The Listening Barriers Scale for University Students: A Study of Validity and Reliability

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Abstract

Being the most used skill in the school environment as well as being the first skill to be acquired, listening can be defined as making sense of the sounds heard in the communication process and responding as a result of this interpretation. The fact that the response given at the end of a listening process is appropriate for the context is associated with completing the listening process without encountering any obstacles. However, the conducted studies emphasize that students encounter many listening barriers during the listening process. It is considered that it is important for the development of listening skills to detect the barriers to effective listening, which is a major source of school learning, at every education level from pre-school to university. In this context, the aim of the study is to develop a scale to determine the listening barriers encountered by university students in the course process. The data of the research were obtained from 587 students studying in different departments of Kırıkkale University in Turkey. In the development of the measurement tool, literature review, item pooling, content validity (consulting to expert opinion), and pilot scheme stages were followed, and then necessary reliability calculations were carried out. In line with the scores obtained from the tool, exploratory and confirmatory factor analysis was carried out in order to test the construct validity of the draft scale. As a result of the factor analysis, it was determined that the scale revealed a three-factor structure classified as "teacher related listening barriers", "student related listening barriers", and "classroom environment and course related listening barriers", and the Cronbach's Alpha internal consistency coefficient was detected as .93 for the overall scale. As a result of the research, a 30-item scale was developed to determine the listening barriers encountered by university students.

Keywords: Listening Skill, Listening Barriers, Academic Listening, University Students, Listening Barriers Scale.

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INTRODUCTION

Regardless of age or level, school can be considered the second social institution in which an individual feels a sense of belonging after home. As it also happens in daily life, the interaction process at school takes place by focusing on communication based on listening, speaking, reading and writing skills. In this sense, it can be stated that there is an interaction and education process based on two communication mediums as being written and oral. Written communication takes place in the focus of reading and writing while oral communication takes place in the focus of listening and speaking. When the relevant literature is analyzed, it is observed that there are many studies evaluating reading and writing skills on the basis of students from different perspectives (Arı, 2017; Sallabaş, 2008; Sidekli, 2005; Uyğun & Çetin, 2020; Yılmaz, 2008). In this case, the effect of acquiring both skills together through the school period is significant. However, it is understood that the number of studies conducted on the components of oral communication, especially those associated with listening skill, is quite limited (Başkan & Deniz, 2015; Karatay, Dolunay & Savaş, 2014). The omission of listening skills compared to others causes it to be described as the Cinderella of language skills in the literature (Vandergrift, 2007), and the need for systematic studies on the subject is emphasized (Mendelsohn, 1998; Rubin, 1994). The reasons for the scarcity of listening studies in terms of quantity can be listed as that students' ability to use oral communication skills when they start school leads to a misconception that listening is an innate skill which cannot be developed, that the perception of listening and hearing as the same concept negatively affects the listening comprehension process, that assessment and evaluation studies on skills are difficult to carry out, and that listening has an abstract quality.

First of all, it is thought that it is necessary to understand what the concept of listening is on the path to be followed regarding listening education. Listening is defined as making sense of an auditory input (Brown 2011, p. 5), taking control of the recognition of language signal elements in communication situations (Lado, 1961, p. 206), paying attention to understand what one hears, and following the speech to draw a conclusion (Göğüş, 1978, p. 228). According to Purdy (1997, p. 60-61), listening covers much more than the process of constructing meaning and responding to verbal and/or nonverbal messages as the listener continuously absorbs the sociocultural-linguistic environment by internalizing it. In this context, listening is a process that includes hearing, transforming, internalizing, accumulating and recalling the data (Grunkemeyer, 1992). Robertson (2004, p. 57) emphasizes that individuals do not have sufficient listening efficiency because listening or being able to listen to another person is a difficult task; it requires respect for the interlocutor, and being patient and comfortable. This situation makes a systematic listening education necessary from an early age.

As in daily life, listening is the most used skill compared to speaking, reading and writing in in-class and out-of-class activities at school (Wolvin & Coakley, 1988). According to Miller (2003, p. 61), more than 40% of daily communication is spent on listening, 35% on speaking, about 16% on reading, and only 9% on writing. During the school period, students learn most of the information by listening. Temur (2001, p.62) states that when the child starts school, s/he spends an average of 60% of her/his time in the classroom for listening. Yangın (1999, p.30) states that 67% of a class hour is devoted to verbal behaviors; and students listen to their teachers and peers for almost 2.5 to 4 hours at school. Robertson (2004) emphasizes that primary school students spend 57% of their time and university students spend 53% of their time by listening in their daily lives. Taylor (1964) also reports that university students spend about 90% of their class hours by listening to discussions and lectures. In this sense, an important part of the education process takes place with the listening skill (Stepanoviene, 2012). If a student studies a subject on her/his own outside the class, the time required for him/her to learn the subject that s/he can learn by listening and watching within one class hour is equal to at least three lesson hours although it may vary by the nature of the lesson (Uluğ, 1995, p.70). This ratio is remarkable in the sense that it shows students must use listening effectively in order to realize learning and to make it permanent. Morley (1991) argues that despite the recognition of the critical role that listening plays in both communication and learning, it remains one of the least understood processes in language learning.

