

*Full Length Research Paper*

# Examining the relation between metacognitive understanding of what is listened to and metacognitive awareness levels of secondary school students

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The purpose of the study is to reveal the relation between the Metacognitive Understanding of What is Listened and the Metacognitive Awareness Levels of Secondary School Students. 210 students, who were at 5, 6, 7, and 8th Grades studying at Turgut Ozal Secondary School in Bulanik County of the city of Mus, participated in the study. The Metacognitive Understanding of What is Listened Awareness Scale, which was developed by Katrancı and the Metacognitive Awareness Scale, which was developed by Sperling whose validity and reliability studies were conducted by Karakelle and Sarac, in Turkey were used as data collection tool in the study. The Relational Scanning Model was used in the study, and the data were analyzed by using the SPSS Windows 22.0 Program. According to the data obtained in this study it was concluded that the Metacognitive Understanding of What is Listened levels and the Metacognitive Awareness levels were high. The Metacognitive Understanding of What is Listened to and the Metacognitive Awareness Levels of the Students showed no significant differences in terms of the education levels of the parents and the socio-economic levels of the families. On the other hand, the results were in favor of the girls in terms of the gender variable. According to the grade variable, it was observed that as the grades of the students at schools increased, the Metacognitive Understanding of What is Listened to and the Metacognitive Awareness Levels of the Students decreased. The results of the study have been discussed in the light of the literature findings, and recommendations have been made.

**Key words:** Metacognitive awareness, metacognitive listening, understanding.

## INTRODUCTION

It is possible to claim that listening skill is needed more when compared with the other basic language skills. The

very first skill of an individual used in the uterus is the listening skill. After the individual is born, the first skill is,

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again, the listening skill. It is the first mother tongue activity. People acquire most of the information by listening before they start school (Ozdemir, 1987). The listening skills of people develop without receiving a regular education and training, and continue to develop in school years together with other language skills. However, the other language skills depend on the development of the listening skill (Celenk, 2005).

The mother tongue is also acquired with the listening skill. For this reason, the listening skill has a separate importance from this viewpoint.

The listening skill is defined in various ways: It is the skill of understanding efficiently and responding in verbal communication process (Johnson, 1951: 58). It is paying attention to the words spoken, and understanding them as well as the voices (Hampleman, 1958: 49). It is an active process that involves hearing, understanding and integrating what is heard with the background knowledge and responding when necessary (Wolff et al., 1983). It is a language skill which we use every day to make sense of what is going around us without thinking (Rost, 1994: 1). It is eliminating the words that are heard in order to focus on the message; it is beyond mere hearing (Jalongo, 1995: 13). It is stopping the mind which wanders around various subjects like speaking and moving, locking the mind on what is told by the speaker (Moore, 120). It is a psychological process which starts with becoming aware of the sounds and the images -if there are any- and paying attention to them, and which ends with the recognition, remembrance and making sense of certain audio signs (Ergin and Birol, 2000: 115). Listening is the activity of being able to understand the verbal messages intended by a speaker or by a reader (Ozbay, 2005: 11). Listening is a complex and multiple-stage process where the spoken language is converted into meaning in the mind (Narr. by Akyol, 2010: 1).

The most important point in listening skill, which is accepted as the specific struggle of the person to understand what is heard and keeping this struggle or the effort until the end of the speech (Sever, 2000; Gogus, 1978), is the fact that not every word or utterance is handled under the title of listening skill. Requiring specific attention and continuance of this attention until the end of the speech are other issues that are important in listening skills. The listening skill is used unconsciously by the individuals until school years. However, this skill is trained in school years, and becomes a skill that is used consciously. The listening skill, which will influence the success levels of the students in their academic lives and daily lives, must be used consciously. The listening skill has an important place in every place and time in their lives, and has become more important in our time, which is considered as the communication age. With the advancement of technology, the need for the listening skill has grown more. This development in communication has made human beings become more active.

Individuals have to take the information, which they obtain in the listening process, which is beneficial for them, and let go the other ones; and behave in a critical manner in this process, establish a good communication in social life, and complete their education successfully in order not to fall in the trap set by the speaker (Dogan, 2007).

The individuals who start to take listening training begin to comprehend that listening and hearing are two different concepts. Individuals who understand this difference deduce results from the elements they listen to because, a listening process which does not end up in understanding, is not a successful one. For this reason, the issue that is necessary to know by the individuals who receive listening training in their school lives is the fact that listening has to end up with understanding. This is the main duty of a Turkish language teacher. Students who receive a good listening education in Turkish language classes will be at a good level in terms of academic success in Turkish language classes. This situation will also show itself in other languages.

