Journal of Education and Practice
ISSN 2222-1735 (Paper) ISSN 2222-288X (Online)
Vol.8, No.25, 2017

Developing the Attitude Scale for Islamic Law Lesson

Mustafa Ersoy[1*] Eyüp İzci[2]
1.Department of Educational Sciences, Faculty of Education, Cumhuriyet University, Turkey
2.Department of Educational Sciences, Faculty of Education, Inönü University, Turkey

This paper is derived from the author's doctoral dissertation.

Abstract
This study was conducted for the purpose of developing an attitude scale in order to be able to measure the attitudes of students towards Islamic Law Lesson in a valid and reliable way. The sampling of the study consisted of 198 students who studied at 4th Grade at Cumhuriyet University, Faculty of Theology, and who answered the measurement scale. In order to determine the structural validity of the scale, the Explanatory Factor Analysis was made on the data obtained from the student group who were included in the sampling of the study. The Cronbach Alpha, which is one of the internal consistency reliability coefficients, was used for the purpose of determining the reliability of the scale. The scale consisted of one single dimension and 18 items. The Cronbach Alpha Internal Consistency Coefficient related with the reliability of the data was determined as 0,930. These values were considered as the proof showing that the scale may make valid and reliable measurements on the learning attitudes of students.
Keywords: Islamic Law, Attitude Scale, Scale development.

1. Introduction

The Islamic Law Lesson provided at Faculties of Theology includes subjects such as the basic concepts of public law, Islamic Law of Inheritance with basic concepts, Islamic Law of Obligations, proper law theory, and types of proper law. It is observed that there are several concepts like history of law, comparative law and methodology of law in academic studies conducted on these subjects. Although Islamic Law does not have any legal quality in our country since 1926, it is possible to claim that it has a religious reputation based on personal preferences. Like many other subjects taught at Faculties of Theology, the Islamic Law Lesson also takes its contents from a structure that was established by Islamic Scholars who dealt with legal system based on the Quran and Sunnah. For this reason, knowing the attitudes of students on learning Islamic Law may provide us with the opportunity to produce opinions on the things that are necessary to do to increase academic success expected from this subject. Because, many previous studies report that there is a relation between the attitudes of students towards a subject and their academic success levels in that subject. Despite this relation, there are no attitude scales in the literature about Islamic Law. Developing such a scale may enable us make the right choice among the strategies, methods and techniques in order to increase success levels in this subject and in similar other subjects.

Attitude, which is one of the behaviors measured in education, refers to the inclinations that lead to some behaviors that are not observable but that lead to observable behaviors. Many definitions have been made on attitude. Attitude is the emotional and mental readiness state that occur as a result of experiences and that has the power of influencing the behaviors of the individual towards all the objects and situations related (Allport, 1935; Narrated by Tavşancıl, 2006: 65). According to this definition, attitude is considered as an element that guides the behaviors of the individual. In addition, it is claimed that attitude is organized with experiences, which means that attitude occurs as a result of a learning process (Tavşancıl, 2006: 65). Some authors claim that attitude is a permanent system, and temporary inclinations must not be considered as attitude; and emphasized that attitude had some cognitive and affective elements (Baysal, 1981; Freedman, Sears and Carlsmith, 1993: 267, 268). Attitude is also defined as an affective property which causes that the individual favors one side in decision-making processes, guides behaviors and is related with learning depending on the values one has (İnceoğlu, 2010; Ülgen, 1997). According to İnceoğlu (2010: 19, 20), attitudes are formed by cognitive, emotional and mental elements. While mental processes have importance in the formation of attitudes; knowledge, belief and feelings are important in the formation of attitudes. This shows the existence and importance of an education process in the formation of attitudes. Cognitive elements consist of knowledge and beliefs that are based on attitude objects. These represent the knowledge obtained by the individual about the attitude objects around them. The knowledge on attitude object occurs with the experience of the individual on this subject (Tavşancıl, 2006: 73). Affective objects constitute the side of the attitude that change among individuals and that cannot be explained with truths and are related with likes or dislikes (Baysal and Tekarslan, 1996: 254). Meanwhile, they are also related highly with the values system of the individual. The attitude object serving the aims of the individual or not causes that negative or positive feelings emerge (Tavşancıl, 2006: 76). There is a close relation between affective and behavioral element. The behavioral element generally appears as the result of an affective element. In other words, the behavior that emerges as a result is somehow the concretization of an affective element (İnceoğlu, 2010: 21). Behavioral elements, on the other hand, reflect the inclination of the individual about the

attitude object in a certain stimulant group. These behavioral inclinations may be observed in words or other behaviors of individuals (Tavşancıl, 2006: 77). These three elements that constitute attitude are in mutual interaction; and a change appearing in one of them causes a chain of reactions consisting of relevant changes to preserve the consistency (İnceoğlu, 2010: 21). The changes in attitudes were investigated as a learning process in previously conducted studies and it was concluded that these changes occurred with effective communication works and as a result of classical conditioning and attitude development experiments in accordance with learning principles. Like many other psychological variables, attitudes are the types of variables that are hypothetical or hidden variables that are not directly observed. The existence of attitudes may only be determined as based on verbal or behavioral outcomes (Tavşancıl, 2006: 82-85). For this reason, the effects of attitudes on behaviors are examined in order to have an idea on attitudes that are not directly observed. Attitudes may direct behaviors in two ways, either in a positive or in a negative way; and therefore, we may have an opinion on attitudes by observing behaviors.

