

# Speaking Performance and Grammatical Competence Across Cognitive Learning Styles and Strategy Inventory for Language Learning

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## ABSTRAK

**Abstract:** This study examines the correlation between speaking performance and grammatical competence, particularly in the EFL context, by including cognitive learning styles and the Strategy Inventory for Language Learning (SILL). The correlational study is employed to analyze the scores of argumentative speaking and written grammar tests of 30 Economics students at STIE Malangkeswara Malang. It is found that there is no significant correlation between speaking performance and grammatical competence. However, FI students outperformed in speaking, and FD students surpassed in grammar. In fact, those who scored higher on both tests used more SILLs than those who scored lower.

**Abstrak:** Penelitian ini merupakan upaya untuk melihat hubungan antara kemampuan berbicara dan kompetensi gramatikal, khususnya dalam konteks EFL dengan memasukkan gaya belajar kognitif dan Strategy Inventory for Language Learning (SILL). Studi korelasional digunakan untuk menganalisis nilai tes berbicara argumentatif dan tata bahasa tertulis pada 30 mahasiswa Ilmu Ekonomi STIE Malangkeswara Malang. Diketahui bahwa tidak ada korelasi yang signifikan antara kinerja berbicara dan kompetensi tata bahasa. Namun, siswa FI unggul dalam berbicara dan siswa FD melampaui dalam tata bahasa. Faktanya, mereka yang mendapat skor lebih tinggi pada kedua tes menggunakan lebih banyak SILL dibandingkan mereka yang mendapat skor lebih rendah.

Speaking performance and grammar competence have been two parts of English language learning that still have a debatable relationship. According to Celce-Murcia (1991), speaking is the most fundamental skill an individual must possess to communicate effectively. Richards (2008) adds the primary aim of studying English as a second or foreign language is to improve speaking skills. Simultaneously, Harmer (2007) argues that grammar summarizes how words in a language can change shape and be combined into sentences. In other words, grammar is a collection of rules that enable us to group words in our language into meaningful structures (Greenbaum & Nelson, 2009).

As far as the relationship between speaking performance and grammatical competence is concerned, some experts note that grammatical awareness can weaken speaking ability due to the strict rules of language expression. Hulstijn and Hulstijn (1984) state that when we focus on the form in speech, we produce less information and slow down. In this case, they claim that the more students know grammar, the less they speak fluently. Terrell and Krashen (1983) argue that the lack of fluency in speech is caused by excessive brain processing monitors, coming about in delay and consequent trouble partaking in a talk.

On another side, many experts admit that increasing students' grammar mastery can lead to speaking improvement. In Krashen (2003), several scholars conclude from their experimental studies on university students that more rule-based instruction and form-focus gained better than less rule-based (Master, 1994), (Leeman, Aregagoitia, and Doughty, 1995), (Alanen, 1995), (De Graaff, 1997), (Manley & Calk, 1997)). Accordingly, de Jong, Halderman, and Perfetti (2008) state that higher articulation rates and fluency can benefit from good grammar skills. Grammar learning has a positive impact on speaking performance (Kianiparsa & Vali, 2010). Furthermore, Kong (2011) argues that developing fluency is difficult without first learning many grammar rules.

In Indonesia, an effort to study the relationship between grammar and fluency in speaking was conducted by (Priyanto, 2015) with a research population of 50 eleventh graders. The results remarked that the respondents' grammatical competence moderately correlated with their speaking fluency. The finding is supported by Kusumawardani and Mardiyani (2018) in a study on 34 tenth graders of high school students as the population sample. They discovered a poor relationship between students' grammar proficiency and their ability to speak fluently. Hidayatullah (2018) recently found a connection between grammar mastery and speaking accuracy. The results revealed a positive correlation between the two variables.

However, the existing inconclusive findings have enticed the researcher to investigate more. Besides, a speaking test should consider the three factors in the assessment rubric: fluency, accuracy, and comprehensibility (Heaton, 1983). Unfortunately, the previous studies have not discussed the other component of speaking: comprehensibility, which is very important to deliver a clear message to the audience. Comprehensibility is described by Munro and Derwing (2001) as "the listener's perception of the difficulty involved in understanding an L2 speaker." Consequently, the aim of this research is to find a correlation between fluency and accuracy and the comprehensibility of students' speaking performance and their grammatical competence.