Listening is a skill that provides that the communication process ends up with understanding, and that this process is completed with understanding the other party or parties successfully. Students with improved listening skills become aware of this skill by putting the items that are listened/followed in the right order, classifying, associating and criticizing them (MEB, 2006).

The listening activity ending up with understanding, the person's questioning what s/he listens to, and reflecting this to the Turkish language classes is only possible by having a good metacognitive awareness level. Metacognitive awareness is a topic which is handled frequently in our country and is about to receive the statue it deserves. The awareness in educational life brings success to the individual. It is considered that individuals whose metacognitive awareness levels are good will try to keep their goals at a high level both in their daily lives and in Turkish language classes in their educational lives.

Human beings receive most of their knowledge by using the listening skill. The information obtained by people and their using this information is called the cognitive process. However, the individuals questioning themselves about the cognitive process, organizing their knowledge and keeping it may be called awareness. In order to define this awareness, it is a must to know metacognition concept (Cakiroglu, 2007). Metacognition concept, which was mentioned by Flavell (1970), may be understood as the awareness of an individual of the cognitive process, and using the skill to control this process (Akin *et al.*, 2007). According to Flavell (1985), metacognition is "the knowledge of one's own cognitive processes and the use of this knowledge to control the cognitive process". According to Schunk (2009, 184), metacognition is "the upper-level cognition". Metacognition is the ability of one's controlling his/her

own cognitive structure and potential, and controlling the acquisition process of the knowledge” (Woolfolk, 2005).

Metacognition may also be understood as the full control of the individual not only over the result but also over the learning process as a whole, and his/her being aware of whatever s/he does. Metacognition does not focus on the result but focuses on the process. An individual with a metacognition skill manages the process by knowing what and how s/he has learnt; and at the end of the process, makes an evaluation about himself/herself (Doganay, 1997). Metacognitive awareness requires that the individual behaves in a planned manner in every stage of the learning process and chooses his/her way, becomes aware of his/her missing points and tries new methods, and criticizes himself/herself and the process (Ozsoy, 2007).

Metacognition is among the biggest factor that ensures that the learning process ends up with success. For this reason, individuals must question himself/herself as follows and answer them (Akin, 2006: 43):

*What do I know about the subject I am going to listen to? Do I know what I need? How much time will I need to listen to this text? which listening strategies can I make use of while listening to this text? Have I understood what I have seen and listened to? If I make a mistake during the listening process, how can I notice it? If the plan I have made is not sufficient in bringing success to me, how can I renew it? How can I measure my success?*

Metacognitive awareness is the selection of the best one among the strengths of an individual after s/he notices them. It is a process that tells the individual to activate himself/herself without an external stimulant and makes the individual know where, how and why to use his/her power. The concept of metacognition, which influences the success in school life, is a thinking skill that makes itself be felt constantly and that makes people successful in every aspect of life (Baltas, 2004). Sahin and Tunca (2014) conducted a study and reported that, as it is stated below, the skills that are expected to appear in an individual with metacognition are the awareness of the individual of himself/herself and the learning ways, behaving consciously, self-control, planning, observing him/herself, organizing oneself, and assessing oneself (Doganay, 1997). When the studies conducted so far are examined in general terms it is observed that metacognitive skills increase success (Cakiroglu, 2007; Ozsoy, 2008) and motivation (Demir-Gulsen, 2000), and develop the attitudes on classes in a positive manner (Kucuk-Ozcan, 2000; Gelen, 2004), develop the self-control skills, develop the obtaining the knowledge ways, and ensure that the knowledge is used (Ciardiello, 1998; Schoeffler, 2012) and develop problem-solving skills (Howard et al., 2000; Rezvan et al., 2006). Cross And Paris (1988) conducted a study and examined the relation between the metacognition of children and

understanding what they read, and reported that students who used the metacognitive skills better had increased success rates. Batha and Carroll (2007) conducted a study with the title “The Contribution of Teaching Based on Metacognitive Strategies to Decision-making Process” and reported that there was a positive relation between the metacognition and decision making, and that the metacognitive strategy training was influential on decision-making process. Katrancı and Yangin (2013) conducted a study on metacognitive listening and reported that: metacognitive listening expresses the *observing oneself strategies* used during the listening process. During listening, an individual using *observing oneself strategies* is prepared for the listening process, and assesses what s/he learns (Arnold and Coran, 2011: 13). Meanwhile, metacognitive listening strategies contribute to the understanding of what is read, and performing the listening goal (Stein, 1999: 47). Based on this, they claimed that it was possible to suggest that metacognitive strategies had positive influence on listening skills of students.

