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DEVELOPMENT OF UNDESIRABLE TEACHER BEHAVIOR SCALE

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Abstract

Undesirable behaviors are those actions which are inappropriate for the situation or context in question, but they are consciously developed. In this context, all of the behaviors that hinder educational activities in the class and at school can be considered as undesirable/negative behaviors (Sağlam, 2007). However, when undesirable behaviors at schools are mentioned, inappropriate student behaviors come to the mind first. In fact, teachers may also exhibit some undesirable behaviors, and these behaviors negatively affect the learning process and learners' behaviors (Bonfield, 2003; Dolin, 1995; Toale 2001) or such behaviors might destroy learners' self-esteem and learning abilities (Çıngır, 2004).

This study aims to test validity and reliability of "Undesirable Teacher Behavior Scale," which was developed to reveal teacher aggression that educational faculty students have encountered so far during their educational life, and it also aims to examine the accuracy of the model that emerged as a result of the analyses. The aggressive teacher behavior scale with totally 38 items

was administered to 357 university students and through exploratory factor analysis it was found that the scale had two factors. The values obtained through the exploratory and confirmatory factor analyses imply that the scale is valid, reliable and has a strong theoretical background.

Key Words: Teacher's Undesirable behavior, student perceptions

Öz

İstenmeyen davranış, duruma veya ortama uygun olmayan, fakat bilinçli olarak yapılan davranışlardır. Buna göre okulda ve sınıfta eğitsel çabalara engel olan davranışların tümü istenmeyen/olumsuz davranış olarak nitelendirilebilir. Ancak okullarda karşılaşılan istenmeyen davranışlardan söz edildiğinde, akla ilk gelen öğrencilerin istenmeyen davranışları olmaktadır. Oysa öğretmenler de bazı istenmeyen davranışlar gösterebilmekte ve bu davranışlar öğrencilerin öğrenmeleri ve davranışları üzerinde olumsuz sonuçlara yol açmakta ya da onların kendilerine güvenlerini ve öğrenme becerilerini yok edebilmektedir. Öğrenciler sınıfta öğretmenleri tarafından değerli bulunmak, özenli ve dikkatli davranılmasını istemektedirler. Öğrenciler öğretmenlerinden okul çalışmalarına verilen akademik desteğin ötesinde kendilerine yönelmiş bir ilgi, merak ve empati beklemektedirler. Öğretmen ilgili bir kişi olarak algılandığında öğrenci sınıftaki etkinliklere katılma ya yönelik daha fazla güdülenebilmektedir.

Bu araştırmada Eğitim Fakültesi öğrencilerinin bu güne kadar geçen öğrencilik yaşamalarında öğrenim sürecinde karşılaştıkları istenmeyen öğretmen davranışlarını onların algılarına göre ortaya koyabilmek için geliştirilmiş olan *İstenmeyen Öğretmen Davranışı Ölçeği*'nin geçerlik ve güvenirliğini ve bu analizler sonucunda oluşan modelin doğruluğun test etmek amaçlanmıştır. Toplam 38 maddeye sahip olan istenmeyen öğretmen davranışları ölçeği 357 üniversite öğrencisine uygulanmış ve yapılan açımlayıcı faktör analizi sonucunda ölçeğin iki faktörlü bir yapıya sahip olduğu saptanmıştır.

Yapılan açımlayıcı ve doğrulayıcı faktör analizleri sonucunda elde edilen değerler itibari ile geliştirilen ölçeğin geçerli, güvenilir bir ölçek olduğu belirtilebilir.

Anahtar Kelimeler: İstenmeyen Öğretmen davranışı, öğrenci algısı

Introduction

In recent years quite a few studies on negative behaviors at school have been carried out. Undesirable behaviors are those actions which are inappropriate for the situation or context in question, but they are consciously developed. In this context, all of the behaviors that hinder educational activities in the class and at school can be considered as undesirable/negative behaviors (Sağlam, 2007). However, when undesirable behaviors at schools are mentioned, inappropriate student behaviors come to the mind first. In fact, teachers may also exhibit some undesirable behaviors, and these behaviors negatively affect the learning process and learners' behaviors (Bonfield,

2003; Dolin, 1995; Toale 2001) or such behaviors might destroy learners' self-esteem and learning abilities (Çınkır, 2004).

