

ISSN 1799-2591

Theory and Practice in Language Studies, Vol. 7, No. 12, pp. 1200-1209, December 2017

DOI: <http://dx.doi.org/10.17507/tpls.0712.06>

The Analysis of Students' Listening Proficiency Viewed from Their Different Learning Styles after Getting the Strategy Instructions

Dodi Mulyadi

English Education Department, Semarang State University, Semarang, Indonesia

Dwi Rukmini

English Education Department, Semarang State University, Semarang, Indonesia

Issy Yuliasri

English Education Department, Semarang State University, Semarang, Indonesia

Abstract—The students' listening cognitive and metacognitive problems should be overcome with an effective listening strategy instruction. Besides, their learning style as the individual learners' differences should be taken into account in getting a satisfactory listening outcome. To seek the solution, the present study aimed to find out quantitatively the effectiveness of implementation of Explicit (Meta)-cognitive collaboration strategy instruction (M-CCSI) and top-down strategy instructions (TDSI) toward the students' listening proficiency viewed from their learning styles. The participants of the study were 50 Javanese EFL students at Muria University of Kudus, Indonesia. The data were gathered by using a listening proficiency test adopted from Longman TOEFL listening section and a questionnaire of visual, auditory, and kinesthetic (VAK) learning styles. Descriptive statistics, Independent Sample t-test, and Friedman two-way analysis of variance revealed that the experimental group has a significant effect of their listening proficiency after treated by using M-CCSI. Meanwhile, the control group has no significant effect on their listening proficiency after dealt with by using top down strategy (TDSI) as a general listening teaching. On the other hand, the result of two-way analysis of variance reveals that students' listening proficiency was not influenced by learning styles including visual learners, auditory learners, and kinesthetic learners for both experimental group and control group. Thus, the findings imply that it is not essential for the lecturers of listening course to divide students into different learning styles in applying Explicit M-CCSI.

Index Terms—explicit (meta)-cognitive collaboration strategy instruction (M-CCSI), top-down strategy instruction, listening proficiency, and VAK learning styles

I. INTRODUCTION

Most EFL student teachers in Indonesia possess an old perception that listening is a passive skill among the other three English language skills. That attitude makes them ignore the crucial goal of listening practices that are leading to a communication failure (Vandergrift & Goh, 2012). It is in line with the results of preliminary research of interview to ten EFL student teachers at Muria University of Kudus and University of Muhammadiyah Semarang that six of them avoid listening class and consider listening as a difficult skill to master.

Besides the old perception, EFL student teachers have also had the difficulties of cognitive strategies. The general problems in listening are related to cognitive listening strategies such as limited vocabulary mastery (Field, 2008; Vandergrift & Goh, 2012; Chang, 2007; Goh, 2000; Kelm & Horwitz, 2006), unfamiliar pronunciation (Goh, 1997; Goh, 2000) of common words. Other listening problems involved the difficulty in recognizing key words (Goh, 1997; Palmer, 2014). These issues are relevant to the results of the interview in preliminary research, for instance, three learners out of ten interviewees highlighted this point of view. Their problems of listening mastery are unfamiliar sounds of words and the differences they read in written text and what they listen. Meanwhile, three students had the problems dealt with metacognitive strategies as well as the lack of the background knowledge (Goh, 2002). They perceived that the unfamiliarity of contents related to oral texts makes them hard to get in charge in mastering listening class.

Based on aforementioned cognitive and metacognitive problems, a cognitive strategy instruction collaborated with metacognitive one was applied to help the listening instructors trace the source of these listening difficulties in EFL learners. However, many researchers investigated metacognitive strategy instruction separately for implementing cognitive one. In fact, the cognitive strategy instruction should be included in listening class because it helped students to find out the solution of their listening problems.

However, not only listening strategy instruction should be taken into account in getting a satisfactory listening outcome, but educator in teaching listening should also consider other factors like individual learners' differences. Ellis (2005) states that there are seven factors in explaining individual learner differences, which is beliefs, affective state, age, aptitude, learning style, motivation, and personality. As one factor in learning, the study of learning style also needs to be paid attention. When educators know their students' learning styles, they can facilitate their learners to learn better with appropriate teaching strategies. Hamdani (2015) asserts that knowing and recognizing student's learning style can promote the education quality and make it more appropriate for the individual learner.

According to Oxford in Xu (2011), learning styles and learning strategies can work together with a given instructional methodology. Ellis (2005) asserts the optimal type of instruction will be related closely to the individual learner's preferred approach to learning. In addition, Gilakjani (2011) states if the educators recognize their students' learning styles, the educator can find out the most appropriate teaching technique for making students understand faster. They will comprehend about the education setting, teaching methods and learning strategies to make students feel comfortable in the learning process and vice versa. However, most researchers just focused on the effectiveness of listening strategy instruction on listening comprehension, but few consider students' learning styles in the learning process of listening class. Therefore, it is necessary for the lecturers to know what their students' learning styles are in order to facilitate the students in understanding the process of teaching and learning efficiently. Knowing students' learning styles can assist students to determine their strengths and weaknesses to find the correct way of learning (Gilakjani, 2011; Xu, 2011). Thus, they can have a clearer picture of the learning process, and more awareness of learning process.