The individuals that are subject to listening training develop their metacognitive awareness levels by asking themselves questions and receiving good results. People then become aware of the real purpose of the listening training and listening process. People who act for this purpose become the active individuals in the process and also the successful ones at the end of the process. This is the most important way to achieve academic success both in Turkish language classes and in other classes. Those with higher *Listening Process Awareness Levels* eliminate what they listen in their daily lives and take only those that are beneficial for them. Individuals whose *understanding what is listened levels* are high may comprehend the purpose of the classes better than others. When the literature is examined, it is observed that, as Ozbay and Dasoz (2014) reported in their studies, the majority of the studies on metacognitive strategies focused on *understanding what is listened to* and on the listening in the process of acquiring a second language (Bozorgian, 2014; Rahimirad and Shams, 2014; Rahimi and Katal, 2013; Vandergrift, Goh and Mareschal, 2006; Vandergrift, 2005; Serri et al., 2012; Goh and Hu, 2013; Dabbagh and Noshadi, 2014). In this study, the influence of metacognitive awareness on listening in the mother tongue has been dealt with. It is considered that this will contribute to the literature in this way.

### **Purpose of the study**

The study purposes to determine the metacognitive *understanding levels of what is listened to* and *metacognitive awareness levels* of the students in Turgut Ozal Secondary School students in the County of Bulanik of the city of Mus; and revealing the relation between them. For this purpose, the answers to the following

questions have been sought:

1. What are the *Metacognitive Understanding of What is Listened to* levels and *Metacognitive Awareness* levels of the students?
2. What is the level of the influence of *Metacognitive Understanding What is Listened to* on *Metacognitive Awareness*?
3. Do the *Metacognitive Understanding of What is Listened to* levels and *Metacognitive Awareness* levels of the students show statistically significant differences according to gender?
4. Do the *Metacognitive Understanding What is Listened to* levels and *Metacognitive Awareness* levels of the students show statistically significant differences according to the grades they are in?
5. Do the *Metacognitive Understanding What is Listened to* levels and *Metacognitive Awareness* levels of the students show statistically significant differences according to the educational status of their fathers?
6. Do the *Metacognitive Understanding What is Listened to* levels and *Metacognitive Awareness* levels of the students show statistically significant differences according to the educational status of their mothers?
7. Do the *Metacognitive Understanding What is Listened to* levels and *Metacognitive Awareness* levels of the students show statistically significant differences according to the educational status of their socio-economic status?

## METHODOLOGY

In this study, the purpose is revealing the Metacognitive Understanding of What is Listened to and the Metacognitive Awareness Levels of Secondary School Students, whose socio-economic levels are good and who are at 5, 6, 7, and 8th Grades studying at Turgut Ozal Secondary School, in Bulanik County of the city of Mus. Gender, Class, socio-economic variables were used for this purpose. The relational scanning method has been made use of in the study. These models determine the existence and level of the changes between two or more variables (Karasar, 2015).

### The universe and the sampling of the study

The universe of this study consists of the 210 Secondary School Students, whose socio-economic levels are good and who are at 5, 6, 7, and 8th Grades studying at Turgut Ozal Secondary School, in Bulanik County of the city of Mus. The sampling consists of 210 students studying at 5, 6, 7, and 8th Grades.

### Data collection tools and their reliability

The Metacognitive Understanding of What is Listened Awareness Scale, which was developed by Katrançı (2012), consisting of 20 items was used as the data collection tool in the study to determine the Metacognitive Understanding of What is Listened levels of the

students. When the scale data were being evaluated, "1" point was given for the "Never" choice; "2" points for the "Sometimes" choice; and "3" points of the "Always" choice. The scale consists of 3 factors. It was observed that the *before listening factor Cronbach Alpha internal consistency coefficient* was 0.67; *during listening factor Cronbach Alpha internal consistency coefficient* was 0.76; and the *after listening factor Cronbach Alpha internal consistency coefficient* was 0.74. The total reliability coefficient of the scale is 0.89. In this study, the Understanding Behavior during Metacognitive Listening reliability coefficient alpha was 0.958; the Understanding Behavior after Metacognitive Listening reliability coefficient alpha was 0.889; and the General Understanding Behavior Reliability coefficient alpha was 0.950.