Attitude scales consist of items prepared about the topic in question. The individual is asked to react to these items to express their real feelings. The individual has the opportunity of stating to which extend s/he agrees or disagrees in the items given with the Likert-type Attitude Scale by selecting among various levels. It is known that using Likert-style scales is preferred much in measuring affective properties by researchers because they are easy, convenient and have a high validity and reliability levels (Tavşancıl, 2006: 139).

Learning-related Attitude Scale (Kara; 2010), Science Attitudes Scale (Asarkaya, 1981), Attitudes Scale for Chemistry Lesson (Hançer, Uludağ and Yılmaz, 2007), Attitudes Scale for Secondary Education Geography Lesson (Güven and Uzman, 2006), Attitudes Scale for Science and Technology Lesson (Akpınar, Yıldız, Tatar and Engin, 2011), Attitudes Scale for Science and Technology (Balım, Sucuoğlu and Aydın, 2009), Attitudes Scale for Geometry (Bulut, Ekici, İşeri and Helvacı, 2002), Biology Attitude Scale (Yeşilyurt and Gül, 2009), Attitudes Scale for Mathematical Field Lesson (Turanlı, Türker and Keçeli, 2008), Developing an Attitude Scale for Biology Lesson (Koçakoglu and Türkmen, 2010), Attitude Scale for Social Science Lesson (Demir and Akengin, 2010), Attitude Scale for Social Geography Lesson (Uzunöz, 2011), Attitude Scale for Social Physical Education Lesson (Güllü and Güçlü, 2009), Attitude Scale for Geography Lesson (Demir and Koç, 2013), Attitude Scale of Highscool Students for Chemistry Lesson (Kan and Akbaş, 2005), Attitude Scale Development Study for Arabic Lesson Taught at Faculties of Theology (Uçar, 2013), Attitudes of Primary and Secondary School Students towards Religion and Morality Lesson (Kaya, 2001), Philosophy Lesson Attitude Scale Validity and Reliability Study (Tecim, 2015), Mathematics Attitude Scale Development (Duatepe and Çilesiz, 1999), Attitude Towards Physics Lesson Scale for Secondary School Students Compilation and Assessment of Student Assessments (Nalçacı, Akarsu and Kariper, 2011), and Development of Attitude Scale towards School: Reliability and Validity Study (Alıcı, 2013) were examined and it was determined that the common purpose of these studies were to develop a measurement scale that will facilitate the determination of strategies, methods or techniques that may be used to increase the qualifications of students through education by determining the learning-related attitudes in general, in other words, the subject. For this reason, it is important that the attitude scales on Faculty of Theology Lesson, which are not frequently observed in the literature, are also developed. Since there are no attitude scales on Islamic Law Lesson, the need was felt to conduct the present study.

2. Method

The Descriptive Method, which is one of the literature review methods, was used in the study. The study population consisted of the 203 4th Grade students at Cumhuriyet University, Faculty of Theology in 2012-2013 Academic Year. Since 198 of these students were contacted, 97.53% of the study population was included in the preset study.

The Attitude Scale developed as a result of the analyses made in the study consists of a total of 18 items 12 of which are positive and 6 of which are negative. The items were prepared according to 5-Point Likert Scale, and was assessed as I do not agree at all = 1, I partly agree = 2, = 3, I agree much = 4; and I completely agree = 5. The scale was designed in the Likert type in which positive and negative items are given. The negative items were reverse-coded for analyses. The highest score that may be received from the Attitude Scale is 90, the lowest score is 18.

2.1.The Development Stages of the Scale

"The basic aim in developing a scale is creating a reliable and valid measurement scale" (Tavşancıl, 2006). "Reliability means that the scale reveals similar results in every situation in a consistent manner" (Bell, 1993). "The two basic criteria sought at a measurement scale is the consistency between the scores obtained at two different times, and at the same time, the consistency between the results obtained at the same time" (Büyüköztürk, 2005: 170). The viewpoints of specialists were received to ensure the validity in the study, and the viewpoints of language specialists were also received when required to ensure the validity in linguistic terms.

The most common used attitude measurement method is the Attitude Scale. Such scales consist of items

prepared on the topic investigated. The individual is asked to react to these items to express their true feelings. The individual has the opportunity of expressing how much s/he agrees to the items given in the Attitude Scale, which is the Likert Style, by choosing among the items given. It is known that Likert-style scales are preferred in measuring especially affective properties because they are easy, handy and have a high validity and reliability (Tavşancıl, 2006: 139).

The steps that must be followed when preparing a Likert-type scale are given below (Anderson, 1988; Narrated by Tavşancıl, 2006: 141):

- Many attitude items must be written either positive or negative about a certain attitude.
- These items must be tested before the actual study and must be assessed. In this pre-test, the group to which the scale is applied (the referees group) must be selected from among a similar group to which the scale is organized (the similar group) and each item must be assessed as positive, negative or neutral.
- The items that are not assessed as either positive or negative by the majority of a group must be excluded from the scale.
- The remaining items after such items are removed must be ordered randomly.
- The Likert Scale, which is formed in this way for trial purposes, must be applied to the subject group which is intended to be included in the study. The number of the members of the group must be a few times more than (at least five times) the number of the items in order to achieve significant and reliable results.
- The relation coefficient between the score received from each attitude scale and the score received form the whole scale must be calculated (item analysis).
- As a result of the calculations, in other words, after the item analyses, the items that do not have a significant relation with the whole scale scores must be excluded from the scale.
- In this way, the Likert Attitude Scale is given the latest form.