Even so, several factors, such as cognitive learning styles and learning techniques, can affect students' speaking achievement and grammatical competence. Students' learning patterns and methods for learning English as a foreign language in Indonesia are still understudied (Angraini, 2016). Individual characteristics studied in the field of Second Language Acquisition are thought to be the background for why language learners experience varying levels of success in learning. As a response, this study aims to look into the characteristics of students' language cognitive learning styles and strategies in terms of speaking success and grammatical competence.

To determine the students' learning styles, this research uses the cognitive learning styles of Field Independent (FI) and Field Dependent (FD). The terms FI and FD were introduced by Witkin, Dyk, Faterson, Goodenough, and Karp (1976) in their study using GEFT (Group Embedded Figure Test). In 15 minutes, participants must locate a previously visible simple figure concealed inside a larger and more complex figure and trace it with a red pencil directly over the complex figure's outline. Since FI learners were better at analyzing formal grammar laws, Witkin *et al.* (1976) predicted that they would do better in classroom learning. The conclusion is that FI learners do better in grammatical tasks than FD learners.

On the other hand, individuals with FDs were found to perform better in the social aspect of language (Dornyei, 2005). FD people have performed better on L2 communicative tasks than on standard dimensions of language proficiency (Johnson *et al.*, 2000). Salmani-Nodoushan (2006) came to the same conclusion in her analysis of the impact of FI / FD on communicative language tests. It can be assumed from this statement that FD students outperform FI in speaking in terms of social communication. Nevertheless, instead of GEFT, the current researcher uses the Learning Style Survey (LSS) developed by Cohen, Oxford, and Chi (2006). The questionnaire of FI/FD learners' characteristics becomes one of the contents. Another reason for choosing this questionnaire is that it focuses on language-related issues (Dornyei, 2005). In this work, they drew on Ehrman and Leaver's theoretical construct (Rebecca L Oxford & Ehrman, 1995), and there are ten types of learning styles. The FI/FD model is the ninth type, and it contains such statements of how the students deal with multiple inputs.

Another language characteristic the researcher of the current study concerns is language learning strategies. Williams and Burden (1997) suggest that learning a language differs significantly from learning any other topic because of its social and communicative essence. Therefore, it demands not only cognitive skills but also social and communicative skills. Thus, the learning process requires a suitable strategy to be implemented. In short, the purpose of this correlational study is to verify the previous controversial findings of EFL learners' speaking performance and grammatical competence related to their cognitive learning styles and SILL. The study population is the students of the second semester of General English courses at *STIE Malangkuceswara* majoring in Accounting and Management in Malang, East Java, Indonesia.

## LITERATURE REVIEW

### Performance vs Competence

Harmer (2007) distinguishes the words 'competence' and 'performance'. Competence is knowledge of grammar and other language features, and performance is the realization of the knowledge in production, i.e., writing and speaking. Therefore, it can be stated that a student's knowledge related to grammar is considered as grammatical competence, which can be realized in either writing or speaking performances.

### Speaking Performance

Ladouse (1991) defines speaking performance as the ability to articulate oneself and record acts or circumstances in specific terms and the ability to converse or express a series of ideas fluently. Furthermore, according to Harmer (2007), speaking performance includes the ability to communicate fluently using language features and to process knowledge and language 'on the spot.'

According to Heaton (1983), Speaking has three elements, namely accuracy, fluency, and comprehensibility. Gu (2010) distinguishes the two: Accuracy is the ability to generate accurate sentences using correct grammar and vocabulary, and fluency is the ability to read, speak, and write quickly, smoothly, and expressively. Meanwhile, comprehensibility defined by Richards

(2008) as "the ability to understand someone's vocalization (listener) as well as the ability to converse with others and be understood by others" (speaker).

### **Grammar Competence**

Harmer (2007) defines language grammar as "the explanation of how words can modify their forms and be combined into sentences." Then, grammatical competence is the theoretical and practical knowledge of a subset of grammatical rules that enable an infinite number of correct sentences to be produced (Chomsky, 1965). As a result, according to Lock (1997), grammatical competence is gained by the rule-plus-drilling technique used in audio-lingual or conventional grammar methods.