Undesirable teacher behaviors, especially aggressive teacher behaviors are those actions that directly or indirectly affect and hinder both learning and teaching activities in the class (Kearney et al., 1991).

Such behaviors of oral harassment as the teacher's using a humiliating and downgrading language, embarrassing the student in the class or insulting him/her and not using a positive language are known as "teacher aggression." Oral aggression of the teacher hinders student's learning by decreasing the learner's developing positive attitudes towards learning and harming his/her motivation; it results in hostile feelings in the mind of the student and negatively affects the behaviors of him/her (Bekiari et al., 2005). A study carried out by Gözütok (1993) revealed that 30 % of teachers tried to create a disciplined environment by exhibiting behaviors that can be considered negative (pulling students' hair, slapping in the face, insulting, threatening by low marks, reporting to the principal and throwing chalk). The study also suggested that male teachers, in comparison with females, exhibited more negative behaviors. The study by Memişoğlu (2005) found that 36 % of the students thought that teachers *rarely* avoided humiliating behaviors. A study carried out by Tor and Sargın (2005) indicated that teachers frequently resorted to such behaviors as pulling ears, hitting with a ruler or stick, slapping in the face, scolding, throwing a pen or a similar object. In the same study, upon being asked the question "How would you respond to teacher violence?" 54.16 % of the students reported that they would not study that teacher's lesson, and 20.83 % of them said that they would try to spoil the lesson. Maurer and Wallerstein (1984; cited in Gözütok, 1993) carried out an empirical study on the effects of negative teacher behaviors on learning. In this study that they carried out in 50 state schools, the researchers examined the learners' failure and negative teacher behaviors, and concluded that the success rate decreased as negativity increased. In the study mentioned above, negative teacher behaviors resulted in absenteeism, dropouts and a decrease in the quality of education.

Students want their teachers to value them and they desire to be treated with care and attention. Apart from the academic support given to their works at school, students expect interest, curiosity and anxiety on the part of their teachers. If the teacher is considered to be a caring person, the students get more motivated to learn or to take part in the activities in the class (Phelan, Davidson and Cao, 1992). The teacher's not exhibiting discriminatory behaviors is highly significant in the learner's search for psychological security. A study by Çobanoğlu and Şentürk (2005) suggests that depending on the student's gender, teachers exhibit discriminatory behaviors. In Memişoğlu's (2005) study, it was found that one-fourths of the students think that they are not treated fairly by their teachers.

Whether student-teacher relations are healthy is significant in terms of students. According to the studies that have been carried out so far, having teachers not caring

for them and not being happy with their works negatively affect the motivation of the learners (Phelan, Davidson and Cao, 1992). In the study by Memişoğlu (2005), it was found that in terms of "sharing students' problems", 34,8 % of the students thought that teachers rarely did this." In Sheets' (2002) study, the students reported that their teachers did not listen to them and they did not try to communicate, and there were no sincere relations between the students and their teachers.

The classroom is not only a place where learning and teaching activities take place, it is also an environment where students form their perception of themselves by interacting with their teachers and friends. According to Açıkgöz (2003), the teacher as one of the people who is involved in a long period of interaction with the student has to undertake such functions as being a role model for the students, and guiding them in addition to his/her main task of "facilitating learning." It is not possible to talk about quality in a system in which there are no qualified teachers. Therefore, it is commonly known that positive teacher-student relations have a greater impact on the academic success of the learners. Having a qualified teacher might increase the learners' self-confidence and learning abilities, while having a bad teacher might devastate the learners' self-confidence and learning abilities (Çınkır, 2004).

No direct studies attempting to develop or adapt scales for evaluating aggressive teacher behaviors have been encountered in the literature. This study aims to test validity and reliability of "Undesirable Teacher Behavior Scale. (Appendix-1)" which was developed to reveal violent teacher behaviors that educational faculty students have encountered so far during their educational life, and it also aims to examine the accuracy of the model that emerged as a result of the analyses.