The Cronbach Alpha value of the Turkish Version of the Metacognitive Awareness Scale was 0.64. The scale was developed by Sperling et al. (2002) whose validity and reliability studies were conducted by Karakelle and Sarac (2007). The metacognitive awareness reliability coefficient for this study was alpha=0.969. The personal information form was used to examine the demographic properties of the students

### Statistical analysis of the data

The data obtained in the study were analyzed by using the SPSS (Statistical Package for Social Sciences) for Windows 22.0 program. The definitive statistical methods were also made use of in evaluating the data. The t-test was used in comparing the quantitative continuous data between two independent groups; and the One-Way Anova Test was used in comparing the quantitative continuous data among more than two independent groups. The Scheffe test was used as the supplementary post-hoc analysis to determine the differences after the Anova Test. The Pearson Correlation and Regression Analysis were applied among the continuous variables of the study.

## FINDINGS

In this part, the findings obtained with the analysis of the data collected with the scales from the students who participated in the study are given in Table 1.

The students were distributed as 45 (21.4%) 5; 68 (32.4%) 6; 48 (22.9%) 7; 49 (23.3%) 8th Graders. According to the gender variable, 127 of them were (60.5%) males, 83 (39.5%) were females. According to the father's educational status variable, 65 (31.0%) primary school graduates, 70 (33.3%) secondary school graduates, 55 (26.2%) high school graduates, 20 (9.5%) university graduates. According to the mother's educational status variable, 60 of them (28.6%) were not literate; 77 (36.7%) primary school graduates, 46 (21.9%) secondary school graduates; 19 (9.0%) high school graduates; 8 (3.8%) university graduates. According to the socio-economic status variable, 20 of them were (9.5%) very good, 12 (5.7%) good, 139 (66.2%) medium, and 39 (18.6%) were bad (Table 2).

The "Understanding Behavior during Metacognitive Listening" of the students who participated in the study was high ( $2.330 \pm 0.517$ ); the "Understanding Behavior after Metacognitive Listening" levels were high ( $2.325 \pm 0.484$ ); and the "General Understanding in Metacognitive

**Table 1.** Distribution of definitive characteristics of the students.

Variable	Groups	Frequency(n)	%
Class	5	45	21.4
	6	68	32.4
	7	48	22.9
	8	49	23.3
	Total	210	100.0
Gender	Male	127	60.5
	Female	83	39.5
	Total	210	100.0
Father's Educational Status	Primary School Graduate	65	31.0
	Secondary School Graduate	70	33.3
	High School Graduate	55	26.2
	University Graduate	20	9.5
	Total	210	100.0
Mother's Educational Status	Not Literate	60	28.6
	Primary School Graduate	77	36.7
	Secondary School Graduate	46	21.9
	High School Graduate	19	9.0
	University Graduate	8	3.8
	Total	210	100.0
Socio-Economic Level	Very Good	20	9.5
	Good	12	5.7
	Medium	139	66.2
	Bad	39	18.6
	Total	210	100.0

**Table 2.** Metacognitive understanding of what is listened to and metacognitive awareness level.

Variable	N	Ave.	Sd.	Min.	Max.
Understanding Behavior during Metacognitive Listening	210	2.330	0.517	1.000	3.000
Understanding Behavior after Metacognitive Listening	210	2.325	0.484	1.000	3.000
General Understanding in Metacognitive Listening	210	2.326	0.478	1.000	3.000
Metacognitive Awareness	210	3.434	0.996	1.440	5.000

Listening" was high ( $2.326 \pm 0.478$ ); and the "Metacognitive Awareness" levels were high ( $3.434 \pm 0.996$ ) (Table 3).

There is a high and positive relation between the Understanding Behavior after Metacognitive Listening and Understanding Behavior during Metacognitive Listening ( $r=0.856$ ;  $p=0.000<0.05$ ). There is a very high and positive significant relation between the General Understanding in Metacognitive Listening and Understanding Behavior during Metacognitive Listening ( $r=0.92$ ;  $p=0.000<0.05$ ). There is a very high and positive significant relation between the General Understanding in Metacognitive Listening and Understanding Behavior after Metacognitive

Listening ( $r=0.99$ ;  $p=0.000<0.05$ ). There is a weak and positive significant relation between the (Understanding Behavior during Metacognitive Listening and Understanding Behavior after Metacognitive Listening ( $r=0.485$ ;  $p=0.000<0.05$ ). There is a medium level positive significant relation between the Metacognitive Awareness and Understanding Behavior after Metacognitive Listening ( $r=0.512$ ;  $p=0.000<0.05$ ). There is a medium-level positive significant relation between the Metacognitive Awareness and General Understanding of what is Listened to ( $r=0.52$ ;  $p=0.000<0.05$ ) (Table 4).