### **Learning Styles vs. Strategies**

Carver (1984) suggested a taxonomy of language learning methodology, according to Kamińska (2014), with learning style at the top. Learning style, in his words, is "concerned with the learner's expectations for organizing his learning, as well as the relationship between his personality and his condition as a learner." Overt, covert, aware, or unconscious behaviours are characterized as learning strategies, which are a lower-level category. Sternberg and Grigorenko (2001) propose that the degree of consciousness involved in them be used to distinguish at the most fundamental level. They assume that styles work without people being aware of it, while strategies are characterized by deliberate behavior, such as choices.

According to Entwistle (2001), A learning style is a general propensity to use a specific strategy. Meanwhile, according to Oxford (1990), strategies are "conscious measures or practices used to improve the acquisition, storage, retrieval, recall, and use of new information," making them much more precise than styles. Although strategies can be modified and taught, while malleable in certain ways, styles cannot be defined as teachable. In the present study, the students' learning styles were determined using cognitive learning styles, which are categorized into Field Independent and Field Dependent. Meanwhile, the students' learning strategies are represented by SILL or Strategy Inventory for Language Learning.

### **Cognitive Learning Styles - Field Independent (FI) and Field Dependent (FD)**

According to Kamińska (2014), the FI/FD hypothesis is one of the earliest and best-known hypotheses about cognitive styles, and it is thought to be one of the main variables in learning. They are described as cognitive styles that influence people's interpretation and processing of information and their interactions with their surroundings, and it all depends on how much they see themselves as part of the surrounding field (Chapelle & Green, 1992). Dornyei (2005) distinguishes between FI and FD as follows:

- Field independent: preference for abstract content to be separated from its meaning. For example: "I not only attend to grammar but check for the appropriate level of formality and politeness."
- Field dependent: a predisposition to approach knowledge more holistically. For example: "It is a challenge for me to both focus on communication in speech or writing while at the same time paying attention to the grammatical agreement (e.g., person, number, tense, or gender)."

### **Strategy Inventory for Language Learning (SILL)**

Oxford (1990) explained that the word "strategy" is derived from the ancient Greek *strategia* for any step or action taken to win a war. She introduced the six cognitive strategies, memory, compensation, metacognitive strategies, affective strategies, and social strategies covered in Strategy Inventory for Language Learning (SILL).

#### *1. Memory-related strategies*

They assist learners in connecting one L2 object or idea to another. Still, they do not need deep understanding (e.g., acronyms, rhyming, images, the keyword method, body movements like a total physical response, flashcards, and locations on a page or blackboard).

#### *2. Cognitive strategies*

They enable the learner to explicitly manipulate the language content through reasoning, interpretation, note-taking, summarizing, synthesizing, outlining, reorganizing information to strengthen schemes (knowledge structures), practicing in naturalistic environments, and practicing formal forms and sounds.

#### *3. Compensatory strategies*

This group helps the learner make up for lost information by guessing from meaning in listening and reading, using synonyms and "talking around" the missing word to assist communicating and writing, and purely for speaking, using gestures or pause words).

#### *4. Meta-cognitive strategies*

They involve determining one's learning style preferences and requirements, preparing for an L2 mission, collecting and organizing resources, setting up a study space and a schedule, and keeping track of mistakes. To control the learning process as a whole, they assess task performance and the success of any form of learning strategy.

5. *Affective strategies*

They include knowing one's mood and level of anxiety, talking about emotions, praising oneself for successful results, and using deep breathing or constructive self-talk.

6. *Social strategies*

These strategies (asking for verification, clarifying a confusing question, requesting assistance in completing a language task, conversing with a native-speaking conversation partner, and exploring cultural and social norms) assist the learner in collaborating with others and comprehending the target community as the language.

### METHOD

This study employs a quantitative design which is called a correlational study. The students from two classes of General English of STIE *Malangkuceswara* majoring in Management and Accounting Year 2019/2020 become the population. The total number of students is 80. However, the researcher takes 30 of them as the sample due to the practicality and availability during the survey.