Considering identification the aforementioned research background, the experimental research on listening strategy instruction should be conducted to overcome students' listening difficulties (Field, 2008). Relevant to that Field's statement, the implementation of effective listening teaching instruction based on the students' problems was conducted to enhance the students' listening proficiency that was analyzed from a moderator variable. Thus, this study was carried out to investigate the effectiveness of Explicit M-CCSI as the proposed technique in teaching listening compared with TDSI on students' listening proficiency as an existing method viewed from students' learning styles.

II. LITERATURE REVIEW

A. *Explicit (Meta)-Cognitive Collaboration Strategy Instruction*

Explicit (meta)-cognitive collaboration strategy instruction (M-CCSI) is the clearly stated instruction of metacognitive strategies and cognitive strategies. These strategies were conveyed to make students aware about what kind of strategies that were used in teaching and learning process. Metacognition is defined as a construct having to do with thinking about one's thinking or the ability to recognize one's mental processes (Nelson in Rahimi & Katal, 2012). Therefore, metacognitive strategies point out the methods applied to enable students understands the way to learn. Making them aware of the strategies used in the learning process, they can get in charge in every stage of the learning activities. Holden in Serri et al. (2012) states metacognitive strategy instruction involves conscious management and regulation over learning process, like planning, concentrating and monitoring.

Meanwhile, cognitive listening strategy instruction can enable learners to overcome their listening difficulties. According to O'Malley and Chamot in Guan (2014), cognitive strategies are defined as mental works that utilize directly on succeeding information, employ the language to improve learning achievement. Based on Vandergrift's taxonomy (1997), common cognitive strategies in second language listening involves making an inference, elaborating, summarizing, translating, transferring, resourcing, grouping, note-taking, deduction/induction, and substitution.

Practically, the implementation of listening strategies between cognitive and metacognitive cannot be separated in the process of teaching. Field (2009) states that to distinguish between cognitive and metacognitive strategies in teaching is arduous for a listening lecturer. Metacognitive strategies in one context are possible to be cognitive in another. Therefore, cognitive strategies and metacognitive strategies were run simultaneously. In the present study, this M-CCSI was implemented based on steps displayed in Fig. 1. The first stage of Explicit M-CCSI as planning for listening class was taught by explaining the goal of listening class and the activation of their background knowledge. The students were taught about the strategy of activating their previous experience related to the learning topics.

The second stage was related to monitoring comprehension. It was carried out by asking learners to understand how to listen to the keywords based on the information of the oral text, and then they listen to the audio oral text from computer and then complete some activities to sharpen their listening comprehension. To make students understand more about their task, they were explained to do note-taking strategy before they listened for the second time for practicing that strategy.

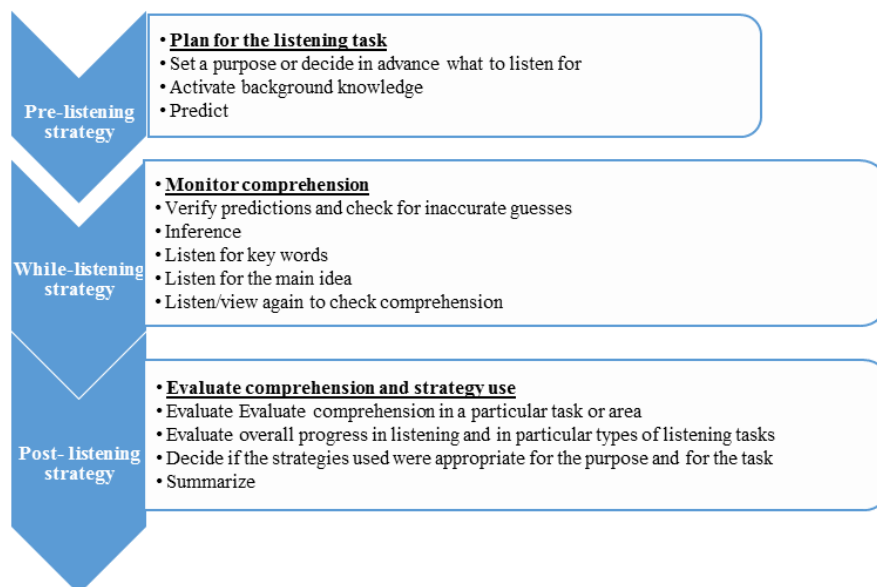


Figure 1. The Steps of (Meta)-Cognitive Collaboration Strategy Instruction

Finally, the learners were invited to have the third listen for doing the next task. The third stage was post-listening activities. The lecturer evaluated students' listening comprehension in a particular task. The students were also requested to determine the appropriate strategies they had learned for better understanding of the oral text.

B. Top down Strategy Instruction

Top-down strategies are the model of the listening process that the listener actively constructs the original meaning based on listening to oral text and its clues. In this reconstruction process, the listeners employ their prior knowledge of the context and situation in which listeners can comprehend what they hear (Nunan, 1994). In this view, the listeners should consider the context of situations well as to each other and prior events such as knowledge of the topic at hand, the speaker or speakers, and their relationship to the situation. These strategies are closely related to larger units and general meaning of a listening text in order to identify smaller ones such as word-level knowledge to find out the phonemes (Field, 2008). In the process of listening instruction, students discuss the topics then they have to find out the most important pieces of information and must do extensive activities to listen for the overall meaning.

Various activities have been conducted to utilize the instruction process of top down strategies as top down strategy instruction (TDSI) as a general strategy instruction that is used for teaching listening in Muria University of Kudus. In this study, the lecturer directly asked students to do the tasks of pre-listening without explaining what kind of strategy they would follow. During listening activities, the students were requested to do the test related to the materials they were listening. They then did the next exercise of word building related to the terms that they had listened to the recording. Finally, in post-listening activities, the lecturer instructed students to summarize the information they had listened.