Method

Identifying individual's attitudes towards an object depends on developing an attitude scale intended for this object and administering it. Today, there are techniques depending on procedures ranging from measurements with one dimension to multi-dimensional ones and more complex procedures. The most frequently used technique among these is Likert Scales, which are also known as "scaling through the sum of the ratings"(Tezbaşaran, 1997). Likert scale, which is an ordering technique with sums, is the most frequently used attitude scale. This is because Likert scales are easier to develop and more practical when compared with other scales. The items in Likert method are not formulated by considering the expression's relationship with the object in a direct way; they are prepared indirectly by considering their degree of usefulness and taking into account the points that are related to the issue (Tavşancıl, 2005).

This study aims to test validity and reliability of "the scale for aggressive teacher behavior in the classroom based on learner perceptions," which was developed to reveal violent teacher behaviors that educational faculty students have encountered so far during their educational life, and it also aims to examine the accuracy of the model that emerged as a result of the analyses.

Sampling

The sample of the study consisted of the students studying at NEU Ahmet Keleşoğlu Educational Faculty during 2011-2012 academic year. The scale developed in the study was administered to totally 357 university students studying at this faculty. Students from six different departments were included in the study. During the sampling procedure, maximum variety method, a purposive sampling type was used, and in this context by considering the population's representation ability, students from science, social science and art departments were included in the study (McMillan & Schumacher, 2006). In such a sampling method, since different cases related to the problem are included in the sample, it is possible to get important clues about the population values (Büyüköztürk et al., 2008). First year students of the departments mentioned above took part in the study. In the related literature, it is stated that the sampling size should be large enough to have at least five cases for each item. As a matter of fact, Kline (1994) and Şencan (2005) state that when developing scales it is enough to have a sample size of 100-200. In this context, it can be said that the sample size is adequate to determine the validity and reliability of the scale. 43.65 % of the students who took part in the study are males, whereas 56.35 of them are females. The age of the participants ranges between 20 and 22. Meanwhile, the participants were randomly selected from the classes.

In the present study, the scale was administered to 370 students, but 13 of the forms were eliminated since they were not filled out according to the instructions, so 357 forms were included in the analysis. That is, the response rate of the scale was 97,5 %. According to Balcı (2004), this response rate is considered to be "highly good."

Developing the Scale

In the first phase of the validation process of the scale, exploratory factor analysis was conducted. As a part of exploratory factor analysis, Kaiser-Meyer-Olkin (KMO) coefficient and Bartlett's sphericity test were conducted. In the related literature, it is stated that the KMO value's being over 0.60 shows that the distribution is adequate for factor analysis and the meaningful result of Bartlett's sphericity test indicates that meaningful factors can be extracted from the data (Reuterberg & Gustafsson, 1992; Kline, 1994; Fraenkel & Wallen, 2000; Tabaschinck & Fidell, 2001). The KMO value's being between 0.80-0.90 is considered to be very good, and its being equal to or over 0.90 is accepted as perfect. In addition, in factor analysis, the factors whose eigenvalues equal to or are greater than 1 are considered as important factors (Murphy & Davidshofer, 1991; Kline, 1994; Tabaschinck & Fidell, 2001; Thompson, 2004). There are various opinions in the literature about how to determine the cut-off point of the value of sub-factor loadings. Diekhoff (1992) state that on the condition that the value of factor loading is 0.71, this can be considered as perfect, and this value explains the 50 % of the variance.