It is thought that it would be a mistake to expect every student to benefit from listening, which is an important element of daily and academic communication, with the same efficiency. Students with different biological structures and different cultural backgrounds cannot give the same reaction to the situations they encounter. Many variables such as past experiences, prior knowledge, interests, needs, abilities, and learning styles of students turn into variables determining the quality of the response (Melanlıoğlu, 2019). The path taken by each student in listening education also differs by these elements. This situation makes a systematic listening education in schools necessary. Although listening is a factor affecting academic success in all courses, skill-oriented education is given within the scope of Turkish classes. Starting from pre-school education, the content of the education for listening skills at primary, secondary and high school levels is presented through curricula (MEB, 2013; 2018; 2019). It is assumed that the student who shall start her/his university education is an active listener with the listening education s/he has received at other levels and has already acquired effective listening as a habit. However, it is clearly observed in the researches that the current situation does not meet the expectations (Doğan, 2008; Kurudayıoğlu & Kana, 2013).

Course-oriented listening requires listening for information. Tompkins (2005, p. 312) states that in this type of listening, elements such as determining the purpose of listening, finding the main and supporting ideas, and organizing the obtained information in the brain should be realized. Listening to spoken texts to get information, like listening to lectures, is a difficult task for students; when students take longer to follow such structured discourses or cannot focus on the content, they gain little or no benefit from the process, and the lesson becomes boring for them (Miller, 2009). Özbay (2009, p. 113) states that there is not any education for listening for information in educational institutions, and that these elements listed above are attempted to be achieved through expressions such as “Shut up!”, “Do not speak!”, and “Listen!” This attitude is thought to be the main factor that hinders the development of academic listening in class. However, listening is one of the basic areas of communication skills and learning. In the classroom, students are required to listen to lectures and class discussions carefully in order to understand and store information to remember them later. (Stepanoviene, 2012). Swanson (1996, p. 3) states the following expression about the topic: “In reality, learning without effective listening is a matter of chance.”

Students spend most of their time in the classroom by listening to what teachers say. Çifçi (2001, p. 169) explains the reason for this situation through the fact that teachers generally prefer using the direct instruction method. Brown and Yule (1983) also state that courses focus on one-way listening and that there is very little space for interactive listening. In fact, academic listening means one-way/operational listening like lectures or two-way/interactive listening like a dialogue between an instructor and a student in an academic environment (Lynch, 2011). Therefore, it can be stated that the student should be exposed to both operational and interactive listening during the course in order to observe the targeted development in listening skills.

The first aim of listening education is to make students understand what they listen to. Making sense of listening is a difficult and complex process. During the listening, students encounter a text that needs to be understood (Kasten & Yıldırım, 2011, p. 5). If the listening process does not result in understanding, it is not possible to call the carried out action as listening. In such a case, there is a process that is not called listening in which hearing occurs but understanding does not occur. Although the aim of listening differs from student to student, the main aim of everyone who performs the listening action is to make sense of the listening material, in other words, to ensure the communication of the listener with the text. In this sense, Alexander (2008) emphasizes that in any text, meaning can be achieved by ear as well as by eye. Lynch (2010, p. 76) states that the factors affecting the listening process are the listener, the speaker, the content of the message and the visual support. The quality of the listening material that students encounter during listening activities sometimes makes the process difficult. Itkonen (2010, p. 5) expresses the features of the listening text that make the process difficult as follows:

- Clustering: Students focus not on the main idea but on small groups of words, and group them while listening.

- Excessiveness: In order to enable students to reach the meaning, the number of examples given from daily life is increased so much that it diverts students from the topic.

- Elliptical expression: It is the use of facilitating forms of spoken language.

- Performance indicators: Distracting performance variables such as pauses and hesitations distract listeners from focusing on the meaning.

- Spoken language: Not using standard language; improper emphasis and intonation.

- Listening comprehension speed: When the listener cannot keep up with the speaker's speaking speed, s/he cannot understand the meaning, and become distracted from the listening process.

- Interaction: When the listener cannot interact with the listening material, it becomes difficult to reach the meaning.