C. Learning Styles

There are various definitions of learning styles. MacKeracher in Gilakjani (2011) defines that learning styles are the manner in which individuals perceive and process information in learning situations and environment. They are the approaches dealing with learners' preference of learning behavior (Flowerdew & Miller, 2005). Kolb & Kolb (2005) also state that learning style draws the differences in the way learners prefer employing in their learning process. Therefore, the teachers or lecturers are necessary to know what their students' learning styles to facilitate them in comprehending the process of classroom instruction.

There are several kinds of learning styles, but visual, auditory and kinesthetic (VAK) styles are commonly used to classify learners in the learning process. They are widely observed in the education history to reflect on the importance of identifying learner's characteristics to enable effective education as recent studies (Gilakjani, 2011; Ocepek et al., 2013; Hamdani, 2015; Dascalu et al., 2015; Vasileva-Stojanovska, et al., 2015). First, visual learners do not prefer to learn by verbal explanation. Reading and charts, pictures, and diagram are very close to their learning. They prefer to study by reading the text, comprehending diagrams and pictures, power point presentation (Brown, 2007; Xu, 2011). They quickly understand materials by taking descriptive notes when the materials are being explained.

Second, auditory learners prefer to learn through comprehending verbal information and oral explanation. Gilakjani (2011) states these students find out information through pitch, emphasis, and speed. They are enthusiastic to master the lesson by listening and talking to others (Xu, 2011). According to Brown (2007, p.129), "auditory learners like better to acquire knowledge from lecturers and audio information in the classroom." They may not have a full understanding of

information that is written. Third, Kinesthetic learners are very interested in physical activities and practical process. They study best by following the learning process actively by movement (Xu, 2011; Gilakjani, 2011). Thus, they study well to understand the materials from practical activities, demonstrations, and bodily movement.

III. METHOD

The present study was analyzed quantitatively in order to examine the effectiveness of implementation of collaboration between cognitive and metacognitive strategy instruction and top-down strategy instruction as independent variables toward the students' listening comprehension. The scores from the listening test are the dependent variables, and students' learning styles including visual, auditory and kinesthetic are moderator variables. Specifically, we address the following questions: which one is more effective between teaching listening comprehension by M-CCSI in the experimental group and TDSI in control group on students' listening proficiency? To what extent is the effectiveness of teaching listening for visual learners, auditory learners and kinesthetic learners between experimental group and control group? How is the relationship among M-CCSI, TDSI and students' learning styles on students' listening proficiency?

The participants of study were the third semester students at Muria University of Kudus (UMK) of the academic year 2016-2017. There were fifty EFL student teachers as a sample that was taken from seventy-seven as population. Twenty-eight learners were in experimental class, and twenty-two learners were in control class.

The data were gathered by using a listening proficiency test and a questionnaire. They were used to identify the potential predictive power of selected variables on the effectiveness of M-CCSI and TDSI on learners' listening proficiency viewed from students' learning styles. The first instrument is listening proficiency test that was adopted from listening section of TOEFL Test in order to find out the students' listening comprehension that has been influenced by the ten weeks intervention program. TOEFL has been the most widely used in recent researches of listening skill (Ahour & Bargool, 2015; Attarzade & Farahani, 2014; Ching-Shyang Chang, 2007; Guan, 2014; Hariri, 2014; Hayati, 2000; K. Jafari & Hashim, 2012; Moradi, 2013; Rahimi & M. Katal, 2013; Sarandi, 2010; Selamat & Sidhu, 2013; Serri et al., 2012). The students did the pre-test before conducting treatment of applying the strategy instruction to find out homogeneity and reliability. After the 10-week listening strategy instruction, they did a similar test as a post-test. The test was given in both experimental and control groups.

The second instrument was VAK questionnaire. The 36 items of statements were arranged adapted from various sources with visual, auditory, and kinesthetic (VAK) learning styles model adapted from various sources (TCM, 2017; Honey & Mumford, 2006; Honey, 2006; Mansur HR, 2013; Gilakjani, 2011). The VAK learning style questionnaire consists of 36 items with Likert scale i.e., Number 1 (never), 2 (rarely), 3 (sometimes), and 4 (often). Before applying in the process of the research, the items of statements were validated from 45 items that were arranged. They were validated statistically after they have been tried out to 16 EFL student teachers at University of Muhammadiyah Semarang. Every piece of the questionnaire statements was completed by Indonesian translation so that they responded the questionnaire attentively and did not have a misunderstanding. After getting the analyses results, the students then were classified into three groups including visual learners, auditory learners, and kinesthetic learners.

The findings were analyzed quantitatively. They were analyzed using descriptive statistics, independent sample test, paired sample test, and Friedman two-way analysis of variance by analyzing 3 x 2 factorial model of the experimental design.

