

An Analysis of Learners' Person Knowledge Factor and Its Relationship with Listening Achievement

Nita Maya Valiantien

myvaliantien@fib.unmul.ac.id

English Literature Department, Faculty of Cultural Science
Mulawarman University
Samarinda, Indonesia

Abstract. This paper is presented to give insight related to the relation between metacognitive awareness towards students' achievement in intensive listening. It also attempts to give additional information about the role of person knowledge factor towards learners' achievement in intensive listening. Specifically, there are two research problems that the author tries to cover. The first problem is to recognize the relation between the overall students' metacognitive awareness score and students' listening achievement. The second problem is to see how person knowledge factor as one of the five factors constructing metacognitive awareness affects students' listening achievement. Using quantitative approach, the author investigated 112 students of English literature study program from four classes enrolled in intensive listening course. Students' metacognitive awareness in listening was explored by using *Metacognitive Awareness Listening Questionnaire (MALQ)* which consists of 21 statements that require the students to give respond using 6 points scale. Meanwhile, students' listening achievement were documented from their final term score in intensive listening course. The findings of this present research are in line with the previous studies which suggest that metacognitive awareness plays significant role towards students' listening achievement. After analyzing the data from the participant, the results show that in general there is a significant relation between the overall score of metacognitive awareness toward students' achievement. Specifically, the statistics concerning person knowledge factor and its relation towards students' listening achievement also shows positive and significant result which can be a consideration to encourage the right activities toward the factor.

Keywords : intensive listening, metacognitive awareness, *Metacognitive Awareness Listening Questionnaire (MALQ)*, person knowledge

1 Introduction

There are some common problems faced by the learners of listening skill. Flowerdew and Miller (1992) noted some problems in listening to academic lectures are the fast speed of delivery, new terminology and concepts, difficulties in concentrating, and problems related to the physical environment. Another problem is quite surprising because actually learners can also feel tired with listening practice even in a situation where they are interested with the material because most of the activities in listening requires a huge amount of effort to follow the meaning. Consequently, these learners tend to become worried if they cannot understand a particular word or phrase and they will be discouraged by the failure (Gilakjani and Ahmadi, 2011). For EFL students, such common problems they experienced in learning listening can lead them to have more negative believe about their capabilities. As a result, this believe in turn may give them feeling of less confidence and grow more anxiety when practicing listening. Instead, learning language requires the students to have more self-efficacy. According to Bandura (1994), self-efficacy is the way people believe their own capabilities to organize and execute the courses of action required to manage prospective situations. In language learning, Graham and Macaro (2008) have discovered some the relationship between self-efficacy and learning strategies. Learners who were reported to have greater level of self-efficacy are those who can take more control over the listening task that they have. In addition, it was also found that learners with better self-efficacy can understand more about the strategies that appropriate to them and can apply the strategies more successfully in the process of listening comprehension

The self-efficacy itself has been involved as one of the factors that build metacognitive awareness. To improve listening skill, metacognitive awareness has been suggested by some experts as an aspect that can assist learners to improve the skill (Vandergrift and Tafaghodtari, 2010; Goh & Hu, 2013). found strong relationship between students' scores in the MALQ and their score in the test of listening performance. This finding indicated that having metacognitive awareness is one of the factors that may help students to have better listening performance. Gilakjani and Ahmadi (2011) also believed that when students are made aware of the factors that affect listening, the levels of listening, and the components of the listening process, they are more likely to recognize their own listening abilities and engage in activities that prepare them to be effective listeners. found that if the students performed better in the listening test were also the ones who reported greater confidence and lower anxiety (Vandergrift et al., 2006; Zeng and Cheng 2018). Goh (2018) also believes that by allowing the learners to improve their metacognitive awareness about both top-down and bottom-up listening, teachers will help them expose more of their own cognitive and learning processes.

Up to recent years, studies aimed to find the benefit of having metacognitive awareness in listening have been conducted, for instances by Yeganeh (2013);Goh and Hu (2013); Li (2013) ; Alm (2013); Rahimirdad and Shams (2014); Al-Alwan, Assahfeh, and Al-Shboul (2013); Zeng and Goh (2015). Even though they explored different subjects and variables, these studies correspondingly suggest that metacognitive awareness also plays important role to facilitate learners improving their listening performance.