While the above mentioned issues are specific to the text, Lynch (2009, p. 48) evaluates the barriers to listening comprehension under two main titles as being personal knowledge and task knowledge. The barriers listed under the title of personal knowledge are limited academic terms, phonological changes, input on subjects without prior knowledge, inability to use memory effectively and speaking quickly. Factors of task knowledge are phonological changes, vocabulary, vernacular features, speaking speed, types of input, interest in the subject, listening purpose, current knowledge and experience, physical factors, emotional states, length and structure of sentences. Akkaya and Ünal (2016, p. 71) classify the factors that prevent listening in two categories as environmental and personal barriers. Examples of environmental factors are noise, inappropriate body language, and the characteristics of the listening environment. Personal factors that prevent listening are the student's perception capacity and negative listening habits that s/he has acquired before. Emiroğlu (2013, p. 280-281) discusses the listening problems he determined based on student opinions under three main categories as being problems arising from the sender (the speaker), problems arising from the receiver (the listener) and other problems. In their study, Mete and Ayrancı (2016) listed the listening barriers of undergraduate students as boredom, uninteresting content, inconsistency with real life, teachers' failure to draw attention to the subject, and crowded classrooms. On the other hand, Melanlıoğlu (2019) expresses the listening barriers that impede the academic listening skills of university students as environment, teacher, peer, physical needs, subject of the course, and extracurricular practices. Adelmann (2012) also points out the listening process, listening strategies, feedback, comprehension and evaluation as "conventional problems in listening". As observed, existence of various classifications regarding the barriers encountered in the listening process in the literature draws attention. However, a scale accepted by everyone and facilitating the identification of barriers could not be reached. If listening takes place to gain knowledge, the student is expected to be more active in the process. However, the student is exposed to many obstacles during the listening process. In order to cope with these obstacles, the student must have an active listening habit. However, considering individual differences, it can be said that this is not the case for every student. Therefore, if the listening barriers that students experience in the process are determined, a roadmap can be drawn on how to manage the process. The listening barriers scale developed in this research can be used to determine students' listening barriers. It is thought that the study will contribute to the field in this respect. It is thought that the study will contribute to the field in this respect. Based on the deficiency stated in this research, it is aimed to develop a listening barriers scale in order to determine the barriers that university students encounter in their listening process.

METHOD

Research Model

The research was designed in descriptive survey model. The survey model is a research model used in quantitative and qualitative research, and it aims to reveal the current situation related to the research problem and to describe the functioning of phenomenons and events (Arıkan, 2011; Büyüköztürk et al., 2012).

Study Group

The study group of the research consists of a total of 587 university students who study in Turkish teaching (n=49), classroom teaching (n=62), preschool education (n=20), mathematics teaching (n=70), veterinary (n=104), electrical and electronic engineering (n=21), civil engineering (n=84), and law (n=127) programs of Kırıkkale University in Turkey. The students participating in the research are studying in the third and fourth grades. 374 of the participants are female, and 213 of them are male.

Item Pooling

In order to identify the listening barriers of university students, first of all, a literature review was conducted. As a result of the review, a scale development study aiming directly for listening barriers could not be reached. For this reason, the scales (Maden & Durukan, 2016; Melanlıoğlu, 2013; Orakçı, 2018; Polat & Erişti, 2018; Taşkın, 2017) for listening anxiety, for attitude towards listening, and for communication skills in the literature were analyzed. In addition to this, 38 university students (Turkish teaching (n=12), classroom teaching (n=9), preschool education (n=7), mathematics teaching (n=10)) were asked the following question: "What are the factors that prevent you from listening during the lesson?" and they were asked to write down their experiences. Afterwards, a trial form consisting of 58 items was created by using the studies analyzed and the opinions of students on the factors that prevent them from listening in the learning environment. In the form, two items were written for most of the features which were attempted to be measured. The created trial form was rated on a 5-point Likert type scale as being strongly disagree, disagree, neutral, agree, strongly agree, and it was prepared in order to consult the expert opinion.

Determining Content Validity

Content validity of the trial form was determined by consulting the expert opinion. Content validity is the determination of whether the feature that is aimed to be measured is met by the items in the measurement tool or not. Content validity ratio (CVR) is used in scale development studies when it is not possible to make a trial application (DeVellis, 2014; Erkuş, 2012; Yurdugül, 2005). The trial form was submitted to the opinion of 11 field experts in order to determine the content validity for measuring the listening barriers of university students. Experts were asked to analyze the items in the trial form in terms of theoretical relevance, clarity and comprehensibility, and to state their opinions as "appropriate", "appropriate but should be corrected" and "should be removed". CVR was calculated for each item in accordance with the feedback from the field experts. By using the table suggested by Ayre and Scally (2014) to decide whether items should remain in the scale or not, the lowest CVR score that items should get for 11 experts was accepted as .636. Six items staying below this value were removed from the scale, and three items were regulated. The content validity index for the overall draft scale was determined as .87. Thus, the draft scale consisting of 52 items became ready for the preliminary application.

The draft data collection tool was applied to 32 university students studying in different programs in order to have information about the comprehensibility and application duration of the scale before the application with large participation. After the application, the participants were asked

to state their opinions about the comprehensibility of the items. Based on the feedback from the students, it was decided to use the draft scale as it is in the pilot scheme.