The above-mentioned items show that the first step in developing an Attitude Scale is to determine the scope of the study, the items must be prepared, these items must then be examined in linguistic and psychometric terms, the scale form must be prepared, the scale must be applied, and the validity and reliability of the scale must be made (Şencan, 2005: 723; Tezbaşaran, 1997: 9-36). The Attitude Scale was developed in the light of this information found in the literature about scale development.

2.1.1. Determining the Scope

For the purpose of determining the scope of the scale that would be prepared, the relevant literature was reviewed. In the literature review, all the Attitude Scales examined and their properties are given in Table 1.

Table 1. Attitude Scales Examined

Scale	Factors	Number of Questions	Scale Type	Age Group
1-Learning-related Attitude Scale (Kara; 2010).	F1: Nature of learning F2: Learning-related expectations F3: Being open for learning F4: Learning-related concerns	40	5-Point Likert	University
2-Science Attitudes Scale (Asarkaya, 1981).	F1: General science field F2: Science class F3: Scientific research method F4: Scientist F5: Extracurricular science activity F6: Future relation with science	50	5-Point Likert	Secondary School
3-Attitudes Scale for Chemistry Lesson (Hançer, Uludağ and Yılmaz, 2007)	F1	32	5-Point Likert	University
4-Attitudes Scale for Secondary Education Geography Lesson (Güven and Uzman, 2006).	F1-F10	39	5-Point Likert	High School
5-Attitudes Scale for Science and Technology Lesson (Akpınar, Yıldız, Tatar and Engin, 2011)	F1: Liking Science and Technology Class F2: Concern on Science and Technology Class F3: Interest in Science and Technology Class F4: Liking Science and Technology Experiments	21	5-Point Likert	University
6-Attitudes Scale for Science and Technology (Balım, Sucuoğlu and Aydın, 2009)	F1, F2, F3	44	4-Point Likert	Secondary School
7- Attitudes Scale for Geometry (Bulut, Ekici, İşeri and Helvacı, 2002)	F1: Like F2: Benefit F3: Concern	17	5-Point Likert	High School
8-Biology Attitude Scale (Yeşilyurt and Gül, 2009)	F1: Interest in Biology F2: Benefit of Using Computer, Laboratory, Equipment in Biology F3: Biology teacher F4: Personal success F5: Importance of Biology	42	5-Point Likert	High School
9- Attitudes Scale for Mathematical Field Lesson (Turanlı, Türker and Keçeli, 2008)	F1	20	5-Point Likert	University
10- Developing an Attitude Scale for Biology Lesson (Koçakoglu and Türkmen, 2010)	F1: Attitudes towards Biology F2: Attitudes towards Laboratory F3: Attitudes towards Biology Lesson F4: Attitudes towards Cooperative and Group Work in Biology Lesson F5: Attitudes towards Learning Biology Class F6: Attitudes towards the Position of Biology Class (Compulsory or Optional) F7: Attitudes towards the Place of Biology Class in Media (TV)	36	5-Point Likert	High School
11-Attitude Scale for Social Science Lesson (Demir and Akengin, 2010)	F1: Desire to Learn F2: Liking Social Sciences Lesson F3: Attitudes Stemming from Teacher F4: Love for Social Sciences	26	5-Point Likert	Primary School
12-Attitude Scale for Social Geography Lesson (Uzunöz, 2011)	F1,F2,F3,F4,F5,F6	24	5-Point Likert	High School
13-Attitude Scale for Social Physical Education Lesson (Güllü and Güçlü, 2009)	F1	35	5-Point Likert	High School
14-Attitude Scale for Geography Lesson (Demir and Koç, 2013)	F1: Love-Like F2: Desire to learn	15	5-Point Likert	High School
15-Attitude Scale of High School Students for Chemistry Lesson (Kan and Akbaş, 2005)	F1,F2,F3	30	5-Point Likert	High School

The Attitude Scales examined in detail in Table 1 and the other Attitude Scales in the literature (Akpınar et al., 2011; Asarkaya, 1981; Balım et al., 2009; Baykul, 1990; Bayturan, 2011; Bulut et al., 2002; Çetin, 2010; Çömlek, 2009; Demir and Akengin, 2010; Demir and Koç, 2013; Deveci, 2003; Gül, 2011; Güllü and Güçlü, 2009; Güven and Uzman, 2006; Hançer et al., 2007; Helvacı, 2010; Hevedanlı, 2003; Kan and Akbaş, 2005; Kara, 2010; Kılıç, 2003; Koçakoglu and Türkmen, 2010; Sulak, 2002; Tataroğlu, 2009; Teyfur, 2009; Turanlı et al., 2008; Uzunöz, 2011; Yeşiltaş, 2010; Yurtluk, 2003) were also considered to determine the attitude statements that might contribute to the measurement of attitudes towards Islamic Law Lesson. These statements were used in the development stage of Attitude Scale.

2.1.2. Item Pool: Preparation of Scale Items

After the scope of the study was defined, the items of the scale were prepared. Sixty attitude statements which were considered to be related to the attitudes of students towards Islamic Law Lesson were prepared. When the statements were prepared it was cared for to write positive and negative statements were written in a balanced manner with cognitive, affective and behavioral statements.