In relation to the importance of self-efficacy in listening, it is found that metacognitive awareness also includes this matter in one of its factors, that is person knowledge factor. This factor is one of five factors that construct metacognitive awareness in listening. This factor represents learners' perception and believe about L2 listening which can lead to their self-efficacy. Based on the previous findings about the importance of metacognitive awareness and self-efficacy in learning listening, it is motivating to analyze

further about learners' person knowledge and its relationship with students' achievement. Consequently, this paper aims to answer the following questions:

How is the relation between the overall students' metacognitive awareness score and students' listening achievement?

How do the person knowledge factor as one of the five factors constructing metacognitive awareness affects students' listening achievement?

In general, this paper contributes in a way that it supports the previous findings which promote the importance of metacognitive awareness in listening practice. Specifically, it gives specific attention for person knowledge element and its role toward learners' listening achievement.

2 Methodology

This research applied descriptive quantitative design since the purpose of this study is to gain information about students' metacognitive learning strategies awareness through numerical form. As Fraenkel, Wallen & Hyun (2012: 188) proposed that the data belongs to quantitative "when the variable being studied is measured along a scale that indicates how much is the variable is present". This research attempted to find the relationship between metacognitive awareness with students' listening achievement and the relation between person knowledge with the achievement. It implemented correlational research since its purpose is to clarify our understanding of important phenomena by identifying relationships among variables (Fraenkel and Wallen, 2006). The second semester students at English literature study program were the participants of this study. They were asked to join this research because in this semester they learned intensive listening course. The total number of the participants was 112.

Vandergrift's Metacognitive Awareness Listening Questionnaire (MALQ) is the research instrument used in this study. The questionnaire contains 21 items that assesses language learners' awareness and perceived use of listening strategies. Each question is rated on a six-point Likert scale rating indicating agreement (1 = strongly disagree, 2 = disagree, 3 = partially disagree, 4 = partially agree, 5 = agree, and 6 = strongly agree) without a neutral point so that respondents could not hedge.

MALQ consists of five subscales including problem-solving (6 items), planning and evaluation (5 items), mental translation (3 items), directed attention (4 items), and person knowledge (3 items). For 18 items, the Likert-scale points chosen by the participants will be coded as their scores for the items. However, for the remaining three items (items number 3 and 8 for person knowledge, and item number 16 for directed attention), the code was reversed (Vandergrift et al., 2006).

2.1. Finding and Discussion

The findings describe the relation between students' listening achievement with MALQ in general and with person knowledge factor in specific. The author begins with the general description of responses toward the variables in MALQ. Following this description, the findings related to the relationship between metacognitive awareness which include five constructing factors and students' achievement in listening are elaborated. Subsequently, the specific relation between person knowledge and listening achievement is presented and as the final part of this chapter is the discussion concerning the findings

Initially, the responds from 112 the participants were presented using descriptive statistics analysis to show general description of the variables involved in this research. The variables include students' final score (FS) as dependent variable and independent variables which cover the score of metacognitive awareness in listening (MAL) along with and the five constructing factors in MALQ: directed attention (DA), mental translation (MT), planning evaluation (PE), problem solving (PS), and person knowledge (PK). The statistics is presented in Figure 1.

Variables	Obs.	Minimum	Maximum	Mean	Std. Deviation
Directed Attention	112	2.00	6.00	4.7433	0.65283
Mental Translation	112	1.00	5.67	2.6213	0.90558
Planning Evaluation	112	2.20	6.00	4.5804	0.66844
Problem Solving	112	1.00	6.00	4.8139	0.71394
Person Knowledge	112	1.33	5.67	2.8720	0.89164
MAL	112	2.91	4.94	3.9260	0.31721
FS	112	46.90	90.70	72.1000	10.28264

Figure 1. Descriptive statistics of variables

The figure presents the minimum and maximum score for each variable and the mean score which was calculated from the whole score of each variable based on the responses of the participants. For students' achievement (FS), the minimum score recorded from the students' final test score was 46.90 while for the maximum is 90.70. Based on the range of the score, the mean score for students' achievement is 72.1000 for 112 students that participated in this study. The next information is related to the score of metacognitive awareness in listening (MAL) along with the five constructing factors in MALQ: directed attention, mental translation, planning evaluation, problem solving, and person knowledge. Related to MAL, which was developed from the average score of the five factors in the MALQ, the table shows that the score of participants' metacognitive awareness in listening was ranged between 2.91 as the minimum score and 4.94 as the maximum score. From this range of score, the average score for the whole participants was 3.9260. This score, 3.9260 on a six-point scale according to Goh and Hu (2013) indicated that the participants reported a moderate level of strategy use and confidence regarding listening.