Data Collection

Data of the study were collected by the researchers through face-to-face application. During the data collection process, first of all, participants were informed about the aim of the research; and then, the draft data collection tool was applied to those who volunteered to participate in the research. The application was completed in approximately 20 minutes for each group.

Construct Validity

Construct validity of the scale was analyzed by using exploratory and confirmatory factor analyses. Before proceeding to factor analyses, the appropriateness of the sample size for factor analysis was checked. In the literature, it is stated that the sample size must be at least five times the number of observed variables in order to perform factor analysis (Bryman & Cramer, 2011; Büyüköztürk, 2002). Considering this information, the data collected from the participants were divided into two parts: exploratory factor analysis was performed on the first part of the data (n=300) and confirmatory factor analysis was performed on the other part of the data (n=287).

Before starting the exploratory factor analysis, it was analyzed whether the data were appropriate for factor analysis or not. As a result of the conducted analysis, results of the KMO and Barlett tests were found to be appropriate for the factor analysis; and exploratory factor analysis was applied to the data in order to determine the construct validity of the scale. Exploratory factor analysis is an analysis technique that allows the items measuring the same structure or feature to be collected from the items determined by the researcher and classified, and that provides clues about the reliability of the items and the test (Büyüköztürk, 2018; Şencan, 2005). In this context, results of the KMO and Bartlett test, common factor variances of the items, the scree plot, and the principal component analysis results were analyzed. In the factor analysis process, first of all, the correlation between the factors was examined. Varimax vertical rotation technique was used because the correlation between the factors was low ($r<.05$). At the next stage, confirmatory factor analysis was applied to the scale consisting of three sub-dimensions and a total of 31 items determined by the exploratory factor analysis. SPSS and AMOS programs were used in the conducted analyses.

FINDINGS

Findings Related to the Exploratory Factor Analysis

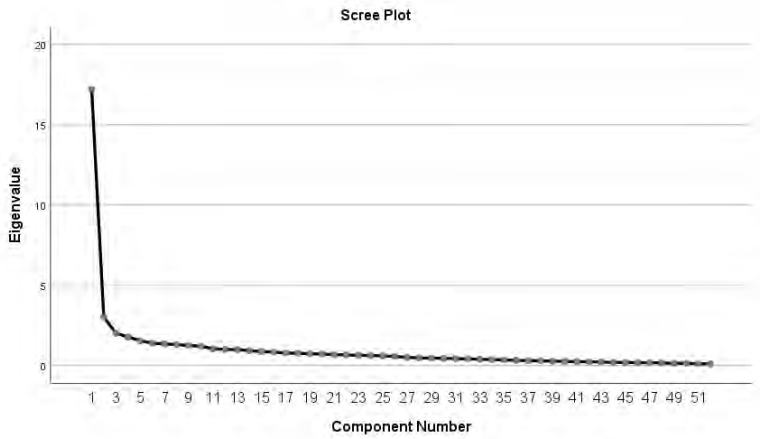
Whether the data is appropriate for factor analysis is determined in accordance with the KMO coefficient and the results of Bartlett test for sphericity (Büyüköztürk, 2007). The KMO coefficient shows whether the number of data is appropriate for factor analysis. In order for the sample size to be at an acceptable level, the KMO value should be at least .60 and above, and the Barlett test result should be significant ($p< .05$) (Tabachnick & Fidell, 2013). Results of the KMO and Barlett tests performed to determine whether the data are appropriate for factor analysis are given in Table 1.

Table 1. Results of the KMO and Barlett Tests

KMO		.904
Barlett Test for Sphericity	Chi-Square	8337.884
	df	1326
	P	.000

When Table 1 is analyzed, it is observed that the KMO value is .904 and the Bartlett test result is significant ($p< .05$). According to these results, it can be stated that the data are appropriate for factor analysis, in other words, a variable can be predicted correctly by other variables (Field, 2000).

Factor structure of the draft scale was analyzed through the principal component analysis which is one of the exploratory factor analysis techniques. As a result of the first conducted analysis, it was observed that there were 12 factors with an eigenvalue of 1 and above, and these 12 factors explained 65,660% of the variance. However, since it is not correct to determine the factor by considering only the eigenvalues, the scree plot was analyzed in order to make a decision about the factor structure of the scale. The scree plot obtained as a result of the analysis is presented below.



Graph 1. Scree Plot

When the scree plot is analyzed, it is observed that the sharp decline and the break decreased after the fourth point and the line continued horizontally. In other words, eigenvalues of the factors after the third factor are quite close to each other. At this stage, in order to determine which rotation technique to use, first of all, the correlation between the factors was analyzed and it was observed that the correlation between three factors varied between -0.09 and 0.24. Since the correlation between the factors was less than 0.30, the analysis was continued by using the Varimax rotation technique (Pallant, 2013; Tabachnick and Fidell, 2007). After the rotation process, the analysis was continued by removing 6 items which either have factor load that is below 0.40 or exist in both factors as being overlapped. At this stage, it was observed that there was no item with a factor load value below 0.40 or existing in both factors. Afterwards, in order to measure the same feature, items with high factor loads were kept in the scale, and those with low factor loads were removed from the scale and the analysis was repeated. As a result of the conducted analyses, a total of 22 items were removed from the scale, and the remaining 31 items were found to be classified under three factors. Eigenvalues and variance explanation rates of the factors forming the Listening Barriers Scale for University Students are presented in Table 2.