The regression analysis which was conducted to determine the relation between the Understanding Behavior during Metacognitive Listening, the Understanding Behavior after Metacognitive Listening

**Table 3.** Relation between metacognitive understanding what is listened to and metacognitive awareness.

Variable		Understanding Behavior during Metacognitive Listening	Understanding Behavior after Metacognitive Listening	Metacognitive general understanding of What is Listened	Metacognitive Awareness
Understanding Behavior during Metacognitive Listening	r	1.000			
	p	0.000			
Understanding Behavior after Metacognitive Listening	r	0.856**	1.000		
	p	0.000	0.000		
Metacognitive General Understanding of What is Listened	r	0.920**	0.990**	1.000	
	p	0.000	0.000	0.000	
Metacognitive Awareness	r	0.485**	0.512**	0.520**	1.000
	p	0.000	0.000	0.000	0.000

**Table 4.** The effect of metacognitive understanding of what is listened to sub-dimensions on metacognitive awareness.

Dependent variable	Independent variable	$\beta$	T	p	F	Model (p)	R <sup>2</sup>
Metacognitive awareness	Constant	0.913	3.109	0.002			
	Understanding Behavior during Metacognitive Listening	0.336	1.519	0.130	38.363	0.000	0.263
	Understanding Behavior after Metacognitive Listening	0.747	3.159	0.002			

**Table 5.** The effect of metacognitive understanding of what is listened to on metacognitive awareness.

Dependent variable	Independent variable	$\beta$	T	P	F	Model (p)	R <sup>2</sup>
Metacognitive awareness	Constant	0.915	3.121	0.002	76.973	0.000	0.267
	Metacognitive understanding of what is listened to	1.083	8.773	0.000			

and the Metacognitive Awareness was found to be statistically significant ( $F=38.363$ ;  $p=0.000<0.05$ ). It was observed that the relation between the Understanding Behavior during Metacognitive Listening and the Understanding Behavior after Metacognitive Listening, as the determinant of the metacognitive awareness level (the power of being explanatory) was strong ( $R^2=0.263$ ). The Understanding Behavior during Metacognitive Listening influences the Metacognitive Awareness of the students ( $p=0.130>0.05$ ). The Understanding Behavior after Metacognitive Listening levels of the students increase the Metacognitive Awareness levels of them ( $\beta=0.747$ ) (Table 5).

The regression analysis, which was conducted to determine the relation between the *Understanding Metacognitive Listening General* and the *Metacognitive Awareness*, was found to be statistically significant ( $F=76.973$ ;  $p=0.000<0.05$ ). It was observed that the relation between the *General Understanding Metacognitive Listening* and the *Metacognitive Awareness* level, (the power of being explanatory) was

strong ( $R^2=0.267$ ). The *General Understanding Metacognitive Listening* levels of the students increase the *Metacognitive Awareness* level of the students ( $\beta=1.083$ ) (Table 6).

It was observed that there were no significant differences between the Understanding Behavior during Metacognitive Listening, Understanding Behavior after Metacognitive Listening, General Understanding Metacognitive Listening, and the Metacognitive Awareness levels of the students according to the education level of the fathers ( $p>0.05$ ) (Table 7).

It was observed that there were no significant differences between the Understanding Behavior during Metacognitive Listening, Understanding Behavior after Metacognitive Listening, General Understanding in Metacognitive Listening, and the Metacognitive Awareness levels of the students according to the education level of the mothers ( $p>0.05$ ) (Table 8).

It was observed that there were no significant differences between the Understanding Behavior during Metacognitive Listening, Understanding Behavior after

**Table 6.** The averages of metacognitive understanding what is listened to and metacognitive awareness level according to the mother's educational status.

Parameter	Group	N	Ave.	Sd.	F	P
Understanding Behavior during Metacognitive Listening	Illiterate	60	2.390	0.575	0.449	0.773
	Primary School Graduate	77	2.301	0.527		
	Secondary School Graduate	46	2.335	0.430		
	High School Graduate	19	2.305	0.567		
	University Graduate	8	2.175	0.292		
Understanding Behavior after Metacognitive Listening	Illiterate	60	2.390	0.516	0.583	0.675
	Primary School Graduate	77	2.308	0.517		
	Secondary School Graduate	46	2.312	0.404		
	High School Graduate	19	2.291	0.437		
	University Graduate	8	2.150	0.470		
General Metacognitive Understanding What is Listened	Illiterate	60	2.390	0.519	0.573	0.683
	Primary School Graduate	77	2.307	0.505		
	Secondary School Graduate	46	2.317	0.394		
	High School Graduate	19	2.295	0.455		
	University Graduate	8	2.156	0.419		
Metacognitive Awareness	Illiterate	60	3.522	0.987	0.409	0.802
	Primary School Graduate	77	3.466	1.006		
	Secondary School Graduate	46	3.285	0.864		
	High School Graduate	19	3.421	1.206		
	University Graduate	8	3.340	1.282		

Metacognitive Listening, General Understanding in Metacognitive Listening, and the Metacognitive Awareness levels of the students according to the socio-economic levels of the students ( $p>0.05$ ) (Table 9).