Specifically, for directed attention variable, it was found that the responses were varied from 2.0 as the minimum score up to 6.00 as the maximum score with the mean score is 4.7433. Related to mental translation, it was found that from the overall responses, the minimum score for mental translation is 1.00 and the maximum is 5.67 with mean score 2.6213. In planning and evaluation, the minimum score is 2.20 and for the maximum score is 6.00 with overall responses mean score is 4.5804. In terms of the score for problem solving, the data gathered from the participants show that the minimum score for this factor is 1.00 with maximum score 6.00 and this leads to the mean score 4.8139. For the last independent variable, person knowledge, the participants' minimum score is 1.33 and the maximum score from the response is 5.67 with mean score 2.8720. Based on the information presented in the table, generally the data gathered from the responses of the participants are in normal distribution since the standard deviation is lower than the mean score of each variable.

Before conducting further analysis on how the factors in MALQ relate with students' listening achievement, the multicollinear test was applied to see if there is relation between each factor constructing metacognitive awareness in listening. The results of the test are

presented in the following figure which indicated that there is no relation between each five factors.

Variables	Directed Attention	Mental Transl	Planning Evaluation	Problem Solving	Person Knowledge
Directed Attention	1.000				
Mental Transl	-0.372**	1.000			
Planning Evaluation	0.415**	-0.309**	1.000		
Problem Solving	0.468**	-0.393**	0.523**	1.000	
Person Knowledge	-0.208*	0.207*	-0.262**	-0.190*	1.000

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

Figure 2. Correlation Matrix of factors constructing metacognitive awareness in listening

The figure gives us information that there was no relation between each factor (the relation between each factor is lower than 0,90). Therefore, it indicates that regression toward these factors are possible to be applied since there is no indication of multicollinear between each factor which construct the metacognitive awareness in listening.

To recognize the relationship between metacognitive awareness in listening and students' listening achievement, the researchers analyzed the overall scores of MALQ and the scores of their final test in intensive listening course using regression analysis. The result of the analysis revealed that there was a significant relationship between metacognitive awareness and students' listening achievement as shown in Figure 3.

The first part of the figure (model 1) presented the statistical measures of the relation between the metacognitive awareness and listening achievement. Specifically, the metacognitive awareness in this research was examined from the participants' overall score of metacognitive awareness using MALQ, while for the listening achievement, it was recorded from participants' score of their final test in intensive listening course.

Variables	Dependent variable: FS							
	(1)				(2)			
	Unstandardized Coefficients	Std. Error	T	Sig.	Unstandardized Coefficients	Std. Error	T	Sig.
Intercept	29.6225	11.471	2.581	0.011	33.1023	10.993	3.011	0.003
MAL	10.820**	2.9134	3.714	0.000				
Directed Attention					1.379	1.5860	0.876	0.386
Mental Translation					2.418*	1.0832	2.238	0.028
Planning Evaluation					-3.464*	1.5934	-2.172	0.032
Problem Solving					7.003**	1.5478	4.528	0.000
Person Knowledge					2.881**	1.0235	2.815	0.006
Obs.	112				112			
R	0.334				0.492			
R-Square	0.111				0.242			
F	13.791				6.770			
Sig. F	0.000				0.000			

Figure 3. MALQ score and learners' listening final score

The r-square or known as coefficient of determination was applied to measure how far the model can explain the variation of dependent variable. The range of r-square is between 0 to 1 ($0 \leq R^2 \leq 1$). In this research, the value of r-square was 0,334. The value indicated that students' listening achievement as dependent variable was 33,4 % affected by metacognitive awareness as independent variable. Based on this data, it can be concluded that dependent variable was 66,6 % affected by other variables which were not included in this research.