2.1.3. Specialist Viewpoint: Examining the Lingual and Psychometric Properties of the Items of the Scale

The 34 of the 60 items in the Item Pool were positive and 26 were negative. In order to assess the items in terms of scope, understandability, and target audience (Yurdugül, 2005), they were sent to 10 specialists, 5 specialists form Islamic Law field, 3 specialists form Educational Sciences Department, 3 specialists from Measurement and Assessment Science Department, and 2 specialists from Turkish Education Department. In the light of the specialist viewpoints from measurement and assessment fields, 20 items that were not considered appropriate were excluded from the scale before the trial. Some items were changed in the recommendations of the specialists in terms of expression of ideas. In the light of the specialist viewpoints, the necessary corrections were made, and 40 items were selected, and read by 10 students who were selected from among Faculty of Theology 4th Grade students to test the structural validity and reliability, and the understandability of the items was questioned.

2.1.4. Creating the Scale Form

The Islamic Law Class Attitude Scale, which was made into a form with the items prepared, consists of two sections. In the first part, there are the questions on demographical data of the participants. In the second part, items that had the statements on Islamic Law Lesson and that were scored between 1-5 were asked to these students to state their agreement levels in scale items. 21 of these items were positive, and 19 of them were negative. The 40-Item draft form was made ready for trial. In this respect, the form was applied to 198 4th Grade students studying at Cumhuriyet University, Faculty of Theology, and the data that were needed for the analyses were obtained.

2.2. Explanatory Factor Analysis

In the analyses of Attitude Scale, the significance value was taken as .05. In order to ensure the content validity, the viewpoints of specialists from the relevant field and measurement and assessment field were made use of; and in ensuring the structural validity, the Factor Analysis Method was used. In addition, the Item-Total Score correlations were examined, and the proof for validity was sought for the items in the scale. Ten items whose Item-Total Correlation Coefficients (Tavşancıl, 2006: 33) were below 0,2 were not included in Factor Analysis. The remaining 30 items were used in the Factor Analysis to determine the factor groups and to test the structural validity.

3. Findings and Interpretation

3.1. The Analysis of the Scale

Before the analysis of the items, the distribution characteristics of the Scale scores were examined. The descriptive statistics on the total scores of the items of the Attitude Scale are given in Table 2.

Table 2. Descriptive Statistics on the Distribution of the Raw Scores of the Attitude Scale

N	*Valid*	*198*
	Lost	*0*
Average		*117,10*
Median		*116,50*
Mode		*120*
Standard deviation		*21,82*
%	*25*	*108,00*
	50	*116,50*
	75	*126,00*

In order to understands whether there were extreme values in the dataset, the frequency graphics was obtained firstly. The frequency graphics is given in Figure 1.

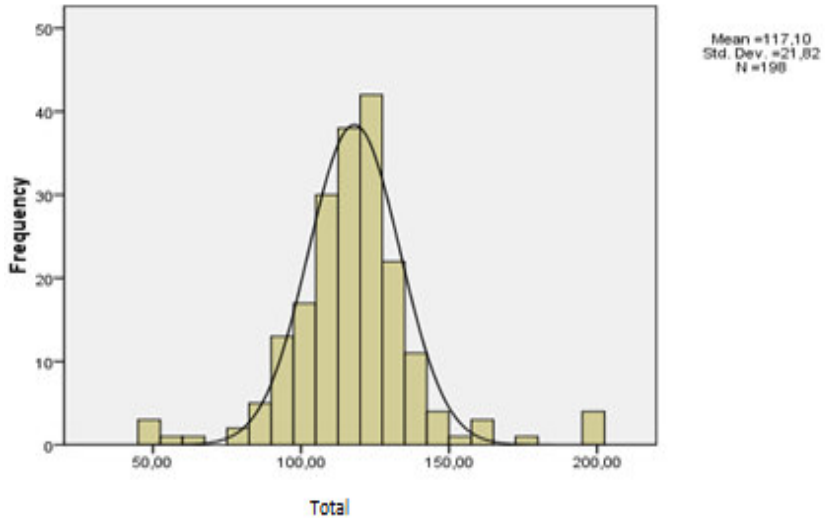

Figure 1. Attitude Scale Frequency Graphics

When Figure 1 is examined, it is observed that there are total scores except for the normal distribution curve, in other words, there are extreme values.

For this reason, the standard scores were calculated for each item and for total score, and the it was examined whether there were items that were outside the -3 and +3 range. 1o datasets were excluded from the analysis because of having extreme values, and the Frequency Graphics, which was ten obtained, is given in Figure 2.