IV. RESULTS

A. *The Comparison of Effectuality of Explicit M-CCSI Compared with TDSI on Students' Listening Proficiency*

The pre-test was given to the experimental and control learners in order to know their listening proficiency before getting treatments. Before analyzing the data, the normal distribution test and homogeneity test was conducted. The sample of this research was tested using pre-test questions item to see whether the distribution of the data is normal or not. In consequence, the sample score should be tested, so that the researcher can be continued using parametric analysis and non-parametric analysis. The normal distribution was "a spread of cases resembling the normal curve, with most cases concentrated near the mean" (Ary et al., 2009, p. 646). In this research, the normal distribution of the sample was proven that the statistical analysis resulted that P-value of students' pre-test of experimental and control class was the same value ($0.20 > 0.05$) based on Kolmogorov-Smirnov^a. Moreover, the Asymp. Sig. (2-tailed) of the level of significance of students' post-test score between experimental class and control class were more than 0.05. Because P-value was bigger than the standard error, the prerequisite of normality test was fulfilled and could be continued to next statistical analyses.

After analyzing the normality test, homogeneity of variance was taken from the participants' score of the pre-test. This test of Homogeneity was conducted "to assess the inter-item consistency of the items on a test" (Ary et al., 2009, p. 245). Miles and Huberman cited in Cohen et al. (2007, p. 176) assert that "the homogeneous sampling focuses on groups with similar characteristics". The homogeneity test of variance based on the Levene statistical results has the total of significant value is > 0.05 ($0.159 > 0.05$). It can be concluded that students' listening proficiency for both classes between experimental and control class was homogenous. Thus, they were selected as the sample of the research to find

out the effectuality of teaching listening by using Explicit M-CCSI for Experimental Group and TDSI for control group on students' listening comprehension. Then, the homogeneity of variance was taken from the learners' score of post-test indicated that the significant value of students' listening proficiency was higher than 0.05. It means that the variants data of experimental class and control class were homogenous then were continued to be analyzed using independent sample t-test.

The comparison of statistical effects of the treatments on students' listening proficiency was analyzed using independent sample t-test. Table 1 demonstrates that there is a significant influence on students' listening proficiency after conducting the treatments with the 10-weeks listening strategy instruction using the Explicit M-CCSI. The students in the experimental group have a better achievement of listening proficiency than those in the control group. It proves that the collaboration of Explicit two instructions between metacognitive strategy instruction and cognitive strategy instruction is very beneficial in enhancing students' listening proficiency.

TABLE 1.
THE RESULTS OF INDEPENDENT SAMPLES TEST FOR POST-TEST BETWEEN EXPERIMENTAL AND CONTROL CLASS

		Levene's Test for Equality of Variances		t-test for Equality of Means				
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference
Posttest score	Equal variances assumed	2.752	.104	-4.434	48	.000	-6.53896	1.47478
	Equal variances not assumed			-4.574	47.991	.000	-6.53896	1.42959

B. The Effectiveness of Explicit M-CCSI on Visual, Auditory and Kinesthetic Learners' Listening Proficiency between Experimental Group and Control Group

The Descriptive Results of Students listening proficiency viewed from learning styles in Experimental presented in Fig. 2 was analyzed based on the students' pre-test and post-test scores. The post-test was held to determine whether or not students' listening proficiency have improved after the learners got the treatment of Explicit M-CCSI.

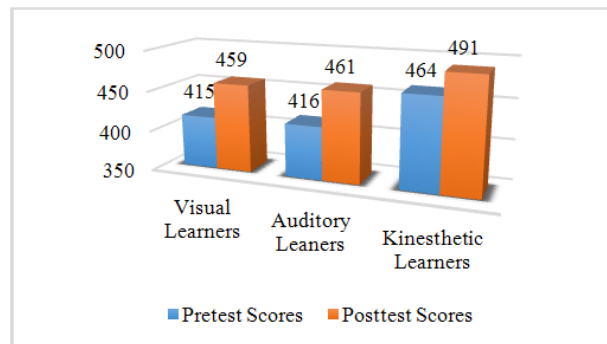


Figure 2. The Improvement of Students' Listening Proficiency Viewed from their Learning styles in the Experimental Group

As shown in Fig. 2, the students' listening proficiency got an improvement after getting treatment of Explicit M-CCSI. It can be definitely seen that the average scores of visual, auditory as well as kinesthetic learners were comparatively higher than their pre-test score. The visual learners and the auditory learners got almost similar improvement, i.e., 10.6% and 10.8%. Meanwhile, the kinesthetic learners had the highest score in both pre-test and post-test, but they just got a slight increase of the score with only 5.6% improvement. The results show that the Explicit M-CCSI could be implemented for teaching students who have various learning styles.

After describing the average scores of students' listening proficiency, the data were analyzed statistically to find out the effectiveness of the experimental treatment on student teachers' listening proficiency viewed from VAK learning styles. As a result, Paired Sample Test shows significant differences of visual, auditory, and kinesthetic learners' listening proficiency after Explicit M-CCSI was carried out as demonstrated in Table 2.

TABLE 2.
THE RESULTS OF PAIRED SAMPLES TEST FOR PRE-TEST AND POST-TEST SCORE VIEWED FROM THEIR LEARNING STYLES IN CONTROL CLASS

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Visual learners	Pre-test- Post-test	-44.000	35.963	11.372	-69.726	-18.274	-3.869	9	.004
Auditory Learners	Pre-test- Post-test	-44.54545	21.61649	6.51762	-59.06761	-30.02330	-6.835	10	.000
Kinesthetic Learners	Pre-test- Post-test	-27.14286	22.88689	8.65043	-48.30970	-5.97602	-3.138	6	.020

Table 2. shows that the probability score or sig. (2-tailed) for visual learners is 0.004, for auditory learners is 0.000, and for kinesthetic learners is 0.020. The scores are lower than $\alpha = 0.05$ that means that can be considered statistically

significant. These findings imply the listening proficiency of visual, auditory, and kinesthetic students got significant improvements of their listening proficiency after having the instruction of Explicit M-CCSI.

