped him being able to use "transfer".

3.2. Frequency of use

From all activities, data were gathered. Cognitive strategies in use were counted. From counting cognitive strategies in use, it is found that all in all, students used 7 cognitive strategies in doing or completing a given task. The cognitive strategies they used are the following: ***auditory representation, repetition, note taking, resourcing, inferring,***

translation, transfer. In this research all students were found to use some of the same cognitive strategies altogether. The frequency can be seen in the following Figure 1.

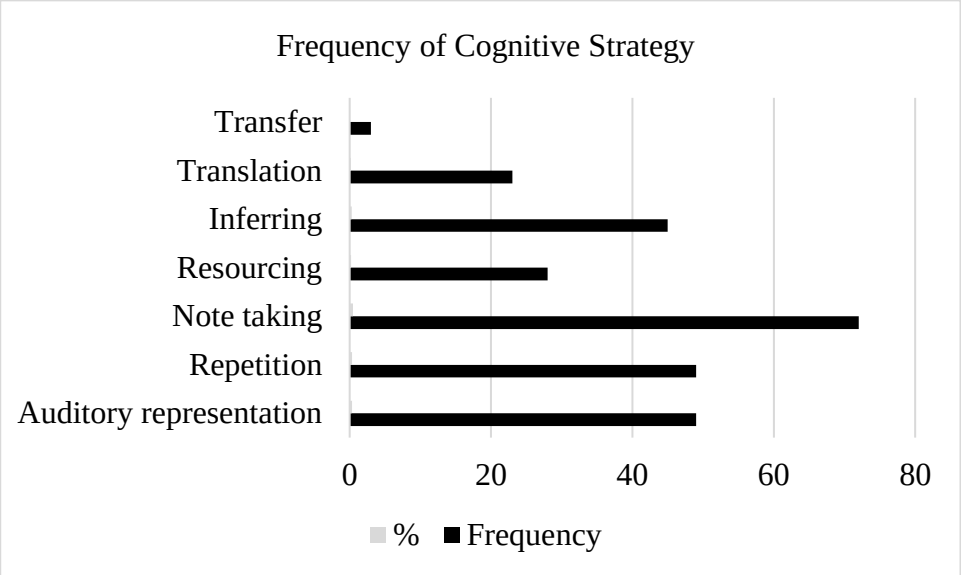

Figure 1. The cognitive strategy frequency used by the students

Data showed that T1, T2, T3, and T4 employed "translation", but T5 employed "transfer".

In terms of overall use frequency, it is found that four cognitive strategies were in use up to 40% in four meetings using six reading texts. Meanwhile for "resourcing" was only at 19% in use and only 16% "translation" was used. Thus, "transfer" was used only by one student three times in overall 4 meetings.

Nevertheless, although **resourcing** appeared in use in form of both mobile phone dictionary and physical dictionary, yet the degree of using it is not so distinctive. T1, T2, T3, T4 appeared to be deeply got involved with notes they made or mobile phones and dictionaries they carried, T5 appeared not to use both his mobile phone or dictionary. He attended to some notes made so rarely. Likewise, in **repetition**, in **auditory representation**, in **inferring**, in **note taking** (although T5 only recorded a few difficult words), they did perform differently. T1, T2, T3, T4 again appeared to be so deeply engaged to these cognitive strategies; Yet T5 appeared to engage directly only to activities. T1, T2, T3, T4, did do **translation** (except T5), especially clearly seen in the two days of the offline sessions. At the same time T5 did not do any "translation" at all. T5, by observation and interview, was found that he preferred making meaning of the text right away after the text was read.

3.3. Notes on Internal Factors having a possible impact to Cognitive Strategies in Use

Since it has been suspected that different cognitive strategies in use may be due to the difference of motivation, interest and background knowledge of English of these students, researchers conducted an additional interview. This aimed to obtain relatively valid information about the students' motivation and background knowledge of English. Some simple yet relevant questions were made and proposed to the students. Questions made are to uncover their motivation, interest and background of English.

The question to uncover students' motivation was: *Mengapa kalian mengambil bahasa Inggris?* This aims to reveal their motivation since they are non-English students, they were from Physics Education Study Program. To this, T1, T2, T3, T4 responded in choir that they had to take English because English is one of the offering courses in their study program curriculum. From their answers, it is so valid to say that they had what is called instrumental motivation to study English. To confirm, researchers still asked them: *Lalu mengapa menerima undangan ikut kegiatan ini?* They, as if in a consensus, responded that it was to comply with the request. In terms of interest, researchers questioned them: *Anda suka bahasa Inggris atau suka mata kuliah kejuruan anda?* Again, they agreed to say that English is difficult and hence they prefer learning their major subjects. However, they were so eager to learn English since it is an international language and according their curriculum, English is one of the subjects they have to program. "*Waktu SMA kalian suka belajar bahasa Inggris dan memiliki pengetahuan yang cukup untuk bahasa Inggris?*" They agreed to admit that they have had some knowledge of English, but what they had was not sufficient to be so good in English. However, when asked all these to T5, he displayed his high motivation to learn English, his strong interest to learn English and he did have good background knowledge of English.