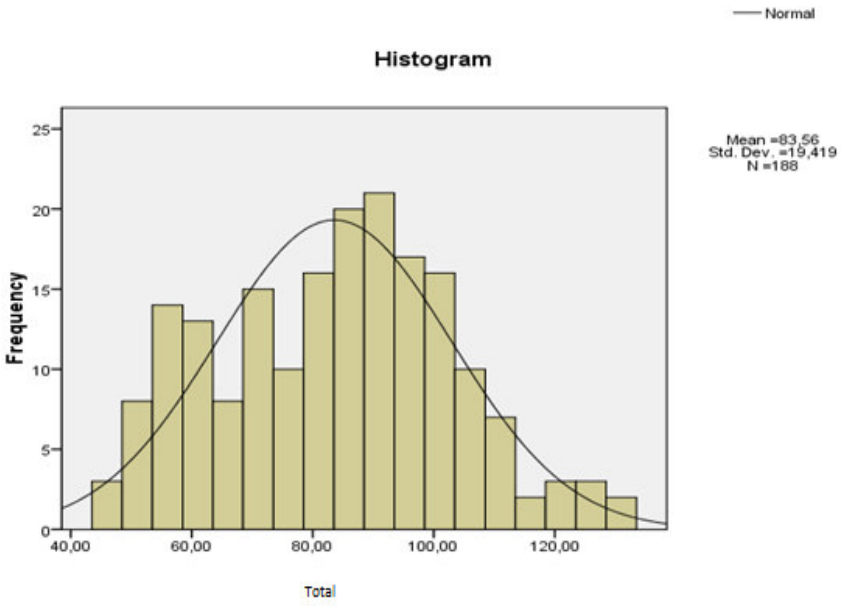

Figure 2. The Attitude Scale Frequency Graphics after the Extreme Values Were Excluded

After the extreme values were excluded, when the attitude scale frequency graphics of the Attitude Scale were examined it is possible to claim that the distribution is normal. The descriptive statistics obtained right at this stage are given in Table 3.

Table 3. Descriptive Statistics after the Extreme Values were Excluded from the Attitude Scale

				Std. Error
Total	Average		83,56	1,42
	95% Confidence interval of average	Lower limit	80,77	
		Upper limit	86,36	
	5% Corrected Average		83,19	
	Median		84,00	
	Variance		377,08	
	Standard Deviation		19,419	
	Minimum		46,00	
	Maximum		131,00	
	Range		85,00	
	Skewness		,076	,18
	Kurtosis		-,567	,35

When Table 3 is examined it is observed that the kurtosis value that was obtained after the extreme values were eliminated was 0,076; skewness "z" value was 0,43; and the kurtosis value was -0,57; kurtosis "z" value was 1,61. If the skewness coefficient is between -1 and +1, and if the "z" values that is obtained by dividing the skewness coefficient by the standard error of skewness is between -1,96 and +1,96 (p=0,05), it is accepted adequate for normality assumption (Büyüköztürk, 2005: 40,41; Kalaycı, 2010: 212). It is possible to claim that the values obtained cover the normality assumption.

In order to determine whether the remaining datasets show normal distribution or not, the Kolmogorov Smirnov Test was applied. The Kolmogorov Smirnov Test score of the Attitude Scale was found as 0,057. These results show that the total scores of the Attitude Scale had normal distribution (p>.05).

One of the analysis that is made to determine the structural validity of scales is the Factor Analysis (Büyüköztürk, 2005: 123). For this purpose, in order to determine the structural validity of the Islamic Law Lesson Attitude Scale, which consisted of 30 items, the Factor Analysis was applied. "Factor Analysis is a multi-variate statistics targeting to find or discover new, significant and irrelevant variables (factors) in conceptual terms by combining "p" number variables related with each other" (Büyüköztürk, 2005: 123). In other words, Factor Analysis "tries to explain the measurement with fewer factors by combining the variables that measure the same structure or quality together" (Büyüköztürk, 2005: 123).

Before Factor Analysis is made, the Kaiser-Meyer-Olkin test must be made in order to test whether or not the data structure is suitable for factorization; and the Bartlett Sphericity Test must be applied to test the normality of the distribution in the study population (Büyüköztürk, 2005: 126; Pallant, 2010: 174).

The results of the KMO and Bartlett Sphericity Test of the draft scale are given in Table 4.

Table 4. Attitude Scale KMO and Bartlett Test Result

KMO	0,935
Bartlett's Sphericity Test	3224,973
df	435
p	.00

When Table 4 is examined it is observed that the KMO value of the draft scale is 0,935. The Bartlett Sphericity Test, which is another assumption of Factor Analysis, is a technique that may be used to check whether the data come from a multivariate normal distribution or not. According to Table 4, the Bartlett test result ($x^2 = 3224,973$; $p < 0,00$) is significant. The KMO value being higher than 0,60; and the Bartlett Test result being significant (Büyüköztürk, 2005: 126) is a wanted situation for conducting Factor Analysis. The Barlett Test result being significant shows that the data come from a multivariate normal distribution. The Factor Analysis was applied four times until the scale had its final shape. The reasons for this is to exclude the items that have lower factor loads from the scale and determine the factorability.

When Explanatory Factor Analysis is made, firstly, the factor loads of the items were considered. When the factorial structure of a scale is formed, the lower cutoff point may be taken between 0,30 and 0,40 (Neale and Liebert, 1980; Narrated by Tavşancıl, 2006: 48), for this reason, in the present study, the lower cutoff value of factor values was taken as 0,40. In addition, if the items have high load value in one single factor, and low load value in another factor, it was reported in previous studies that the difference between the highest load value and the load value that comes after this value should be at least 0,10. In this way, the independence between the

factors were increased (Büyüköztürk, 2005: 125).

In order to determine the factor design of the scale, the Basic Components Analysis was used as the factor finding method. In order to determine the fitness of the data to basic components analysis, the KMO Coefficient and Bartlett Sphericity test result were considered. As the spinning method, the Varimax Method was preferred. During the Factor Analysis, when the number of the factors was decided, the scree plot Graphics and the percentage of the total variance were used. The Scree Plot Graphics (Scree Graphics), which was formed to determine the number of the factors, is given in Figure 3.