Table 2. Eigenvalues and Variance Explanation Rates of Factors

Factor	Eigenvalue	Variance Explanation Rate (Total)	Variance Explanation Rate (Cumulative)
1	12.915	39.135	39.135
2	2.196	6.653	45.788
3	1.702	5.157	50.945

When the results in Table 2 are analyzed, it is observed that the variance explanation rate of the first factor is 39.135%, the variance explanation rate of the second factor is 6.653%, the variance explanation rate of the third factor is 5.157%, and the total variance explained by three factors is 50.945%. Variance explanation rate of scales consisting of more than one factor should be at least 40% (Büyüköztürk, 2007). Considering this explanation, it was decided that the variance explained by the Listening Barriers Scale for University Students consisting of three factors is at a sufficient level. Findings regarding the rotated components analysis (varimax) of the scale are presented in Table 3.

Table 3. Rotated Component Matrix of the Listening Barriers Scale for University Students

Item No	Common Factor Variance	Factor 1	Factor 2	Factor 3
M1	.574	.726		
M14	.590	.695		
M11	.536	.695		
M23	.569	.682		
M17	.509	.672		
M2	503	.650		
M43	.597	.642		
M36	.549	.620		
M44	.400	.596		
M28	.562	.589		
M41	.589	.589		
M35	.602	.581		
M6	.455	.578		
M27	.586		.732	
M7	.575		.720	
M20	.537		.708	
M10	.694		.687	
M21	.506		.652	
M33	.509		.601	
M52	.474		.586	
M46	.422		.562	
M15	.578		.520	
M24	.511		.518	
M40	.609			.709
M50	.453			.660
M8	.477			.561
M3	.399			.560
M49	.430			.497
M30	.501			.495
M51	.282			.482
M47	.233			.476

According to Table 3, factor load values of the items in the first factor vary between .504 and .726, factor load values of the items in the second factor vary between .518 and .732, and factor load values of the items in the third factor vary between .476 and .709. Common factor variances of the items are between .233 and .694. As a result of the exploratory factor analysis, there were 13 items in the first factor, 10 items in the second factor, and 8 items in the third factor. At this stage, a naming study was carried out for the sub-dimensions of the scale; and the first factor was called *Teacher Related Listening Barriers*, the second factor was called *Student Related Listening Barriers*, and the third factor was called *Classroom Environment and Course Related Listening Barriers*.

Findings Related to the Confirmatory Factor Analysis

Since the maximum likelihood method shall be used in the confirmatory factor analysis, first of all, the normal distribution assumption, which is one of the assumptions of this method, was evaluated. Within this scope, the critical values of skewness and kurtosis, obtained by dividing the skewness and kurtosis values of the data by the standard error, and the multivariate kurtosis value were analyzed. As a result of the conducted analysis, it was observed that the critical values of skewness and kurtosis varied between -2.828 and 2.956, and the multivariate kurtosis value was 11.673. Critical values of kurtosis and skewness are expected to be in the range of -3 to +3. In addition, although it is a widely accepted practice that the multivariate kurtosis value is below 10, it does not generally create a problem up to 20 (Gürbüz, 2019, p. 30). Accordingly, it was decided that the data provided the multivariate normality assumption and they were appropriate for the confirmatory factor analysis.

With the aim of determining whether the model obtained through the exploratory factor analysis was confirmed or not, X^2/SD, RMSEA, CFI, NNFI, NFI, GFI and AGFI fit indices acquired through the AMOS program were analyzed. For CFI, NNFI, NFI, GFI, AGFI coefficients, the

acceptable fit value should be >.90 and the perfect fit value should be >.95. The acceptable fit limit for the RMSEA value is <.08, and the limit of the perfect fit is <.05. In addition to this, the value of X^2/DF should be <5 for the acceptable fit, and <3 for the perfect fit (Gürbüz, 2019, p. 34). As a result of the conducted analysis, goodness of fit values were determined as X^2/SD=2.959, RMSEA=.07, CFI=.89, NNFI=0.88, NFI=.89, GFI=.89 and AGFI=.88. Considering the values obtained, it was detected that CFI, NNFI, NFI and AGFI coefficients are not at an acceptable level. For this reason, correction suggestions given by the AMOS program for covariances and regression weights were analyzed. As a result of the conducted analysis, it was observed that an item in the *Classroom Environment and Course Related Listening Barriers* factor tended to load on the *Student Related Listening Barriers* factor, and therefore the item was removed from the model. Additionally, error variances of some items were combined by taking the correction suggestions into account. Coefficients of concordance obtained as a result of the adjustments carried out are presented in Table 4.