C. The Effectiveness of Implementing TDSI to Visual, Auditory, Kinesthetic EFL Student Teachers' Listening Proficiency

The students' post-test scores and pre-test scores were analyzed to find the improvement of listening proficiency. Fig. 3 shows the descriptive results of students' listening proficiency viewed from learning styles in control group that was taught by TDSI.

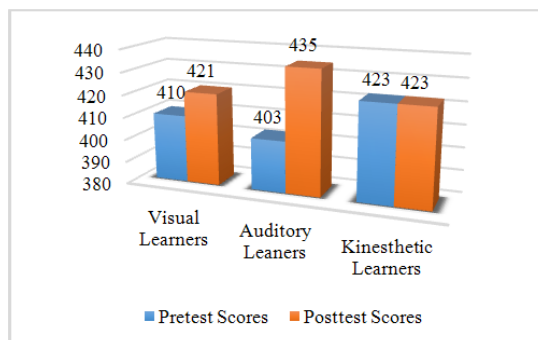


Figure 3. The Improvement of Students' Listening Proficiency viewed from their Learning styles in the Control Group

The graph presented in Fig. 3 shows that there has been a larger increase in auditory learners' listening proficiency with 12.9% improvement than the visual learners' with only 2.7% growth. On the contrary, the listening proficiency of kinesthetic learners did not get the increase in the same score (423) either pre-test or post-test. Furthermore, to find out the effectiveness of implementing TDSI to visual, auditory, kinesthetic EFL student teachers' listening proficiency, the paired sample test was scrutinized as presented in Table 3.

TABLE 3.
THE RESULTS OF PAIRED SAMPLES TEST FOR PRE-TEST AND POST-TEST SCORE VIEWED FROM THEIR LEARNING STYLES IN CONTROL CLASS

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Visual Learners	Pre-test-Post-test	-11.42857	30.78342	11.63504	-39.89849	17.04135	-.982	6	.364
Auditory Learners	Pre-test-Post-test	-32.50000	45.73474	22.86737	-105.27418	40.27418	-1.421	3	.250
Kinesthetic Learners	Pre-test-Post-test	.90909	21.65851	6.53029	-13.64129	15.45947	.139	10	.892

The significant values for visual, auditory, kinesthetic learners are higher than significance level with the score 0.364, 0.250, and 0.892. Hence, it can be claimed that the mean scores of the students' post-tests of listening proficiency are not significantly different. Due to the fact, all students' listening proficiency from different learning styles did not get a significant improvement of their listening proficiency after implementing TDSI in control group.

D. The Effectiveness of Explicit M-CCSI in Enhancing Students' Listening Proficiency Compared to TDSI

In analyzing the improvement of students' listening proficiency viewed from their learning styles, the N-gain analyses were used (Meltzer, 2002; Hake, 1998; McKagan et al., 2017). The researcher calculated the findings of pre-test and post-test mean scores of visual, auditory, kinesthetic, and overall learners both in the experimental group and control group. In addition, the visual representation of the students' improvement in their listening proficiency before and after the application of Explicit M-CCSI and TDSI can be seen in Fig. 4. The results of N-Gain displays the increase of students' listening score in experimental group was higher than students' listening score in control group. It also discloses clearly that all various students including visual, auditory, and kinesthetic learners got a better improvement of their listening proficiency than visual, auditory, and kinesthetic learners in control group.

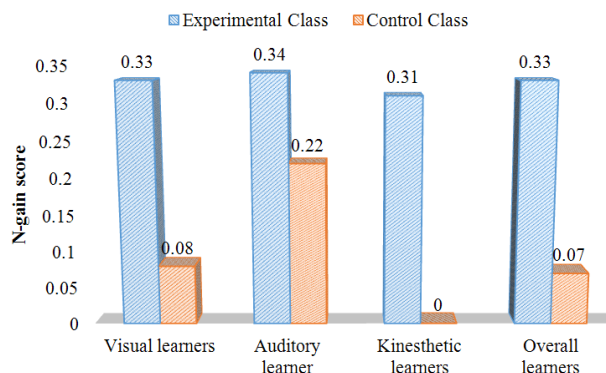


Figure 4. The Comparison of N-Gain Score between Students' Listening Proficiency in Experimental and Control Group viewed from their learning styles

Moreover, the improvement of students' listening proficiency has also been analyzed based on the classification of the enhancement of each group of students with different learning styles. The classification used in this study refers to Hake's category including "High-g, Medium-g, Low-g" (Hake, 1998). Thus, the improvement of students' listening proficiency who have a visual learning style preference in experimental group got a moderate increase with N-gain 0.33 as Medium-g, but the visual learners in control class only got low gain with $0.07 < 0.3$.

After implementing the Explicit M-CCSI, the N-gain of auditory learners got the medium improvement with the score 0.034. On the other hand, the auditory learners who got TDSI had the score $0.22 < 0.3$ as low improvement. For the kinesthetic learners, the instruction of Explicit M-CCSI make their N-gain as others learning style students as the medium growth with the score at the rate of $0.7 > (0.31) \geq 0.3$. In contrast, they who got TDSI did not get improvement at all with the score 0.0.