According to Tabaschinck and Fidell (2001), factor load value's being 0.63 explains 40 % of the variance, and this can be considered as highly good; a factor load value of 0.55 can be seen as good, and this value explains 30 % of the variance; if the factor load value is 0.45, this value is average and explains 20 % of the variance; if it is 0.45, this value is poor and explains 10 % of the variance. Ferguson and Takane (1989) state that 0.40 must be accepted as the lower cut-off point, so that a factor pattern can be formed. In addition to the viewpoints mentioned above, it is stated that when forming a factor pattern, the factor loadings ranging from 0.30 to 0.40 can be taken as the lower cut-off point (Şencan, 2005; Büyüköztürk, 2007; Çokluk, Şekercioğlu & Büyüköztürk, 2010). Therefore, the lower cut-off point was accepted to be .031 in this study. In the literature, it is accepted that the factors whose eigenvalues equal to or are greater than 1 are considered as important factors in factor analysis (Büyüköztürk, 2007). On the other hand, to theoretically describe negative teacher behaviors and their effects in a better way, those factors which contributed to the total variance at the level of 8 % or more and whose eigenvalues were above 3.00 were included in the scale.

To test the accuracy of the construct with two factors determined at the end of exploratory factor analysis, confirmatory factor analysis, commonly encountered in the literature, was used. Kline (2005) suggests conducting confirmatory factor analysis to test the accuracy of the model formed as a result of exploratory factor analysis. As a result of confirmatory factor analysis, multiple goodness of fit indices are obtained. In the related literature, it is accepted that to verify the accuracy of the model generated, it is more reasonable to use multiple goodness of fit indices rather than using a single goodness of fit index (Marsh, Balla & McDonald, 1988; Jöroskog & Sörbom, 1993; Schumacher & Lomax, 1996; Tabaschinck & Fidell, 2001; Kline, 2005). As a result of confirmatory factor analysis of aggressive teacher behavior scale, the following indices were calculated: X^2/sd rate (chi-square goodness of fit test), GFI (goodness of fit index, AGFI (adjusted goodness of fit index), RMSEA (root-mean-square error of approximation), CFI (comparative fit index), NFI (Normed fit index) and PGFI (parsimony goodness of fit index). According to Şimşek (2007), and Yılmaz and Erçelik (2009) goodness of fit criteria help determine how consistent the correlations in the model and the data are. A value under 0.08 and even below 0.05 for the RMSEA and SRMR, which are the indices of goodness of fit, is considered as a better indication of fitness (Jöroskog & Sörbom, 1993; Tabaschinck & Fidell, 2001; Kline, 2005; Çokluk, Şekercioğlu & Büyüköztürk, 2010). The RMSEA value's being under 0.05 implies perfect fitness; its being between 0.05 and 0.08 shows acceptable fitness, while a value between 0.08 and 0.10 indicates weak fitness (Tabaschinck & Fidell, 2001; Kline, 2005). However, it is stressed that X^2/sd rate must be below 3 or 4 at most (Jöroskog & Sörbom, 1993; Schumacher & Lomax, 1996). In general, though the GFI, AGFI and CFI values' being between 0.80 and 0.90 means that the construct is suitable for goodness of fit, the values that equal to 0.90 or above signal adequate goodness of fit (Jöroskog & Sörbom, 1993; Tabaschinck & Fidell, 2001; Brown, 2006). After the Cronbach Alpha

coefficient was calculated to test the internal reliability of the scale, the validation process of the scale was completed.

Data Analysis

To validate the scale, exploratory factor analysis and item analysis were carried out first, and later confirmatory factor analysis was conducted. Exploratory factor analysis and item analysis were conducted with SPSS 16.0 (Statistical Package for Social Sciences), whereas confirmatory factor analysis was carried out by using Amos 16.0 (Analysis of Moment Structures) software. The level of significance for all statistical procedures in the study was accepted to be 0.05.

Findings

In this part of the paper, the findings obtained will be discussed under the headings of (i) the findings related to exploratory factor analysis, (ii) the findings related to reliability and (iii) those related to confirmatory factor analysis.