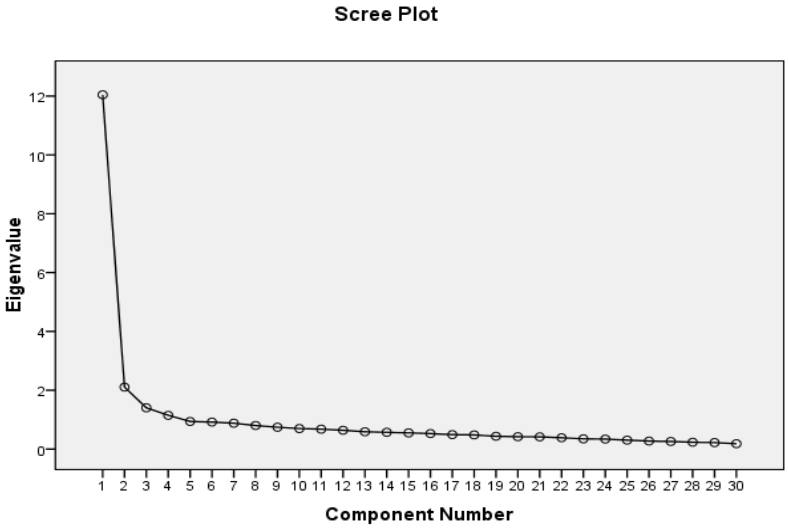

Figure 3. Scree Plot Graphics

When Figure 3 is examined, it is observed that there is one single main break until the graphics has a horizontal position, and after this factor, the curve proceeds in the same horizontal direction. Again, the percentage of each factor for explained total variance, which is used in determining the number of the factors, is given in Table 5.

Table 5. Explained Total Variance

	Eigenvalue			*Factor Loads Squares T.*			*Rotated Factor Loads Squares T.*		
Component	*Total*	*% Variance*	*Accumulated %*	*Total*	*% Variance*	*Accumulated %*	*Total*	*% Variance*	*Accumulated %*
1	*12,34*	*41,13*	*41,13*	*12,34*	*41,13*	*41,13*	*7,93*	*26,44*	*26,44*
2	*2,32*	*7,74*	*48,87*	*2,32*	*7,74*	*48,87*	*3,80*	*12,68*	*39,11*
3	*1,43*	*4,76*							

When Table 5 is examined, it is observed that the number of the factors that contributed to the explanation of the total variances at a rate of more than 5% is two. For this reason, it is possible that the scale has a 2-factor structure.

In order to decide whether there were items that should be excluded from the scale, the number of the factors was marked firstly as 2, and the Factor Analysis was repeated. After these processes, the items whose factor loads was below 0,40 after Varimax spinning, and the items whose load values were below 0,10 and that was included in more than one factor were excluded by eliminating one by one starting from the one which had the lowest load value differences and factor load value; and this part of the analysis was repeated four times. During these repetitions, the items that had load values below 0,10 and the ones that had factor load values below 0,40 were also excluded. In this stage, Items 12, 13, 14, 15, 19, 20, 24, 30, 32, 35, 44 and 47 were excluded from the test. In the last stage, 18 items were left in the scale.

The KMO and Bartlett Sphericity Test results obtained in this stage are given in Table 6.

Table 6. KMO and Bartlett Sphericity Test

KMO		*,936*
Bartlett's Sphericity Test	*Chi-Square*	*1877,309*
	Df	*153*
	P	*,00*

When Table 6 is examined, it is observed that the KMP value of the scale is 0,936. It is also observed that the Bartlett test result is (x^2 = 1877,31; p < 0,000) significant.

The percentage of each factor of the Total Variance of the latest form of the Attitude Scale is given in Table 7.

Table 7. Variance Values of the Factors

Eigenvalue	*Factor Loads Squares T.*			*Rotated Factor Loads Squares T*					
Component	*Total*	*% Variance*	*Accumulated %*	*Total*	*% Variance*	*Accumulated %*	*Total*	*% Variance*	*Accumulated %*
1	*8,54*	*47,44*	*47,44*	*8,54*	*47,44*	*47,44*	*6,69*	*37,18*	*37,18*
2	*1,64*	*9,14*	*56,58*	*1,64*	*9,14*	*56,58*	*3,49*	*19,40*	*56,58*

When Table 7 is examined it is observed that the first factor alone explained 47,44% of the total variance, the second factor explained 9,14% of the second factor. The explained total variance was 56,58%. The explained Variance being between 40% and 60% is considered to be adequate (Scherer, Wiebe, Luther and Adams, 1988; Narrated by Tavşancıl, 2010: 48). On the other hand, it is also observed that the Eigenvalue of the first factor is 8,54 and the Eigenvalue of the second factor is 1,64. The items and factor loads of the Attitude Scale are given in Table 8.