The list of instruments used in this study includes grammar tests, speaking tests, speaking scoring rubrics, and questionnaires of SILL. The scores were analyzed using SPSS 22. This study sets two-tailed hypotheses, in which the correlation can be accepted if the risk of being mistaken (level of significance) is smaller than 0.05. Besides, the R-value must be at least 0.361 for the two-tailed hypothesis for the number of 30 participants (Latief, 2013). Lower than that critical value, the null hypothesis should be accepted and the correlation must be ignored because it is not significant enough. Besides, the study used the independent-samples T-test of SPSS to seek which group of cognitive learning styles achieve better in grammar and speaking tests, and which higher and lower achievers use SILL categories in speaking and grammar tests.

### FINDINGS AND DISCUSSION

#### The Correlation between Speaking Performance and Grammatical Competence

According to the findings, there is no statistically significant connection between the variables. The result is shown in table 1.

**Table 1. Correlation between Speaking Total (ST) and Grammar Comp (GC) Scores**

		GC
ST	R	.165
	Sig. (2-tailed)	.385
	N	30

As per the table, the significance level is  $0.385 > 0.05$ , and the R-value is  $0.165 < 0.361$ , meaning that the significance level is much greater than 0.05 and the R is less than 0.361. Consequently,  $H_0$  should be acknowledged, and there is no vital association between total speaking scores and grammatical competence. The value indicates a very low association between them, according to the coefficient interval. The correlation between speaking accuracy and grammatical competence is also insignificant even though it is positive. It is represented by table 2.

**Table 2. Speaking Accuracy (SA) and Grammatical Competence (GC)**

		GC
SA	R	.103
	Sig. (2-tailed)	.586
	N	30

The degree of significance is  $0.586 > 0.05$ , and the R-value is  $0.103 < 0.361$ , as shown in the table. It implies that  $H_0$  should be acknowledged, and there is no substantial relationship between speaking accuracy and grammatical competence. The correlation coefficient is extremely poor. Meanwhile, the speaking fluency experiences the same result in its relationship with grammatical competence. Having a higher R-value than speaking accuracy does, speaking fluency correlates insignificantly, yet positively, with grammatical competence, as shown in table 3.

**Table 3. Speaking Fluency (SF) and Grammar Competence (GC)**

		GC
SF	R	.267
	Sig. (2-tailed)	.153
	N	30

The degree of significance is greater than 0.05 and the R-value is 0.267, meaning that the R is less than 0.361. As a result, H0 should be acknowledged, and it can be concluded that speaking fluency and grammatical competence have no significant relationship. The value indicates a low correlation between speaking fluency and grammatical competence, according to the coefficient interval. The third component of speaking performance, comprehensibility, also has a weak correlation with grammatical competence. Table 4 represents it.

**Table 4. Speaking Comprehensibility (SC) and Grammatical Competence (GC)**

		GC
SC	R	.126
	Sig. (2-tailed)	.506
	N	30

The table shows that the level of significance is > 0.05 and the R-value is 0.126, which means the r is smaller than 0.361. Thus, there is no significant correlation between speaking comprehensibility and grammatical competence. According to the coefficient interval, the value shows a very low correlation between speaking comprehensibility and grammatical competence. To sum up, we can see from the correlation analyses that there are no significant correlations between speaking performance and grammar competence. However, among the three sub-skills of speaking, fluency seems to have a greater correlation with grammatical competence than accuracy and comprehensibility.

Previously, some studies state such disputing issues toward speaking skills and grammatical mastery. Hidayatullah (2018) reported that the two variables were positively correlated for 20 tenth-grade students. The correlation value was high that it reached 0.920, much bigger than the r-table value. On the other hand, Kusumawardani and Mardiyani (2018) claimed a poor association between speaking fluency and grammatical competence, with a correlation coefficient of 0.259, which was higher than the social significance value of 0.05. Another research related to speaking fluency and grammatical competence was done by Priyanto and L. (2015) and found a moderate correlation between them among 50 high school students.

Hence, the finding of the current research neglects the result by Hidayatullah (2018) since it finds that the correlation between speaking accuracy and grammatical competence is low. In contrast, it supports Kusumawardani and Mardiyani (2018), for the correlation between speaking fluency and grammatical competence is weak. In this case, it should be considered that grammar is not always a helper in a student's speaking skills. It might be agreed that grammar is the foundation of constructing sentences correctly, but the pressure to use it may lead to a threat to the student's fluency. According to Terrell and Krashen (1983), excessive use of the monitor of brain processing causes hesitancy and, as a result, difficulty in conversing. The monitor here is a part of the brain to evaluate and judge the correctness of the language output.