This research also applied F-test to examine whether metacognitive awareness (independent variable) involved in the model has simultaneous effect towards students' listening achievement (dependent variable). From the data in Table 4.3, the F value is 13.791 with significance value 0,000 which is lower than 0.05 ($0,000 < 0,05$). This result suggested that regression model can be used to predict the dependent variable (students' listening achievement). In other words, the independent variable (metacognitive awareness) simultaneously affected student's listening achievement and has shown appropriate model to be applied.

Partial hypothesis test (T-test) was specifically applied to examine how significant the effect of independent variable to dependent variable. Based on the result of regression analysis in Table 4.3, the independent variable (metacognitive awareness) has t value 3.714 with the level of probability $0,000 < 0,05$ which means in partial, metacognitive awareness suggests positive and significant relation to student's listening achievement.

Vandergrift et al (2006) have categorized the factors that construct metacognitive awareness of listening that include problem solving (PS), planning and evaluation (PE), mental translation (MT), directed attention (DA) and person knowledge (PK). Accordingly, this research also aimed to examine how each constructing factor is related to students' listening achievement. In the second part of the table (model 2), the effects of problem solving (PS), planning and evaluation (PE), mental translation (MT), directed attention (DA) and person knowledge (PK) as independent variables toward students' listening achievement as dependent variable were measured. The effects were discussed using similar statistical measures applied in model 1.

The value of coefficient of determination (r-square) from the five factors as the independent variables was 0.492, which was in the appropriate range of r-square ($0 \leq R^2 \leq 1$). It means that the independent variables affect the result of students' achievement for 49,2 %. For the rest 50,8%, the effect came from other variables separate from this research.

From the data in Table 4.3, the F statistical value for the five factors was 6.770 with similar significance value in model 1 that is 0,000 (lower than 0,05). This result suggested that regression model can be used to predict the dependent variable (students' listening achievement). In other words, the independent variables (five factors constructing metacognitive awareness in listening) simultaneously affected student's listening achievement and have shown appropriate model to be applied.

T-test was applied to see the significant effect from five constructing factors as independent variables towards students' achievement. The result of statistical measure in this research showed that the four factors have positive impact to student's achievement. Three of them: mental translation (MT), problem solving (PS), and person knowledge (PK) showed positive and significant result, while directed attention (DA) evidenced positive and non-significant outcome.

In specific, the statistics measure for mental translation found out that its coefficient was 2.418 with t value 2.232 and the probability level $0.028 < 0,05$. Such output provided information that in partial, mental translation gave positive and significant effect for student's achievement. The statistics for problem solving indicated that it partially constructed student's

achievement in positive and significant way. The coefficient for problem solving is 7.003 with t value 4.528 and probability level $0,000 < 0,05$. Similarly, person knowledge in partial also contributed positive and significant effect to students' achievement since it was found that the coefficient is 2.881 with t value 2.815 and probability level $0,006 < 0,05$. For directed attention factor, it was found that this factor in partial demonstrated positive and not significant effect toward students' achievement since the coefficient is 1.379 and t value 0.870 with the probability level 0.38, which is higher than 0,05 ($0.386 > 0,05$).

For the last factor, planning and evaluation, the result indicated different result with the other four factors since the statistical measure showed that it has negative and significant effect toward students' achievement. In specific, the coefficient for planning and evaluation factor in this research was -3.464 with t value -2.174 and probability level $0.032 < 0,05$.

As it has been measured, the person knowledge factor shows positive and significant relation with students' listening achievement. This evidence indicates that the students who show high score in person knowledge factor also tend to show that they are able to achieve high score in listening skills. From 21 items in MALQ, three items: item 3 ("I find that listening is more difficult than reading, speaking, or writing in English("I feel that listening comprehension in English is a challenge for me"), and item 15 ("I don't feel nervous when I listen to English"), are measured to gain the information about students' person knowledge.

The positive and significant results also support that the practice of having metacognitive awareness will affect students' achievement in listening. In addition, understanding that there is a person knowledge factor that can influence the achievement will bring new insight about what the students can do related to their individual perception and attitude to improve their listening skill. By knowing their attitude toward the three items, students can take benefit from person knowledge factor to strengthen their skill in listening. Since items 3 and 8 are presented in negative statements, students are expected to have lower point which shows less anxiety. The more the students know about the items measured in person knowledge, the better their strategy to develop self-efficacy and good perception related to listening skill.