Upon the One-Way Variance Analysis (Anova), which was conducted to determine whether the averages of the *Metacognitive Awareness* points of the students who participated in the study differed according to the grades of the students, showed significant difference or not, the difference between the average points was found as being statistically significant ( $F=6.748$ ;  $p=0.000<0.05$ ). The post-Hoc analysis was conducted to determine the sources of the differences. The Metacognitive Awareness points of the 5th Graders ( $3.886 \pm 0.926$ ) was found as being higher than the Metacognitive Awareness points of the 6th Graders ( $3.459 \pm 0.896$ ). The Metacognitive Awareness points of the 5th Graders ( $3.886 \pm 0.926$ ) were found to be higher than those of the 7th Graders ( $3.417 \pm 0.990$ ). The Metacognitive Awareness points of the 5th Graders ( $3.886 \pm 0.926$ ) were found to be higher than those of the 8th Graders ( $2.999 \pm 1.032$ ). The Metacognitive Awareness points of the 6th Graders ( $3.459 \pm 0.896$ ) were found as being higher than those of the 8th Graders ( $2.999 \pm 1.032$ ). The Metacognitive Awareness points of the 7th Graders ( $3.417 \pm 0.990$ ) were found to be higher than those of the 8th Graders ( $2.999 \pm 1.032$ ).

Upon the One-Way Variance Analysis (Anova) which was conducted to determine whether the average points of the Understanding Behavior during Metacognitive Listening, Understanding Behavior after Metacognitive Listening and the General Understanding in Metacognitive Listening points varied according to the Grade variable, and the difference between the averages was not found to be statistically significant ( $p>0.05$ ) (Table 10).

The t-test was conducted to determine whether the averages of the Understanding Behavior during Metacognitive Listening points of the students showed significant differences according to the gender variable; the difference between the group averages was found to be statistically significant ( $t=-3.492$ ;  $p=0.001<0.05$ ). The Understanding Behavior during Metacognitive Listening points of the female students were ( $x=2.480$ ) higher than those of the males ( $x=2.232$ ).

The t-test was conducted to determine whether the averages of the *Understanding Behavior after Metacognitive Listening* points of the students showed significant differences according to the gender variable, the difference between the group averages was found to be statistically significant ( $t=-3.446$ ;  $p=0.001<0.05$ ). The *Understanding Behavior after Metacognitive Listening* points of the female students were ( $x=2.464$ ) higher than those of the males ( $x=2.234$ ).

**Table 7.** The averages of metacognitive understanding what is listened to and metacognitive awareness level according to the father's educational status.

Variable	Group	N	Ave.	Sd.	F	P
Understanding Behavior during Metacognitive Listening	Primary School Graduate	65	2.280	0.601	0.290	0.832
	Secondary School Graduate	70	2.354	0.481		
	High School Graduate	55	2.346	0.428		
	University Graduate	20	2.360	0.590		
Understanding Behavior after Metacognitive Listening	Primary School Graduate	65	2.260	0.574	0.614	0.607
	Secondary School Graduate	70	2.360	0.457		
	High School Graduate	55	2.337	0.381		
	University Graduate	20	2.380	0.519		
General Metacognitive Understanding What is Listened	Primary School Graduate	65	2.265	0.570	0.546	0.651
	Secondary School Graduate	70	2.359	0.447		
	High School Graduate	55	2.339	0.372		
	University Graduate	20	2.375	0.526		
Metacognitive Awareness	Primary School Graduate	65	3.549	1.010	0.655	0.580
	Secondary School Graduate	70	3.424	0.972		
	High School Graduate	55	3.295	0.957		
	University Graduate	20	3.475	1.157		

**Table 8.** The averages of metacognitive understanding of what is listened to and metacognitive awareness level according to the socio-economic status.