To sum up, the medium gain happened for all students with different learning styles after getting the application of Explicit M-CCSI. Overall students got 0.33 as gained the medium improvement. Meanwhile, Overall students who got TDSI only got low gain with the score 0.07. It means they just got low enhancement of their listening proficiency.

E. The Interaction among M-CCSI, TDSI and Students' Learning Styles on Students' Listening Proficiency

The interaction among students' listening comprehension and their learning styles was analyzed by using Friedman two-way analysis of variance disclosed in Table 4. The results show that learning styles has no significant effects on listening comprehension with $F=0.996$, $P=0.377$ ($p>0.05$). However, the M-CCSI has a significant impact on students' listening comprehension than TDSI with $F=18.339$, $P=0.000$ ($p<0.05$).

TABLE 4.
THE INTERACTION AMONG M-CCSI, TDSI, AND THE STUDENTS' LEARNING STYLES ON THEIR LISTENING PROFICIENCY

Dependent Variable: TOEFL Score Post Test					
Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	642.845 ^a	5	128.569	4.812	.001
Intercept	191874.743	1	191874.743	7181.092	.000
Learning style	53.234	2	26.617	.996	.377
Group (experiment & Control)	490.008	1	490.008	18.339	.000
Learning style * group	73.234	2	36.617	1.370	.265
Error	1175.655	44	26.719		
Total	220279.000	50			
Corrected Total	1818.500	49			

a. R Squared = .354 (Adjusted R Squared = .280)

V. DISCUSSION

The analysis result in Fig.1 elucidates that visual, auditory, and kinesthetic learners have a better listening proficiency after getting the treatment of M-CSI, but the visual, auditory and kinesthetic learners in control class without implementing M-CSI have no significant improvement of their listening proficiency. Those results can be concluded that M-CSI can be implemented in teaching listening course to students who have various learning styles among visual learners, auditory learners, and kinesthetic learners in order to enhance their listening proficiency.

The findings (Table 4) also reveal there is no statistically significant different score among visual, auditory, and kinesthetic learners after getting treatment of M-CSI. In other words, this M-CSI can be implemented for students with various learning styles. This concurs with the findings of Hamdani's (2015) study that after analyzing students based on visual, auditory, and kinesthetic learning styles at Sohar University in Sultanate of Oman, there is no dominant learning style among them. Moreover, the findings are in line with M. Jafar's & Sadeghi's (2015) studies revealing students' foreign language achievement viewed from students' learning style categories are not significantly different.

Surprisingly, these findings are not in line with the study conducted by Hsueh-Jui (2008) that listening strategy use was significantly associated with learning styles for Taiwanese university EFL students. The findings are also not supported by Bidabadi & Yamat' (2012) findings that all educators should be aware of students' learning styles and their English listening comprehension level in order to choose the methods of teaching EFL learners. The reason why this study is not in line with those studies (Hsueh's, 2008; Bidabadi & Yamat's, 2012) is the average score of students' preferences based on VAK learning style questionnaire among visual learners, auditory learners, and kinesthetic learners are not highly different. Therefore, the findings imply that it is not essential for the lecturers of listening course to divide students into different learning styles dealing with VAK styles in applying Explicit M-CCSI.

However, the influence of Explicit M-CCSI treatment in control group analyzed by using Independent Sample Test and two-way ANOVA indicates there is a significant difference of students' listening proficiency between experimental group and control group that was taught by TDSI. Thus, the collaboration of metacognitive and cognitive strategy instruction was effective to be applied for teaching listening in order to make students better in mastering spoken language. This effective way of Explicit M-CCSI is relevant with Field's statement that between metacognitive and cognitive strategy instruction cannot be separated (Field, 2008). Furthermore, generally, the significant effect of the listening strategy instruction on students' listening proficiency is corroborated by some studies (Amin, 2011; Selamat & Sidhu, 2013, Birjandi & Rahimi, 2012; Hariri, 2014; Guan, 2014).

VI. CONCLUSION

This study shows that Explicit M-CCSI is the effective listening strategy instruction to enhance the students' listening proficiency. Overall, it is believed that the findings provide the empirical evidence that EFL student teachers should be able to actively and selectively choose the strategies to master their listening skill successfully. Pedagogically, the present study is expected to give a valuable contribution in teaching and learning listening class. This study is also a great value for English teachers or lecturers to accomplish better teaching practices by applying Explicit M-CSI as a teaching technique that will advance their professionalism.

As future research line, it would be an interesting study for investigating the effectuality of Explicit M-CCSI on big population for more effective generalization. Furthermore, the further researcher should also consider other individual learners' differences not only learning styles for scrutinizing the moderator variables in completing the experimental listening strategy instruction treatment.