From the interview, in connection to the use cognitive strategies, it is clear that the use of various cognitive strategies may possibly be due to their compliment given researchers and to their responsibility to the assignment given to them, yet they also have had motivation, interest, and background knowledge of English although these personal repertoires were just able to enable them to learn English not as those of English students. These personal properties are, however, not the prime mover for them to do all tasks assigned, yet using cognitive strategies are real and useful ways that they cannot neglect or avoid.

5. Discussion

Based on the findings of this current study, the non-English students were found to use 7 cognitive strategies in completing given tasks, which are auditory representation, repetition, note taking, resourcing, inferring, translation, transfer. Talok (2006) in his research found some similar strategies used which are resourcing, note taking, translation, and repetition. While Suyitno et al (2017) identified several similar strategies in their study, namely note taking and repetition. Andini & Prastiyowati (2021) found two similar strategies; repetition, and resourcing to be the cognitive strategy used by students majoring in English Education. The finding of the current study indicates that, the use of cognitive strategy by non-English students is the surface-level strategies. Andini & Prastiyowati (2021), Suyitno et al (2017) Talok (2006) however, in their findings found other deep-level strategies used by the English students such as analyzing and reasoning, elaboration, and recombination, which were not used by the non-English students in the current study. Dinsmore (2017) argued that "as learners develop expertise, they will shift their use of strategies from more surface-level strategies to deeper-level strategies. Surface-level strategies are employed to better understand a problem, whereas deep-level strategies are employed to transform a problem based on additional information, such as one's prior knowledge".

Although, the strategies used by the students described their level of expertise in English, the frequency of use is relatively high in the reading tasks. Previous studies have also shown that cognitive strategy is commonly used in learning since it is a general method of thinking that improves learning across the variety of subject areas (Hidayatullah & Dayu, 2017). According

to Brown (2007), reading comprehension is an active process in which the reader contracts the meaning to build a better knowledge of a concept and information offered in a text. Therefore, to comprehend, readers have to use the information they already have to filter, organize, and reflect the upcoming information (Hidayatullah & Dayu, 2017) by using appropriate learning strategies.

Research data speak that although the students employed 7 cognitive strategies all together, yet they also appeared to perform "quite" differently. Researchers decided to get evidences if "slight difference" may be due to different motivation and background knowledge of English. Ellis (1997) said that in addition to learning strategies there is also language aptitude, which is linguistic competing, which can make it easier for a person to learn a language and succeed. T5 can be a learner categorized based on this theory. T5 in addition to using good strategies but concerned is also supported by good linguistic competence. Thus, the learning outcomes of T5, which can represent other students, are students with good language talents and if the student is able to use or empower the right cognitive strategies, the learning outcomes will be even better (Bahri & Corebima, 2015; Hidayatullah & Dayu, 2017). In addition, Suparman (2021) proposed that in reading background knowledge can help learner better grasp what is read. Thus, the use "transfer" is successful because T5 is well equipped with background knowledge. T1, T2, T3, and T4 also have had with them background of knowledge, yet it is possibly in different degree. What they have had with them is "inadequate" yet it has been a helping factor for them to face and do tasks given to them.

T5 can also represent "fast learners". T5 is proven to quickly follow the direction of the researcher and precisely and especially correctly complete the tasks carried out. Brown (1994, 2000) ensures that fast learners learn faster and more precisely learn successfully. On the other hand, T1, T2, T3, and T4 require time and require some cognitive strategies to be able to do the assigned task. By using several cognitive strategies, they can finally also complete the assigned tasks well. From the results of ex-post facto interviews, it can be found that they can also be categorized as students who have a good language aptitude, but they do not have enough of a backlog of knowledge and skills of English even though they have been studying English since junior high school. From the fast or slow learner category, they can still be classified as fast learners, because of the activities prepared for one meeting, and during 15 meetings, they can complete the task well and successfully.

In terms of the success of learning, Bahri & Corebima (2015) in their research found that "contribution of learning motivation and metacognitive skills was very high". One of the results of this study is that T5 had both integrative and instrumental motivation and others have only instrumental motivation. As proven, students of non-English as the subject of the research proved to be able to do all tasks due to the motivation they have had.

6. Conclusion

Non-English students proved that they used seven cognitive strategies, either alone or together, to do the tasks assigned to them well and successfully. Quite specifically, one of the subjects, T5 due to his motivation and background knowledge of English, yet he still used cognitive strategies, most particularly "transfer", did all tasks quite faster and successful. Nevertheless, other students, although "less faster" but the use of cognitive strategies in completing tasks given, still can be categorized as fast learners as well.

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