Variable	Group	N	Ave.	Sd.	F	P
Understanding Behavior during Metacognitive Listening	Very Good	20	2.240	0.648	0.947	0.419
	Good	12	2.433	0.545		
	Medium	139	2.360	0.490		
	Bad	39	2.236	0.529		
Understanding Behavior after Metacognitive Listening	Very Good	20	2.293	0.603	1.222	0.303
	Good	12	2.422	0.517		
	Medium	139	2.355	0.455		
	Bad	39	2.202	0.503		
General Metacognitive Understanding What is Listened	Very Good	20	2.280	0.605	1.187	0.316
	Good	12	2.425	0.511		
	Medium	139	2.357	0.449		
	Bad	39	2.210	0.493		
Metacognitive Awareness	Very Good	20	3.172	1.086	1.058	0.368
	Good	12	3.329	0.941		
	Medium	139	3.517	0.969		
	Bad	39	3.302	1.058		

The t-test was conducted to determine whether the averages of the *General Understanding in Metacognitive Listening* points of the students showed significant differences according to the gender variable; the

difference between the group averages was found to be statistically significant ( $t=-3.565$ ;  $p=0.000<0.05$ ). The *Understanding Behavior after Metacognitive Listening* points of the female students were ( $x=2.468$ ) higher than



**Table 9.** The Averages of metacognitive understanding of what is listened to and metacognitive awareness level according to the grades.

Variable	Group	N	Ave.	Sd.	F	p	Difference
Understanding Behavior during Metacognitive Listening	5	45	2.413	0.540	1.889	0.132	-
	6	68	2.400	0.461			
	7	48	2.271	0.482			
	8	49	2.212	0.582			
Understanding Behavior after Metacognitive Listening	5	45	2.391	0.489	0.771	0.511	-
	6	68	2.352	0.466			
	7	48	2.299	0.454			
	8	49	2.252	0.531			
General Metacognitive Understanding What is Listened	5	45	2.397	0.488	1.061	0.367	-
	6	68	2.364	0.453			
	7	48	2.292	0.446			
	8	49	2.242	0.530			
Metacognitive Awareness	5	45	3.886	0.926	6.748	0.000	1 > 2
	6	68	3.459	0.896			1 > 3
	7	48	3.417	0.990			1 > 4
	8	49	2.999	1.032			2 > 4
							3 > 4

**Table 10.** The averages of metacognitive understanding what is listened to and metacognitive awareness level according to gender.

	Group	N	Ave.	Sd.	t	p
Understanding Behavior during Metacognitive Listening	Male	127	2.232	0.513	-3.492	0.001
	Female	83	2.480	0.488		
Understanding Behavior after Metacognitive Listening	Male	127	2.234	0.467	-3.446	0.001
	Female	83	2.464	0.478		
General Metacognitive Understanding of What is Listened to	Male	127	2.234	0.465	-3.565	0.000
	Female	83	2.468	0.465		
Metacognitive Awareness	Male	127	3.252	1.031	-3.348	0.001
	Female	83	3.712	0.875		

those of the males ( $x=2.234$ ).

The t-test was conducted to determine whether the averages of the *Metacognitive Awareness* points of the students showed significant differences according to the gender variable; the difference between the group averages was found to be statistically significant ( $t=-3,348$ ;  $p=0.001<0.05$ ). The *Understanding Behavior after Metacognitive Listening* points of the female students were ( $x=3.712$ ), higher than those of the males ( $x=3.252$ ).

## CONCLUSIONS AND RECOMMENDATIONS

This study was conducted in order to determine the *Metacognitive Understanding of What is Listened to*

levels and to reveal the *Metacognitive Awareness* levels of the students, and the results obtained were put in order and discussed. In addition, recommendations have been made based on the study results.

It was concluded that the students who participated in the study had all the dimensions of the *Metacognitive Understanding of what is Listened to* scale, and had a high level in *Metacognitive Awareness Scale*. This situation may be interpreted as the students are conscious of the *Metacognitive Understanding what is Listened to* and the *Metacognitive Awareness*. It was concluded that there was a high and positive relation between the *Understanding Behavior during Metacognitive Listening* and the *Understanding Behavior after Metacognitive Listening*; also there was a very high

and positive relation at a significant level between the *General Understanding in Metacognitive Listening* and the *Understanding Behavior during Metacognitive Listening*. There was also a very high and positive relation at a significant level between the *General Understanding in Metacognitive Listening* and the *Understanding Behavior after Metacognitive Listening*. It was determined that there was a high and positive relation between all the dimensions of the *Metacognitive Awareness* and *Metacognitive Understanding What is Listened Scale*; and that the *Metacognitive Understanding What is Listened* to levels of the students increased the *Metacognitive Awareness* levels. This situation shows that the *Metacognitive Understanding What is Listened* to processes are influenced by each other, and that there is a positive relation between the *Metacognitive Awareness* levels. Based on these results, it is possible to suggest that the awareness levels may influence all the other skills, specifically the listening skills.