REFERENCES

- [1] Ahour, T., & Bargool, S. (2015). A Comparative Study on the Effects of While Listening Note Taking and Post Listening Summary Writing on Iranian EFL Learners' Listening Comprehension. *Theory and Practice in Language Studies*, 5(11), 2327–2332.
- [2] Amin, I. A. (2011). A Correlation Study between EFL Strategic Listening and Listening Comprehension Skills among Secondary School Students. Retrieved July 26, 2015, from <http://files.eric.ed.gov/fulltext/ED527448.pdf>.
- [3] Ary, D., Jacobs, L. C., Razavieh, A., & Sorensen, C. K. (2009). *Introduction to Research in Education* (8th ed.). USA: Wadsworth Publishing.
- [4] Attarzade, S., & Farahani, E. (2014). The Effect of Task Complexity on Iranian EFL Learners' Listening Comprehension across Aptitude. *Procedia - Social and Behavioral Sciences*, 98, 314–323. <https://doi.org/10.1016/j.sbspro.2014.03.422>.
- [5] Bidabadi, F. S., & Yamat, H. (2012). The Relationship between English Listening Proficiency Levels and Learning Styles. *GEMA Online™ Journal of Language Studies*, 12(November), 1041–1055.
- [6] Birjandi, P., & Hossein Rahimi, A. (2012). The Effect of Metacognitive Strategy Instruction on the Listening Performance of EFL Students. *International Journal of Linguistics*, 4(2), 1485–1491. <https://doi.org/10.5296/ijl.v4i2.1707>.
- [7] Brown, H. (2007). *Principles of language learning and teaching* (5th ed.). New York: Pearson Education, Inc.
- [8] Ching-Shyang Chang, A. (2007). The impact of vocabulary preparation on L2 listening comprehension, confidence and strategy use. *System*, 35(4), 534–550. <https://doi.org/10.1016/j.system.2007.06.003>.
- [9] Cohen, L., Manion, L., & Morrison, and K. (2007). *Research Methods in Education* (6th ed.). New York: Routledge.
- [10] Dascalu, M.-I., Bodea, C.-N., Moldoveanu, A., Mohora, A., Lytras, M., & de Pablos, P. O. (2015). A recommender agent based on learning styles for better virtual collaborative learning experiences. *Computers in Human Behavior*, 45, 243–253. <https://doi.org/10.1016/j.chb.2014.12.027>.
- [11] David E. Meltzer. (2002). The relationship between mathematics preparation and conceptual learning gains in physics: a possible hidden variable in diagnostic pretest scores : Normalized Learning Gain: A Key Measure of Student Learning. Retrieved August 19, 2016, from <http://citeseerx.ist.psu.edu/viewdoc/download?jsessionid=3146016B859758FFAA9984E675FD3622?doi=10.1.1.569.1590&rep=rep1&type=pdf>.
- [12] Ellis, R. (2005). *The Study of Second Language Acquisition*. Shanghai: Shanghai Foreign Education Press.
- [13] Field, J. (2008). *Listening in the Language Classroom*. Cambridge: Cambridge University Press.
- [14] Flowerdew, J., & Miller, L. (2005). *Second Language Listening Theory and Practice*. New York: Cambridge University Press.
- [15] Gilakjani, A. P. (2011). Visual, Auditory, Kinaesthetic Learning Styles and Their Impacts on English Language Teaching. *Journal of Studies in Education*, 2(1), 104–113. <https://doi.org/10.5296/jse.v2i1.1007>.
- [16] Goh, C. (1997). Metacognitive awareness and second language listeners. *ELT Journal*, 51(October), 361–369. <https://doi.org/10.1111/j.1540-4781.1989.tb02534.x>.
- [17] Goh, C. C. . (2000). A cognitive perspective on language learners' listening comprehension problems. *System*, 28(1), 55–75. [https://doi.org/10.1016/S0346-251X\(99\)00060-3](https://doi.org/10.1016/S0346-251X(99)00060-3).