Besides, grammar, which belongs to accuracy, is not the only one that matters in assessing speaking. There are several components of speaking that build up the student's performance. Heaton (1983), from which the current research takes the speaking rubric, assesses speaking accuracy, fluency, and comprehensibility. Thus, some students may have a poor score in grammar, but they are good at fluency or comprehensibility that the total score can be more satisfying. However, the researcher has not found any study which is precisely related to speaking comprehensibility. Hence, this current research might be the pioneer claiming no significant relationship between speaking comprehensibility and grammar competence.

**The Correlation between Speaking Performance and Cognitive Learning Styles**

The result of SPSS analysis reveals no significant correlation between speaking performance and cognitive learning styles, either FI or FD. It is shown in table 5. The findings show that the students' overall speaking scores are not substantially correlated with FI or FD styles. Both relationships have a significance level bigger than 0.05 (0.593 and 0.063), and the R values are less than 0.361 (0.102 and -0.344). Then, each component of the speaking assessment is analyzed, as resulted in table 6.

**Table 5. The Correlation between Speaking Total (ST) and Cognitive Learning Styles**

		FI	FD
ST	R	.102	-.344
	Sig. (2-tailed)	.593	.063
	N	30	30

**Table 6. Correlation of Speaking Accuracy, Fluency, and Comprehensibility and Cognitive Learning Styles**

		Accuracy	Fluency	Comprehensibility
FI	R	.139	.151	-.018
	Significant	.464	.426	.925
FD	R	-.282	-.247	-.372
	Significant	.131	.189	.043
N		30	30	30

From the data, it can be seen that only speaking comprehensibility and FD style have a significant, negative correlation. With a degree of significance of  $0.043 < 0.05$ , the R-value is  $-0.372$ , higher than the R-table. It means the higher score of speaking comprehensibility is, the less dependent the students are. Meanwhile, the other components, accuracy and fluency, have no significant correlation with FI/FD. It causes the speaking total is also insignificantly correlated with those cognitive learning styles. Then, the researcher seeks the scores of FI and FD students using the Independent-Sample T-test in SPSS. It is aimed at finding which style group has better scores in speaking performance than the other. The result is in table 7.

**Table 7. Comparison of Speaking Total Scores of FI & FD students**

	Cognitive LS	N	Mean
Speaking	FI	15	11.3333
Total Score	FD	15	10.7333

The table indicates that the mean score of FI students' speaking results is marginally higher than that of FD students. The following is a breakdown of the speaking results, including accuracy, fluency, and comprehensibility:

**Table 8. Comparison of Speaking Accuracy, Fluency, and Comprehensibility Scores of FI & FD students**

	Cognitive Style	N	Mean
Speaking	FI	15	3.3333
Accuracy	FD	15	3.0667
Speaking	FI	15	4.0000
Fluency	FD	15	3.8667
Speaking	FI	15	4.0000
Comprehensibility	FD	15	3.8000

From the tables above, the mean scores of the FI group slightly surpass the FD group in speaking accuracy, fluency, and comprehensibility. Hence, even though the correlations or differences among the scores are low, it can still be known that FI is better than FD in speaking performance.

Meanwhile, Soozandehfar and Norooziasiam (2011) found no significant association between speaking and cognitive learning styles in a study of 53 students using GEFT and speaking assessments. The findings of Pearson Product-Moment Correlation showed a negatively insignificant correlation between the FI/FD cognitive styles and the speaking scores ( $r = -.083$ ,  $p > .05$ ), which was validated by a two-way ANOVA study.

Furthermore, FI students have higher speaking mean scores in accuracy, fluency, and comprehensibility than FD students. According to Johnson, et.al (2000) and Salmani-Nodoushan (2006), FD people outperform FI people on L2 communicative tasks rather than formal language proficiency.

According to Cohen, et. al., (2006), FI students can outperform FD students because they can distinguish between relevant and essential information in a given context even when distracting information is present. Furthermore, they not only search for correct grammar but also for proper formality and politeness. Meanwhile, FD students are more concerned with grammar than with the message's substance. Furthermore, it is more difficult for them to concentrate on communication in speech while also paying attention to the grammatical agreement (e.g., person, number, tense, or gender). As a result, they become overwhelmed and overlook aspects of grammar and style when using long sentences.