3 Conclusions

Metacognitive awareness brings significant relation to students' achievement which means that this awareness should be more encouraged to the students. As one of the factors in metacognitive awareness, person knowledge gives evidence that it has positive and significant relation with students' achievement in listening skill. As a result, allowing students to have awareness about themselves is as important as giving them various experience in listening activities.

References

- [1.] Al-Alwan, A., Assahfeh, S., and Al-Shboul, Y. (2013). EFL Learners' Listening Comprehension and Awareness of Metacognitive Strategies: How Are They Related? *International Education Studies*, 6 (9), 31-39.
- [2.] Alm, A. (2013). Extensive listening 2.0 with foreign language podcasts. *Innovation in Language Learning and Teaching*, 6 (3), 266-280. <http://dx.doi.org/10.1080/17501229.2013.836207>
- [3.] Bandura, A. (1994). Self-Efficacy. *University of Kentucky*. Retrieved from: <https://www.uky.edu/~eushe2/Bandura/BanEncy.html>
- [4.] Flowerdew, J and Miller, L (1992). Student perceptions, problems and strategies in second language lecture comprehension. *RELC Journal*, 23(60), 60-80.
- [5.] Fraenkel, J.R., Wallen, N.E. & Hyun, H.H. (2012). *How to design and evaluate research in education (Eighth edition)*. New York: McGraw-Hill.

- [6.] Gilakjani, A.P. & Ahmadi, M.R. (2011). A Study of Factors Affecting EFL Learners' English Listening Comprehension and the Strategies for Improvement. *Journal of Language Teaching and Research*, 2(5), 977-988.doi:10.4304/jltr.2.5.977-988
- [7.] Goh, C.C.M. (2018). Metacognition in Second Language Listening. In The TESOL Encyclopedia of English Language Teaching (eds J.I. Liantas, T. International Association and M. DelliCarpini). <https://doi.org/10.1002/9781118784235.eelt057>
- [8.] Goh,C.C.M and Hu, G. (2013) Exploring the relationship between metacognitive awareness and listening performance with questionnaire data. *Language Awareness*,1-20. <http://dx.doi.org/10.1080/09658416.2013.769558>
- [9.] Graham, S., & Macaro, E. (2008). Strategy instruction in listening for lower-intermediate learners of French. *Language Learning*, 58, 747-783.
- [10.] Li,W. (2013). A Study of Metacognitive Awareness of Non-English Majors in L2 Listening. *Journal of Language Teaching and Research*, 4(3) ,504-510.
- [11.] Rahimi, M. and Katal, M. (2012). Metacognitive listening strategies awareness in learning English as a foreign language: a comparison between university and high-school students. *Procedia - Social and Behavioral Sciences*, 31, 82 – 89
- [12.] Rahimirdad, M. and Shams, M.R. (2014) The Effect of Activating Metacognitive Strategies on the Listening Performance and Metacognitive Awareness of EFL Students. *International Journal of Listening*, 28 (3), 162-176 DOI: [10.1080/10904018.2014.902315](https://doi.org/10.1080/10904018.2014.902315)
- [13.] Vandergrift, L. & Tafaghodtari,M.H.(2010). Teaching L2 Learners How to Listen Does Make a Difference: An Empirical Study. *Language Learning* 60(2), 470-497. <http://dx.doi.org/10.1111/j.1467-9922.2009.00559.x>
- [14.] Vandergrift, L. Goh, C.C.M., Mareschal, C., and Tafaghodtari, M. H. (2006). The metacognitive awareness listening questionnaire (MALQ): Development and Validation. *Language Learning*, 56(3), 431-462
- [15.] Yeganeh, M.T. (2012). Metacognitive listening strategies awareness in monolingual versus bilingual EFL learners. *Procedia - Social and Behavioral Sciences*, 70, 1787 – 1793
- [16.] Zeng, Y. & Goh, C. 2015. Learners' Level of Metacognitive Awareness and Its Relationship with Listening Performance, *2015 IEEE 15th International Conference on Advanced Learning Technologies*, 345-349.DOI 10.1109/ICALT.2015.79
- [17.] Zheng, Y., and Cheng, L. (2018) How does anxiety influence language performance? From the perspectives of foreign language classroom anxiety and cognitive test anxiety. *Lang Test Asia*, 8 (13), 1-19.doi: <https://doi.org/10.1186/s40468-018-0065-4>