Findings Related to Exploratory Factor Analysis

After the piloting version of the scale was administered to the selected student group, exploratory factor analysis was carried out to test the construct validity of the scale for aggressive teacher behaviors. As a result of the exploratory factor analysis, those items with item total correlations of 0.31 and above were included in the study. It was also found that factor loadings of the 4th and 40th items were below 0.31. Therefore, these two items were eliminated. An additional factor analysis of all those items with factor loadings of 0.31 or over was carried out to calculate the KMO value and Bartlett's sphericity test result. The analysis revealed that the KMO value of the scale was 0.923. The KMO value is used to determine whether the distribution is adequate for factor analysis; the range between 0.80 land 0.90 is labeled as very good, and 0.90 or above is considered to be perfect (Kline, 1994; Büyüköztürk, 2007). Moreover, it is commonly thought that the number of people in the study group is enough if the KMO value is something around 1 (Murphy & Davidshofer, 1991; Kline, 1994; Fraenkel & Wallen, 2000).

In addition to this, according to Bartlett's sphericity test, the value for this scale was calculated to be [X^2=7229/sd=703, p<0.000]. A meaningful result of Bartlett's sphericity test indicates that the variable that is being measured is multivariate in the population parameter (Thompson, 2004). In conclusion, the KMO value obtained in this study was 0.923, which means that it is perfect. In addition, the result of Bartlett's sphericity test was meaningful [X^2=7229/sd=703, p<0.000]. As a result of the analyses carried out, it was decided that exploratory factor analysis could be carried out. In factor analysis, the factors whose eigen value equals to or is greater than 1 are considered as important factors (Büyüköztürk, 2007). In this study, by considering the contribution of the factors to the overall variance, the eigenvalue was accepted to be 3.00, and two factors with eigenvalues over 3.00 were determined. With this aim in

mind, the factors that were obtained as a result of rotated component analysis of the scale and the factor loadings of the items belonging to these factors are given in Table 1.

Table 1. *Factor Loads of the Items in Rotated Component Matrix Analysis of the Scale*

Items	Factors	
	Teacher's Undesirable behavior	**The effects of Teacher's Undesirable behavior**
v16	,756	
v18	,700	
v15	,682	
v17	,681	
v12	,674	
v10	,674	
v11	,640	
v13	,633	
v14	,623	
v9	,603	
v19	,528	
v21	,516	
v20	,502	
v2	,500	
v8	,498	
v3	,453	
v22	,442	
v23	,437	
v6	,416	
v5	,398	
v1	,384	
v7	,348	
V35		,777
V34		,761
V29		,744

V31	,712
V32	,711
V39	,705
V37	,695
V36	,648
V33	,646
V27	,611
V38	,589
V28	,573
V30	,569
V26	,516
V25	,473
v24	,312
Variance Explained	
Factor-1: 32.771 %	
Factor-1: 32.771 %	
Total: 40.888 %	

In line with the findings in Table 1, it is seen that the loads of the items belonging to the first factor (teacher's undesirable behavior) in the scale range between 0.756 and 0.348, and those of the items belonging to the second factor (the effect of teacher's undesirable behavior) range between 0.777 and 0.312 . Since the 4th and 40th items' factor loadings were below the point 0.31, which was determined as the lower cut-off point, these items were eliminated. On the other hand, the variance rate explained by the first and second factor was found to be 32.771 %, and 08.117 %, respectively. Moreover, the total variance rate of the whole scale was found to be 40.888 %. In factor analysis, the variance rates ranging between 40 % and 60 % are viewed as ideal (Kline, 1994). At the end of the rotation procedure carried out with varimax factor analysis of the items of teacher's undesirable behavior scale, it was decided that the scale had two dimensions. To see these dimensions more clearly, Cattel's scree test (Kline, 1994) was used, and Figure 1, which gives the number of maximum meaningful factors, was obtained.