Table 8. Items and Factor Loads of the Attitude Scale

Factor/Factor Load				**Items**
Item	1st Factor Load	Item	2nd Factor Load	
10	,83	**9**	,75	1-I love Islamic Law class
17	,79	**8**	,75	2-I like discussing Islamic Law topics
18	,79	**4**	,72	**4-I get bored in Islamic Law class**
26	,79	**29**	,61	5-Islamic Law class attracts curiosity
16	,76	**28**	,55	6-I feel relaxed when I study Islamic Law class
11	,74	**7**	,47	**7-I am afraid of Islamic Law class**
5	,73			**8-Trying to Understand Islamic Law Class is a waste of time**
23	,73			**9-I am afraid of the exam of Islamic Law Class**
1	,73			10-I enjoy using the things I learn in Islamic Law class in my daily life
21	,70			11-Islamic Law Class is very important
2	,68			16-I want to use what I learn at Islamic Law Class in my daily life
6	,62			17-The topics in Islamic Law Class are interesting
				18-I like reading books on Islamic Law
				21-I do Islamic Law Class assignments with pleasure
				26-Studying Islamic Law makes me happy
				23-I think that Islamic Law Class is very beneficial
				28-I have difficulty in understanding the topic in Islamic Law Class
				29-I lose my attention in Islamic Law Class

When Table 8 is examined to analyze the items that were obtained as a result of Factor Analysis, it is observed that the first factor consisted of only positive items, and the second factor consisted of only negative items. Factor Analysis works on the basis of correlation matrices and it causes that the positive and negative items are collected under two separate factors in single-dimensional structures that measure the same characteristics (Brown, 2006). For this reason, the scale may be considered as single-dimensional.

When the scale is analyzed again as having one single factor, the explained variance consisted of 47,44% of the total variance.

The items that constitute the scale and the load values of these items are given in Table 9.

Table 9. Islamic Law Class Attitude Scale

Item No	Factor Load	Item
17	,83	The topics in Islamic Law Class are interesting
1	,81	I love Islamic Law Class
26	,80	Studying Islamic Law Class makes me happy
5	,79	Islamic Law Class arouses curiosity
10	,79	I enjoy using the things I learn in Islamic Law Class in my daily life
21	,79	I do the assignments in Islamic Law Class with pleasure
11	,76	Islamic Law Class is very important
23	,76	I consider Islamic Law Class as very beneficial
18	,76	I like reading books on Islamic Law
16	,75	I want to use the things I learn in Islamic Law Class in my everyday life
2	,68	I love discussing Islamic Law topics
6	,66	I feel comfortable when I am studying Islamic Law Class
8	**,60**	**Trying to Understand Islamic Law Class is a waste of time**
28	**,51**	**I have difficulty in understanding the topics in Islamic Law Class**
29	**,48**	**I lose my attention in Islamic Law Class**
9	**,48**	**I am afraid of Islamic Law Class exam**
4	**,45**	**I get bored in Islamic Law Class**
7	**,43**	**I am afraid of Islamic Law Class**

The Islamic Law Class Attitude Scale consists of a total of 18 items, 12 of them are positive, and 6 of them are negative.

3.2 Reliability

The Cronbach Alpha formula, which is one of the internal consistency coefficients, was used to determine the reliability of the scale.

The Cronbach Alpha Internal Consistency Coefficient of the scale which consisted of 18 items and one single dimension is 0,930. The reliability coefficient of a scale which is accepted as a Data Collection Tool must be 0,70 and over (Büyüköztürk, 2005:171; Chen, Zeng, Huang, Lin and Cheng, 2013; Ibrahim, Shafiei, Said and Ismail, 2012; Pallant, 2010: 90). According to the values obtained, it is possible to claim that the reliability of the scale is adequate.

4. Result

With this study, a measurement tool was developed for the purpose of measuring the attitudes of students towards Islamic Law Lesson. For this purpose, the literature was examined and a valid and reliable measurement tool was obtained

The resulting scale consists of 18 items and has one single dimension, which makes it easy to use. The Cronbach Alpha Internal Consistency Coefficient of the scale is 0,930 and the explained Variance of it is 47,44% of the Total Variance are adequate to accept it as a valid and reliable scale (Büyüköztürk, 2005:171; Scherer, Wiebe, Luther and Adams, 1988; Narrated by Tavşancıl, 2010: 48).

This scale may be of use for researchers in forming an educational medium for students according to the attitudes of students and in developing their attitudes. It may also facilitate the explanation of the feelings, opinions and attitudes of students in Islamic Law Class. I addition to these, the studies conducted on the validity and reliability of this scale may be repeated for other lesson taught in Faculties of Theology.

References

Akarsu, B., Nalçacı, İ. Ö., ve Kariper, İ. A. (2011). Orta öğretim öğrencileri için fizik tutum ölçeği derlenmesi ve öğrenci tutumlarının değerlendirilmesi. Journal of European Education, 1(1).

Akpınar, E., Yıldız, E., Tatar, N. ve Ergin, Ö. (2011). Fen ve teknoloji dersine yönelik tutum ölçeğinin geçerlik ve güvenirlik çalışması. Milli Eğitim Dergisi, (189).

Alıcı, D. (2013). Okula yönelik tutum ölçeğinin geliştirilmesi: Güvenirlik ve geçerlik çalışması. Eğitim ve Bilim, 38 (168).

Asarkaya, E. (1981). Toplu fen ve fen bilgisi programlarının öğrencilerin fen tutumlarına etkisi. (Yayınlanmamış doktora tezi), Hacettepe Üniversitesi, Eğitim Bilimleri Enstitüsü, Ankara.

Balım, A. G., Sucuoğlu, H. ve Aydın, G. (2009). Fen ve teknolojiye yönelik tutum ölçeğinin geliştirilmesi.