When the literature is scanned, it was observed that Ozbilgin (1993) conducted a study and reported that using *Metacognitive Awareness* during listening influenced the *Understanding what is Listened to* levels of the students in a positive way. Imhof (2000) reported that the awareness status during listening being good made the understanding of the students become easier and permanent. Muhtar (2006) conducted a study and focused on the influence of metacognitive strategy training on reading skills and student success, and reported that there was a significant difference. Vandergrift (2005) conducted a study and focused on understanding what is listened to and metacognition, and reported that there was a significant relation between the understanding what is listened to and metacognition. Abdelhafez (2006) conducted a study and found that metacognition language learning strategies intended to develop understanding skills were influential on the understanding skills of the students. Ozsoy (2007) conducted a study and reported that metacognition strategy training was influential on the problem solving skills of the students. Cakiroglu (2007) reported in his study that the use of metacognition strategy was influential on the *understanding what is read* skills of the students. Young and Fry (2008) found out in their studies that there was a significant and positive relation between the metacognitive awareness and academic success levels of the students. Gursimsek et al., (2009) conducted a study and reported that as the metacognitive awareness levels of the students increased, there was a positive increase in the problem solving approaches of the students. Yesilbursa (2002) and Coskun (2010) reported after their studies that the training given on the listening skills metacognitive strategies had positive influences on the listening skills of the students. Karatay (2010) conducted a study and reported that the academic success levels of the students with high metacognitive

awareness levels was also high. Sarac (2011) conducted a study and reported that the metacognitive knowledge was not influential on understanding what is read; however, the metacognitive following and the metacognitive skills were influential at a positive level on the *understanding what is read* levels.

It was concluded that there was not a significant difference among the *Understanding Behavior during Metacognitive Listening*, *Understanding Behavior after Metacognitive Listening*, *General Understanding in Metacognitive Listening*, and *Metacognitive Awareness* levels in terms of the educational status of the mothers, fathers, and the socio-economic status variables. Clearer ideas may be obtained by conducting this topic on different sampling groups.

It was concluded that there was not a significant difference among the *Understanding Behavior during Metacognitive Listening*, *Understanding Behavior after Metacognitive Listening*, *General Understanding in Metacognitive Listening* and the grade variables of the students. According to the metacognitive awareness levels and the Grades of the Students variables, it was concluded that the 5 Graders were higher than the 6, 7 and 8th Graders; 6 Graders were higher than the 7 and 8th Graders; and 7th Graders were higher than the 8th Graders. This situation may be interpreted as there is a decrease in the metacognitive awareness levels of the secondary school students when they move to a higher grade. The upper graders try to take sample tests because they are going to take the Entrance Exams for Higher Education and they have an anxiety about their exams, and this situation may be influential on this situation.

When the literature is scanned it was observed that there are similar results on this topic: Akin and Cecen (2014) conducted a study and found that the reading strategies metacognitive reading awareness levels of the 7th Graders were higher than the other graders; Bagceci et al. (2011) conducted a study and reported that 7th Graders were at a better level in terms of cognitive way.

It was determined according to the gender variable that the difference was in favor of the female students in terms of all the sub-dimensions of the *Metacognitive Understanding what is Listened Scale*. When the *Metacognitive Awareness* levels are examined according to the gender variable it was observed that the awareness levels of the female students were higher than those of the male students. This situation may be interpreted as the *Metacognitive Understanding What is Listened* levels and *Metacognitive Awareness* levels of the female students are at a good level, and the female students need to receive education where the female sampling is intense because of the conditions of the regions, and they feel compelled to be successful. When the literature is scanned it was observed that Ates (2013) conducted a study and reported that the *Metacognitive Awareness* levels of the female students were more than

the male students. Akin and Cecen (2014) conducted a study and reported that the reading strategies metacognitive reading awareness levels were higher than those of male students. Bağceci et al. (2011) reported after their studies that the female students were at a better status in terms of cognitive status when compared with the male students.

Based on the findings of the study, the following recommendations may be made: the importance of metacognitive awareness and its influence on basic language skills must be investigated. This cognition must be imposed to students and teachers. The metacognitive awareness must be the main subject of further studies for all language skills.

In order to increase the Metacognitive Awareness levels of the students who have the exam anxiety and who are subject to multiple-choice tests, the exam system must be revised. Questions that are intended to increase the Metacognitive Awareness levels of the students must be included in such exam types.

### Conflict of Interests

The author has not declared any conflicts of interest.

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