Table 4. Coefficients of Concordance

X^2	X^2/DF	CFI	NNFI	NFI	GFI	AGFI	RMSEA
1045.496	2.872	.92	.91	.93	.93	.92	.066

When Table 4 is analyzed, it is observed that the value of X^2/DF is 2.872; and this value is at the level of *perfect fit*. Other coefficients of concordance (CFI, NNFI, NFI, GFI, AGFI, RMSEA) are within the limits of acceptable fit. When all the obtained values are evaluated together, it can be stated that the scale is compatible at an acceptable level for the three-factor structure. The track diagram showing the standardized factor loads for the three-factor model obtained as a result of the confirmatory factor analysis for the Listening Barriers Scale for University Students is given in Figure 1.

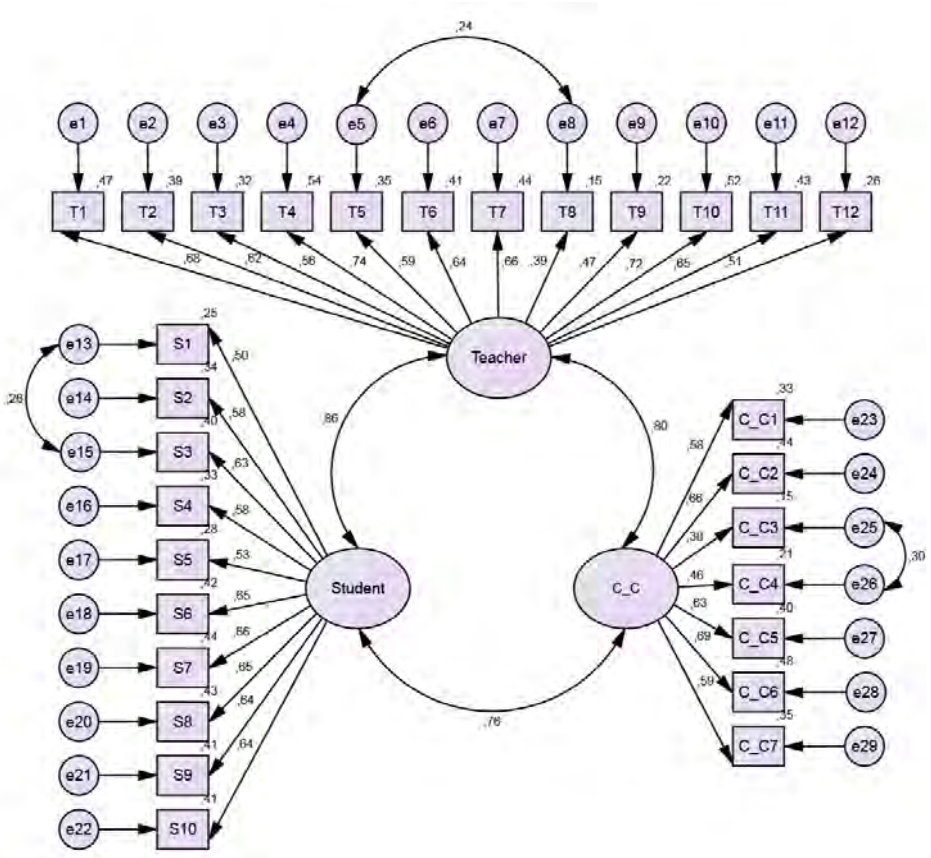


Figure 1. Confirmatory Factor Analysis Track Diagram for the Listening Barriers Scale for University Students

Findings Related to Reliability

Reliability of the Listening Barriers Scale for University Students was analyzed by calculating the Cronbach's Alpha internal consistency and the correlation coefficients between the split half scores of the test. Odd and even numbered item technique (odd-even reliability) were used to determine the split half scores for the sub-dimensions and the overall scale. Findings for the reliability analysis are presented in Table 5.

Table 5. Findings Related to the Reliability Analysis of the Listening Barriers Scale for University Students

Sub-dimension	Number of Item	Internal Consistency Coefficient	Split Half Correlation Coefficient
Teacher Related Listening Barriers	13	.88	.77
Student Related Listening Barriers	10	.85	.74
Classroom Environment and Course Related Listening Barriers	7	.78	.69
Overall Scale	30	.93	.88

According to Table 5, the Cronbach's Alpha internal consistency coefficients of the scale are .88 for the *Teacher Related Listening Barriers* factor, .85 for the *Student Related Listening Barriers* factor, .78 for the *Classroom Environment and Course Related Listening Barriers* factor, and .93 for the overall scale. Split half correlation coefficients are detected to be .77 for the *Teacher Related Listening Barriers* factor, .74 for the *Student Related Listening Barriers* factor, .69 for the *Classroom Environment and Course Related Listening Barriers* factor, and .88 for the overall scale. When the findings related to the reliability analysis are evaluated together, it can be stated that the scale is at a very reliable level.