Pamukkale Üniversitesi Eğitim Fakültesi Dergisi, 25(1).
Baysal, A. C. (1981). Sosyal ve örgütsel psikolojide tutumlar. İstanbul: Yalçın Ofset.
Baysal, A. ve Tekarslan, E. (1996). Davranış bilimleri. İstanbul: Avcıol Basım Yayın.
Bell, J. (1993). Doing Your Research Project. Open University Press. Buckingham
Brown, T. A. (2006). Methodology in the social sciences. D. A. Kenny (Ed.), Methodology in the Social Sciences. New York: Guilford Press.
Bulut, S., Ekici, C., İşeri, A. İ. ve Helvacı, E. (2002). Geometriye yönelik bir tutum ölçeği. Eğitim ve Bilim, 27.
Büyüköztürk, Ş. (2005). Sosyal bilimler için veri analizi el kitabı. Ankara: PegemA Yayıncılık.
Chen, P. C., Zeng, W. J., Huang, S. H., Lin, C. F. and Cheng, C.S. (2013). Analysis of professional competence required by the wind energy industry practitioners. Applied Mechanics and Materials, 284, 3580-3585
Demir, S. B. ve Akengin, H. (2010). Sosyal bilgiler dersine yönelik bir tutum ölçeğinin geliştirilmesi: geçerlik ve güvenirlik çalışması. E-uluslararası Eğitim Araştırmaları Dergisi, 1 (1).
Demir, S. B., ve Koç, H. (2013). Coğrafya dersi tutum ölçeği: geliştirilmesi, geçerlik ve güvenirlik çalışması. Electronic Turkish Studies, 8(8).
Duatepe, A., ve Çilesiz, Ş. (1999). Matematik tutum ölçeği geliştirilmesi. Hacettepe Üniversitesi Eğitim Fakültesi Dergisi, 16 (16)
Freedman, J. L., Sears, D. O. and Carlsmith, J. M. (1993). Sosyal psikoloji (Çev. A. Dönmez). Ankara: İmge kitabevi.
Güllü, M., ve Güçlü, M. (2009). Ortaöğretim öğrencileri için beden eğitimi dersi tutum ölçeği geliştirilmesi. Beden Egitimi ve Spor Bilimleri Dergisi, 3 (2).
Güven, B. ve Uzman, E. (2006). Ortaöğretim coğrafya dersi tutum ölçeği geliştirme çalışması. Kastamonu Eğitim Dergisi, 14 (2).
Hançer, A. H., Uludağ, N. ve Yılmaz, A. (2007). Fen bilgisi öğretmen adaylarının kimya dersine yönelik tutumlarının çeşitli değişkenlere göre değerlendirilmesi. Hacettepe Üniversitesi Eğitim Fakültesi Dergisi, (32).
Ibrahim, F. A., Shafiei, M. W. M., Said, I. and Ismail, R. (2012). Assessment on housing developer's readiness to develop green homes in Malaysia. European Journal of Scientific Research, 92(2), 184-190.
İnceoğlu, M. (2010). Tutum algı iletişim. İstanbul: Beykent Üniversitesi Yayınları.
Kan, A. ve Akbaş, A. (2005). Lise öğrencilerinin kimya dersine yönelik tutum ölçeği geliştirme çalışması. Mersin Üniversitesi Eğitim Fakültesi Dergisi ,1 (2).
Kara, A. (2010). Öğrenmeye ilişkin tutum ölçeğinin geliştirilmesi. Electronic Journal of Social Sciences, 9 (32).
Kaya, M. (2001). İlköğretim ve Ortaöğretim Öğrencilerinin Din Kültürü ve Ahlak Bilgisi Dersine Karşı Tutumları. Ondokuz Mayıs Üniversitesi İlahiyat Fakültesi Dergisi, 12 (13).
Koçakoglu, M. ve Türkmen, L. (2010). Biyoloji dersine yönelik tutum ölçeği geliştirilmesi. Ahi Evran Üniversitesi Eğitim Fakültesi Dergisi, 11 (2).
Pallant, J. (2010). SPSS survival manual:A step by step guide to data analysis using SPSS, Open University Press.
Şencan, H. (2005). Sosyal ve davranışsal ölçümlerde güvenilirlik ve geçerlilik. Ankara: Seçkin Yayıncılık.
Tavşancıl, E. (2006). Tutumların ölçülmesi ve SPSS veri analizi. Ankara: Nobel Yayınları.
Tecim, E. (2015). Felsefe dersi tutum ölçeği geçerlik ve güvenirlik çalışması. Electronic Turkish Studies, 10 (3).
Tezbaşaran, A. A. (1997). Likert tipi ölçek geliştirme kılavuzu. Ankara: Türk Psikologlar Derneği Yayınları.
Turanlı, N., Türker, N. ve Keçeli, U. (2008). Matematik alan derslerine yönelik tutum ölçeği geliştirilmesi. Hacettepe Üniversitesi Eğitim Fakültesi Dergisi, 34, 254-262.
Uçar, R. (2013). İlahiyat Fakültelerinde Okutulan Arapça Dersine Karşı Tutum Ölçeği Geliştirme Çalışması. İnönü Üniversitesi İlahiyat Fakültesi Dergisi, 4 (2).
Uzunöz, A. (2011). Coğrafya dersine yönelik öğrenci tutum ölçeği geliştirilmesi. e-Journal of New World Sciences Academy (NWSA), 6 (1).
Ülgen, G. (1997). Eğitim psikolojisi. İstanbul: Alkım Yayınevi.
Yeşilyurt S., Gül Ş. (2009). Biyoloji tutum ölçeği. Erzincan Üniversitesi Erzincan Eğitim Fakültesi Dergisi, 11 (2).