- [18] Goh, C. C. M. (2002). Exploring listening comprehension tactics and their interaction patterns. *System*, 30(2), 185–206. [https://doi.org/10.1016/S0346-251X\(02\)00004-0](https://doi.org/10.1016/S0346-251X(02)00004-0).
- [19] Guan, Y. (2014). The Effects of Explicit Listening Strategy Instruction on the Listening Comprehension of English as Second Language (ESL) Community College Students. Ph.D Thesis. University of San Francisco. Retrieved September 15, 2015 from <http://repository.usfca.edu/diss>.
- [20] Hake, R. R. (1998). Interactive-engagement versus traditional methods: A six-thousand-student survey of mechanics test data for introductory physics courses. *American Journal of Physics*, 66(1), 64–74. <https://doi.org/10.1119/1.18809>.
- [21] Hamdani, D. Al. (2015). Exploring Students' Learning Style at a Gulf University: A Contributing Factor to Effective Instruction. *Procedia - Social and Behavioral Sciences*, 176, 124–128. <https://doi.org/10.1016/j.sbspro.2015.01.452>.
- [22] Hariri, M. (2014). The Effect of Meta-cognitive Strategies Instruction on Listening Comprehension of Iranian Pre-intermediate Female EFL Learners. *International J. Soc. Sci. & Education*, 4(2), 437–442.
- [23] Hayati, a M. (2000). The Impact of Cultural Knowledge on Listening Comprehension of EFL Learners. *English Language Teaching*, 2(3), 144–152. Retrieved July 16, 2015, from <http://www.ccsenet.org/journal/index.php/elt/article/view/344/307>.
- [24] Honey, P., & Mumford, A. (2006). The Learning Styles Questionnaire. England and Wales: Peter Honey Publications.
- [25] Hsueh-Jui, L. (2008). A Study of the Interrelationship between Listening Strategy Use, Listening Proficiency Levels, and Learning Style. *Arecls*, 5, 84–104.
- [26] Jafari, K., & Hashim, F. (2012). The effects of using advance organizers on improving EFL learners' listening comprehension: A mixed method study. *System*, 40(2), 270–281. <https://doi.org/10.1016/j.system.2012.04.009>.
- [27] Jafari, M., & Sadeghi, N. (2015). The Impact of Learning Style Preferences on Foreign language Achievement : A Case Study of Iranian EFL Students. *Procedia - Social and Behavioral Sciences*, 171, 754–764. <https://doi.org/10.1016/j.sbspro.2015.01.188>.
- [28] Kelm, O. R., & Horwitz, E. K. (2006). Listening comprehension in the foreign language classroom: The cognitive receptive processes in the development of Spanish phonological perception. PhD dissertation, The University of Texas at Austin.
- [29] Kolb, A. Y., & Kolb, D. a. (2005). The Kolb Learning Style Inventory — Version 3 . 1 2005 Technical Specifications. LSI Technical Manual. [https://doi.org/10.1016/S0260-6917\(95\)80103-0](https://doi.org/10.1016/S0260-6917(95)80103-0).
- [30] Mansur HR. (2013). Mengenal Gaya Belajar Peserta Didik. Sulawesi Selatan. Retrieved August 20, 2015, from http://www.lpmpsulsel.net/v2/attachments/259_MENGENAL_GB_PESERTA_DIDIK.pdf.
- [31] McKagan, S., Sayre, E., & Madsen, A. (2017). Normalized gain: What is it and when and how should I use it? Retrieved July 30, 2017, from <https://www.physport.org/recommendations/Entry.cfm?ID=93334>.
- [32] Moradi, K. (2013). The Impact of Listening Strategy Instruction on Academic Lecture Comprehension: A Case of Iranian EFL Learners. *Procedia - Social and Behavioral Sciences*, 70, 406–416. <https://doi.org/10.1016/j.sbspro.2013.01.078>.
- [33] Nunan, D. (1994). Research methods in language learning. Cambridge and New York: Cambridge University Press.
- [34] Ocepek, U., Bosnić, Z., Nančovska Šerbec, I., & Rugelj, J. (2013). Exploring the relation between learning style models and preferred multimedia types. *Computers and Education*, 69, 343–355. <https://doi.org/10.1016/j.compedu.2013.07.029>.
- [35] Palmer, E. (2014a). Teaching the Core Skills of Listening and Speaking. USA: ASCD publications. <https://doi.org/10.1007/s13398-014-0173-7.2>.
- [36] Rahimi, M., & M. Katal. (2013). The Impact of Metacognitive Instruction on EFL Learners' Listening Comprehension and Oral Language Proficiency. *The Journal of Teaching Skills (JTLS)*, 5(2), 69–90.
- [37] Rost, M. (2011). Teaching and Researching Listening (2nd ed.). London: Longman Pearson Education.
- [38] Sarandi, H. (2010). Content related support and listening comprehension: Some limitations. *Procedia - Social and Behavioral Sciences*, 2(2), 5605–5611. <https://doi.org/10.1016/j.sbspro.2010.03.914>.
- [39] Selamat, S., & Sidhu, G. K. (2013). Enhancing Listening Comprehension: The Role of Metacognitive Strategy Instruction (MetSI). *Procedia - Social and Behavioral Sciences*, 90(InCULT 2012), 421–430. <https://doi.org/10.1016/j.sbspro.2013.07.111>.
- [40] Serri, F., Boroujeni, A. J., & Hesabi, A. (2012). Cognitive, Metacognitive, and Social/Affective Strategies in Listening Comprehension and Their Relationships with Individual Differences. *Theory and Practice in Language Studies*, 2(4), 843–849. <https://doi.org/10.4304/tpls.2.4.843-849>.
- [41] TCM. (2017). VAK learning styles questionnaire. Retrieved August 4, 2017, from <https://www.trainingcoursematerial.com/free-assessment-tools/vak-learning-styles-questionnaire-quiz>.
- [42] Vandergrift, L., & Goh, C. C. . (2012). Teaching and Learning Second Language Listening: Metacognition in Action (Vol. 40). New York: Rou. <https://doi.org/10.1016/j.system.2012.10.004>.
- [43] Vasileva-Stojanovska, T., Malinovski, T., Vasileva, M., Jovevski, D., & Trajkovik, V. (2015). Impact of satisfaction, personality and learning style on educational outcomes in a blended learning environment. *Learning and Individual Differences*, 38, 127–135. <https://doi.org/10.1016/j.lindif.2015.01.018>.
- [44] Xu, W. (2011). Learning Styles and Their Implications in Learning and Teaching. *Theory and Practice in Language Studies*, 1(4), 413–416. <https://doi.org/10.4304/tpls.1.4.413-416>.



Dodi Mulyadi was born in Ciamis, Indonesia. He is a Ph.D. candidate in Language Science in TEFL at State University of Semarang, Indonesia. He got MA in English Education. His main research interests are ELT, listening strategies, and ESP. He has taught listening courses for EFL Student Teachers since 2010 at University of Muhammadiyah Semarang.

He is a member of TEFLIN (Teaching English as Foreign Language Indonesia) since 2015.



Dwi Rukmini was born in Semarang, Indonesia. She is a Professor of English Education at the English Education Program, State University of Semarang, Indonesia. She holds Ph.D. in Language Science and MA in English Education. She has research interests in ELT, writing, and Discourse Analysis. She is a senior supervisor for undergraduates and postgraduates.



Issy Yuliasri was born in Klaten, Indonesia. She is a lecturer of English Department of State University of Semarang.

She is also a member of TEFLIN Board, Indonesia. Her research interests are ELT and Translation. She contributed in writing of *Alice in a World of Wonderlands: the Translation of Lewis Carroll's Masterpiece*, Oak Knoll Press, 2015.