CONCLUSION AND DISCUSSION

In this study, the aim is to develop a valid and reliable scale in order to determine the listening barriers that university students encounter during the course process. The draft scale consisting of 58 items, prepared in line with the literature on the subject, student compositions and expert opinions, was applied to 587 university students. As a result of the exploratory factor analysis carried out to determine the construct validity of the scale, a three-factor structure consisting of 31 items and explaining 50,945% of the total variance was obtained. Considering the contents of the items in the factors obtained at this stage, the first factor was called *teacher related listening barriers*, the second factor was called *student related listening barriers*, and the third factor was called *classroom environment and course related listening barriers*. The structure determined through the exploratory factor analysis was tested with the confirmatory factor analysis; and at this stage, an item in the factor of *classroom environment and course related listening barriers* was removed from the scale. As a result of the confirmatory factor analysis, it was detected that X^2/DF value is a perfect fit, and the other coefficients of concordance (CFI=.92, NNFI=.91, NFI=.93, GFI=.93, AGFI=.92, RMSEA=.066) are within acceptable limits. Reliability of the scale was determined by using the Cronbach's Alpha internal consistency and the correlation coefficients between the split half scores of the test. It was observed that the Cronbach's Alpha internal consistency coefficient ranged between .78 and .88 for the factors of the scale; and the internal consistency coefficient for the overall scale was .93. The correlation coefficient between the split half scores of the test was calculated as .69-,77 for the factors; and it was calculated as .88 for the overall scale. Based on the mentioned findings, the scale is determined to be highly reliable. In addition, it was observed that the names given to the factors of the scale, which are *teacher related listening barriers, student related listening barriers,* and *classroom environment and course related listening barriers*, coincide with the listening barriers discussed in the literature (Balay & Sağlam, 2008; Çaylı, 2012; Danaoğlu, 2009; Emiroğlu, 2013; Graham, 2006; Karabay, 2014; Lynch, 2011). In the scale rated in accordance with 5-point Likert type, the points are scored as follows: Strongly disagree=1, Disagree=2, Neutral=3, Agree=4, and Strongly Agree=5. The lowest score that can be obtained from the scale is 30, and the highest score is 150. Items numbered 6-

12-13-15-16-23-25 in the scale are reverse scored, and an increase in the score obtained from the scale indicates that the listening barrier experienced decreases.

Teacher related listening barriers constitute the first dimension of the scale. In the study conducted by Melanlıoğlu (2019) with university students, the participants stated that teacher factor is an important variable in the dimension of listening barriers, and they attributed important responsibilities to the speaker, in other words, to the teacher in increasing academic listening efficiency. Baysen et al. (2003, p. 54) states that teachers complete the course process very quickly in order to fulfill the obligations of the curriculum; therefore, they cannot exhibit appropriate listening behaviors for students. In his study, Cangelosi (2013) concluded that approximately 11% of teachers give feedback that includes praise and appreciation to students, while a quarter of teachers never give feedback that includes praise to students. In the development of listening skills, it is emphasized in the researches on the subject that students from primary school to university are not provided with any expression which enables them to improve or with different practices but they are only told instructive phrases such as "Pay Attention!" and "Listen!" (Nichols & Stevens 1974, p. 43). However, during the lesson, it is highly important to convey caring messages to students such as "I listen to you, I understand you, I value you" (Deniz, 2006). According to Maden (2013, p. 69), the image of listening in the minds of students consists of expressions such as "Shut Up, All of You Shut Up, Listen!" and there is a common perception that listening takes place when there is no noise in the classroom environment, and students listen when they are quiet. This situation is remarkable as it shows that proficiency level of teachers is low. Özbay (2014, p. 169) lists the listening barriers that may arise from the teacher as the way of presenting the subject, body language, gestures and mimics, tone of voice, knowledge, and the ability to use Turkish. In order for the teacher to interact with students and receive feedback from them, it is expected that s/he should give importance to his/her listening skills, know how to manage the listening process, and have a crisis management skill to eliminate the obstacles s/he encounters. In the study conducted by Kurudayıoğlu and Kana (2013) with Turkish teacher candidates, it was determined that listening skills and self-efficacy perceptions of the participants were high. Therefore, it can be interpreted as such that teachers have difficulties in creating the necessary conditions for listening education due to their occupational burnout over time.