Thus, it can be stated that FD students have lower scores in speaking for they are overexposed to grammar. In this case, the monitor hypothesis by Krashen (2003) should be considered that being the monitor over-user to focus on grammar leads to being less fluent in oral production.

### The Correlation between Speaking Performance and SILL

After revealing the correlations between speaking performance and cognitive learning styles, the current research presents the correlation between the variable and the language strategies. The speaking variable takes the total scores for practicality and time efficiency since the previous divisions yield similar results with the cognitive learning styles. Here is the table of the correlative analysis of Speaking Performance and SILL (M=Memorization, C=Cognition, CP=Compensation, MC=Metacognition, A=Affection, S=Social):

**Table 9. The Correlation between Speaking Performance (SP) and SILL**

		M	C	Com	MC	A	S
Speaking	R	.106	.248	-.237	.124	-.335	-.225
Performance	Sig. (2-tailed)	.577	.187	.208	.513	.071	.232
	N	30	30	30	30	30	30

The table shows that all the correlation values between speaking and SILL above are not significant. Furthermore, their levels of significance are greater than 0.05, implying that H<sub>0</sub> should be recognized. There is no connection between SILL learning strategies and speaking scores. Furthermore, the study analyzes whether the higher speaking performers have a different frequency of SILL from the lower ones. Hence, the analysis is done toward each group of the learning strategies.

**Table 10. Comparison of each SILL of Higher and Lower Speaking Scorers**

	Speaking Rank	N	Mean
Memorization	High	15	23.3333
	Low	15	21.5333
Cognition	High	15	36.2667
	Low	15	33.2000
Compensation	High	15	14.0000
	Low	15	14.5333
Metacognition	High	15	27.1333
	Low	15	24.6000
Affection	High	15	13.5333
	Low	15	15.0000
Social	High	15	16.2000
	Low	15	16.2667

The table reveals that higher-performing students outperform lower-performing students using memorization/memory-related, cognitive, and metacognitive strategies. However, lower-performing students are found to use compensation, affection, and social strategies more often than higher-performing students.

In conclusion, there is no substantial correlation between speaking performance, which involves accuracy, fluency, and comprehension, and learning strategies, whether positive or negative. However, the frequency of the strategy differs between students with higher and lower scores.

This finding corroborates Musalamat's (2018) argument that there is little connection between students' speaking learning strategies and their mastery of the language. Sioson (2011) found that language learning beliefs and strategies were not significantly correlated with the academic speaking task in his research. Many studies, however, have reported conflicting findings. In other words, they believe and can demonstrate a strong correlation between SILL strategies and speaking scores. Xu (2016) examines the relationship between speaking strategies and oral English test results (IELTS speaking test). His findings indicate that using the six speaking strategies, especially memory, compensation, affective, and social strategies, is positively correlated with IELTS speaking test scores.

The results linked to particular categories of strategies, according to Pietrzykowska (2014), are more revealing. Memory, meta-cognitive, affective, and social strategies had negative correlations with speaking performance, implying that a high frequency of using these two types of techniques was correlated with lower speaking skills. Speaking, cognitive, and compensation strategies have a good relationship.

This type of outcome is consistent with the study's findings. According to the estimation of the rating of speaking scores, higher achievers are more likely to use more memorization/memory-related, cognitive, and meta-cognitive techniques. Meanwhile, lower-performer students use compensation, affection, and social strategies more frequently than the higher performers. In line with this finding, (Taheri, Sadighi, and Bagheri, 2020) also state from their study on 120 Iranian students. They noted that increased achievers in EFL primarily used compensation, affective, and cognitive strategies, while low achievers primarily used social, meta-cognitive, and memory strategies.

Thus, it can be accepted that in this study, the correlation between the students' total speaking scores and SILL learning strategies is weak. However, there are such individual-strategy differences that distinguish the level of students' speaking performance. It is drawn that high achievers tend to optimize cognitive strategies better than the lower ones. As stated by Straková (2013), learning a foreign language is a cognitive process marked by characteristics that necessitate a significant amount of effort on the part of learners.

### **The Correlation between Grammatical Competence and Cognitive Learning Styles**

Using the same method, the next analysis is done to find the answer of which hypothesis of the correlation between grammatical competence and cognitive learning styles is true. The analysis of correlation by SPSS is represented in Table 11. From the table it is found that either FI or FD style is not significantly correlated with grammatical competence. The *R*-value of grammar scores and FI learning style is only .026, while the grammar scores and FD is only .097, whereas the *r*-table is .361. Moreover, the levels of significance of them are far bigger than 0.05. It means H<sub>0</sub> should be accepted: grammatical competence and cognitive learning styles (FI/FD) have no vital relationship.

The current research also keens on finding the differences between the grammar scores of FI and FD. Previously, it has been found through T test that FI students are better than FD in speaking. Then, the study also reveals which style group is better in grammatical competence. The result is presented in table 12.

**Table 11. Correlation between Grammatical Competence and Cognitive Learning Styles**

		FI	FD
GC	Pearson Correlation	.026	-.097
	Sig. (2-tailed)	.892	.609
	N	30	30

**Table 12. The Comparison between FI and FD's Grammatical Competence**

		Cognitive Style	N	Mean
Grammar Score	FI		15	78.1333
	FD		15	78.3333

The mean values in the table show that the grammatical competence of FI is 78.1333 and FD is 78.333. It means the value of FD is bigger than FI. Hence, it can be concluded that FD's grammatical competence is better than FI's, even though the difference is small.

In contrast with what has been stated by (Witkin et al., 1976), who introduced the terms at the first time, FI learners would do better in classroom learning because they were better at analyzing formal grammar rules. According to Wang's (2017) research in China, FI is characterized by behaving better when dealing with isolated objects in a region. In this regard, FI students should be more adept at mastering grammar than FD students. However, cloze tests and Chinese-English translations are classified in the field of grammar, according to Wang, and the cloze test in particular requires the ability to understand items in their contexts to some degree. This could explain why the FD cognitive style and grammar proficiency have a good relationship.

Then, it can be admitted that FD can surpass FI students in some conditions, such as in this current study in which the grammar tests are in multiple-choice questions. It might be caused by the fact that the FD students more rely and focus on grammar than FI students, then they can memorize and use the grammar knowledge in doing the tests. As Cohen, *et. al.* (2006) put one of the characters of FD students in the list that they focus on grammatical agreement (e.g., person, number, tense, or gender), which is most common in written tests.

#### **The Correlation between Grammatical Competence and SILL**

After finding out the correlation between grammatical competence and FI/FD learning styles, the current study uses the SPSS analysis to know its correlation with the learning strategies of SILL. The result of the correlation analysis is presented in Table 13.

**Table 13. Correlation between Grammatical Competence and SILL**

		M	C	CP	MC	A	S
Grammatical Competence	Pearson Correlation	-.014	.192	.178	.284	.068	.019
	Sig. (2-tailed)	.943	.310	.346	.129	.721	.919
	N	30	30	30	30	30	30

The bivariate table reveals that there is no significant relationship between grammatical competence and SILL learning strategies. None of the highlighted R-values are bigger than the r-table value (0.361), and all the significance levels have a risk of more than 0.05. Anyhow, as done to the previous variables, the current study also intends to find out the mean comparison between higher and lower scorers in grammar related to the frequency of the students' learning strategies. The result is presented in table 14.

**Table 14. Comparison of the SILL Frequency of the Higher and the Lower Grammar Scorer**

		Grammar_Rank	N	Mean
Memorization	High		15	21.6667
	Low		15	23.2000
Cognition	High		15	35.8000
	Low		15	33.6667
Compensation	High		15	14.0000
	Low		15	14.5333



Metacognition	High	15	26.6000
	Low	15	25.1333
Affection	High	15	14.0667
	Low	15	14.4667
Social	High	15	16.0667
	Low	15	16.4000

The table shows that, despite their minor differences, there are differences between the higher and lower grammar scorers. In particular, those who use cognitive and meta-cognitive techniques are more likely to achieve higher scores. Higher scorers, on the other hand, use memorization, reward, affection, and social tactics more often. The low correlation confirms the finding of Lee's (2010) research in Taiwan, which found that grammatical knowledge (both error recognition and severity ratings) among university EFL students is not significantly correlated with any of the learning strategy categories.