Student related listening barriers is the second factor of the scale. University students consider themselves inadequate in academic listening skills (Melanlıoğlu, 2019). It is thought that listening behaviors that students cannot internalize until they come to university are at the root of student related listening barriers. Indeed, the quality of listening education plays a decisive role in the failure to achieve this internalization. Therefore, revealing student related problems in listening education is a precondition for enabling them to be active listeners at different education levels. Teachers report that speaking without raising hand or asking for permission is the first undesirable student behavior in listening in the primary education (Balay & Sağlam, 2008; Tolunay Kapucuoğlu, 2008). On the other hand, Özgözgü Özer (2007) states that high school students often repeat behaviors such as talking to their friends, not listening to the teacher, and speaking without permission. In addition, it is noteworthy that there are various behaviors that negatively affect the listening process such as talking to each other during the class and intentionally disrupting the flow of the lesson (Danaoğlu, 2009). The listed undesirable listening behaviors prevent the student from learning to listen and turning active listening into a habit. When this negative result is combined with variables such as the physiological and psychological state of the listener in the listening process, listening comprehension speed, level of prior knowledge of the content, and indifference to the subject, it can be stated that barriers related to the listener shall increase.

The third dimension of the Listening Barriers Scale for University Students consists of classroom environment and course related listening barriers. Indeed, listening environment is a variable that affects the listening process of the listeners. Variables such as crowdedness of the environment, ventilation pattern, level of light exposure, and acoustics can sometimes turn into listening barriers. Lundsteen (1979) claims that distractions in a classroom environment shall turn into a listening barrier for the student. Keray (2018) lists environment related problems of students as

students making noise, excessive number of students in the classroom, noises coming from outside the classroom, lack of an entertaining classroom environment, and the abundance of distracting elements.

Listening skill is of vital importance in terms of providing classroom interaction and being a source of learning. Therefore, one way to help students develop their listening comprehension skills is to help them recognize their listening problems or difficulties. It is believed that the Listening Barriers Scale for University Students shall have a guiding and facilitating effect in determining these barriers at least for university students.

SUGGESTIONS

- Listening barriers scales can be also developed for different education levels or adaptation studies can be carried out to make the scale developed in this study suitable for the desired level.

- Listening for information used for the course is the first stage of academic listening. Therefore, criteria can be specified about which stages students should perform in listening for information.

- Students need to become aware of their own listening processes in order to prevent listening barriers related to themselves. For this purpose, training on metacognitive strategies can be provided to students.

- Since listening has an abstract quality, listening material should be supported with different stimuli to keep attention alive, this situation can be taken into account during the lesson.

- For undergraduate programs, academic listening can be made compulsory at the first year level.

- Necessary arrangements can be made to prevent the environments where listening takes place/will take place from being affected by external factors and to keep students' attention on the listening material.

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APPENDIX

The Listening Barriers Scale for University Students

No	Item	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	Teacher's motivation for the lesson affects my listening positively.					
2	I more carefully listen to the courses that I think I will need in my profession.					
3	I listen to the topics that I think can be asked in the exam better.					
4	I listen better when the lesson is supported by examples.					
5	I listen better in lessons in which the teacher makes eye contact.					
6	I avoid listening to topics that do not attract my attention.					
7	I like listening when my teacher supports his/her speech with body language.					
8	I enjoy listening to lectures with contents that make me think.					
9	I like listening to people who have different perspectives on the subject.					
10	I listen better if the teacher has a positive attitude towards me.					
11	Teacher's regular use of board in the class affects my listening positively.					
12	The constant interruption of the lesson affects my listening negatively.					
13	I avoid listening in tense situations.					
14	I like listening to lectures that I am interested in.					
15	The length of the lesson affects my listening process negatively.					
16	I do not want to listen to the lecture when the teacher cannot achieve class dominance.					
17	If my attitude towards the teacher is positive, I like listening to the lecture.					
18	I listen to lectures taught in conversational style better.					
19	I think I learn better when I listen by taking notes.					
20	I prefer talking with my friends during the class to listening to the lecture.					
21	If the subject is explained in relation to daily life, I would like to listen.					
22	I would like to listen to lectures using audio-visual materials.					
23	I don't like listening to out-of-field lectures.					
24	I enjoy listening to lectures in classrooms which are specially arranged for the course (laboratory, history, language classes, etc.).					
25	When I am absent from the class, I avoid listening because I think that I will not understand following lectures.					
26	When I feel better psychologically, I listen to the lecture more carefully.					
27	I like listening to lectures supported with humorous elements.					
28	The fact that the class is too early or too late affects my listening					

	negatively.					
29	I like listening to lectures using different methods and techniques.					
30	I do not want to listen to lectures that I have test anxiety about.					

Sub-dimension	**Number of Items**	**Items**	**Reverse Scored Items**
Teacher Related Listening Barriers	13	1-4-5-7-10-11-16-17-18-21-22-27-29	6-12-13-15-16-23-25
Student Related Listening Barriers	10	2-3-6-8-9-14-19-23-26-30	
Classroom Environment and Course Related Listening Barriers	7	12-13-15-20-24-25-28	