Related to this issue, He (2013) explains from his analysis on the individual differences that affect students' grammar mastery. The result of his qualitative data analysis has found that the most affecting individual differences in grammar acquisition are motivation, previous educational background, and learning strategies. Hence, we can see why the correlation between grammatical competence and learning strategies is insignificant. It is because learning strategy is not the only factor affecting the students' achievement. There also motivation, and previous educational background that becomes the students' provision to learn grammar. Furthermore, many EFL pedagogical experts mention a number of other variables, including intelligence, personality, learning beliefs, identity, and ethnic group affiliation (Lightbown and Spada, 2006).

However, it is also found in this current study that based on the T-test of the students' rank of grammar scores, higher achievers in grammar competence use different kinds and frequency of SILL from the lower achievers. It is revealed that the higher scorers are likely to do more cognitive and meta-cognitive strategies; while the lower-score students apply more memorization, compensation, affection, and social ones. The findings are close to those of Zhou (2017), who believes that high scorers consistently use the cognitive strategy, followed by the meta-cognitive strategy, and finally, the social/affective strategy.

According to Gimeno (2004), this model can allow students to learn on their own and improve their attitude toward foreign language learning. Unsuccessful learners lack or do not apply the meta-cognitive and cognitive strategies needed to learn grammar and transfer their acquired knowledge to the acquisition of new grammatical structures. Meanwhile, they tend to solve their grammar problems by memorization, compensation, affective, and social strategies.

Overall, Ararso (2012) claims that, in terms of achievement and the use of learning strategies, high-ranking students learned more strategies than low-ranking students across the board, with the exception of social strategies. In other words, using different methods more often allows students to achieve greater success in language learning.

## CONCLUSION

The study has successfully found the answers to the research questions. The data gathered from 30 respondents of Economics students in *STIE Malangkuceswara* year 2019—2020. There are several research findings delivered from the current study based on the research problems. They are (1) there is no significant relationship between speaking ability and grammatical competence. The connection is really not solid. It also occurs in the relationship between grammatical competence and each component of speaking skills, such as accuracy, fluency, and comprehensibility; (2) there is no evidence of a connection between speaking abilities and cognitive learning styles. On the other hand, speaking comprehensibility is an outlier since it has a strong negative association with FD. As a result, FI students outperform FD students by a small margin; (3) there is no evidence of a connection between speaking abilities and learning strategies. On the other hand, higher scorers are more likely to use memory-related, cognitive, and meta-cognitive techniques. However, lower-performing students are found to use rewards, love, and social interventions more often than higher-performing students; (4) grammatical competence and cognitive learning styles do not have a significant relationship. FD students, on the other hand, have marginally higher grammar scores than FI students. There is no evidence of a relationship between grammatical competence and learning strategies. However, higher-scoring students are more likely to use cognitive and meta-cognitive strategies, while lower-scoring students are more likely to use memorization, compensation, affection, and social strategies.

In summary, the correlations between speaking performance, grammatical competence, cognitive learning styles, and SILL seem to be unsubstantial. However, the differences in students' achievement exist due to the different cognitive learning styles and the frequency of using SILL.

The first suggestion is that needs more research to investigate the correlations between speaking performance, grammatical competence, cognitive learning styles, and SILL. During the data collection, many distractions could have an effect on the data reliability. It is because the tests were conducted online so that the process may lack supervision.

Second, it is strongly recommended that further research will examine other factors that influence students' learning process, such as aptitude and motivation that may have a more meaningful relationship with speaking and grammatical competence. It is worth mentioning since the results of the current study do not show any significant correlations. However, the results of two identical research might be different for different subjects and populations. Thus, it is expected that there will be further research that can clarify the current findings.

Last but not least, it is expected that by knowing their cognitive learning styles and strategies, students can also develop an autonomous learning process as the more frequent the strategies are used, the more successful the students are. Meanwhile, the cognitive learning styles enable students to get more self-awareness. Hence, teachers are suggested to be able to encourage students to use their cognitive learning styles and strategy inventory for language learning more effectively.

As suggested by Cohen and Pinilla-Herrera (2010), different grammar types are not acquired magically, but require conscious attention instead. As a result, it appears that there is a role for assisting students in the systematic use of techniques for maintaining the grammatical forms that they experience and must perform in the language, such as speaking.

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