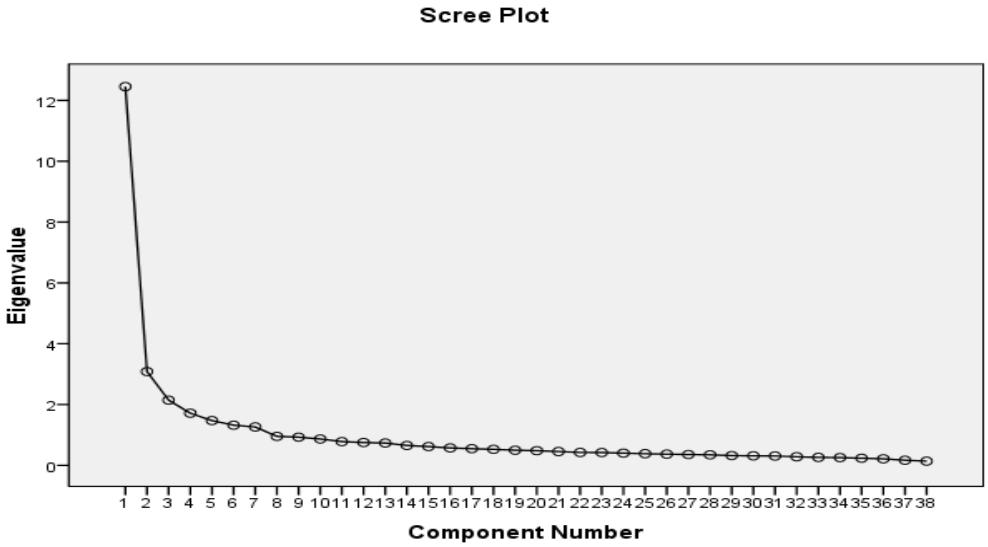

Figure 1. *Scree Plot Test*

In this figure, the vertical axis shows eigenvalues, while the horizontal one shows the factors. This graph is obtained by combining the points determined by matching the factors with their eigenvalues. In this figure, the factor where fast drops with high momentums are seen gives the number of important factors. Horizontal lines show that the contributions of additional variances brought by factors are proximate to each other (Büyüköztürk, 2007; Çokluk, Şekercioğlu & Büyüköztürk, 2010). In the scree plot (See Figure 1), the point where the graph curve drops suddenly is the location where the second factor is. The curve rises again after the third point. As a matter of fact, the contributions of the factors to the variance are both small and almost the same (Fabrigar et al., 1999). Therefore, it can be said that the scale has two factors. Furthermore, the correlation values of the two factors are given in Table 2.

Tablo 2. *The Correlation between the Factors of the Scale*

			Pearson Correlation	
Factors	**X**	**Sx**	**1**	**2**
Teacher's aggressive behavior	44.37	17.47	-	.642**
The effect of violent teacher behavior	37.82	15.52	.642**	-

**p<0.01.

When the correlation between the factors of the scale for violent teacher behaviors given in Table 2 is examined, it is seen that there is a moderate positive and

linear relationship among the factors of the scale ($p<0.01$). Therefore, it is understood that there is a positive consistency among the sub-dimensions of the scale.

Findings Related to Reliability

Independent samples t-test between groups was used to find out the internal validity of the scale. First, the test scores were ordered from the lowest to the highest, and the group's 27 % lower and upper sections were calculated. Total scores of 96 people in the 27 % part are compared in Table 3.

Table 3. *Calculating the Internal Validity of the Scale*

Groups	η	X	Sx	sd	t	p
Upper	96	121.02	16.69	190	40.187	0.000*
Lower	96	46.62	7.07			

When Table 3 is examined, it is seen that the mean of the upper group for the sum of the scores for the items (X=121.02) is higher. Therefore, it is possible to say that there is a significant difference in favor of the upper group ($p<.05$). This indicates that the items have high discriminatory value and they have internal validity. On the other hand, the internal reliability coefficient of the Undesirable Teacher Behavior Scale was estimated and Cronbach Alpha coefficient was found to be 0.94. In the related literature, it is maintained that a reliability coefficient value between 0.60 and 0.70 is enough in the reliability studies with multi-point rating scales (Cronbach, 1990). In this respect, the Cronbach Alpha reliability coefficient is considered to be perfect. Therefore, it was found that this scale was reliable. In addition, item analyses of the scale for teacher's undesirable behavior were carried out and the related findings are presented in Table 4.

Table 4. *Item Analysis of the Scale*

Item	X	Sx	Item Total
v1	1,92	1,38	,32
v2	1,62	1,09	,45
v3	1,96	1,34	,46
v5	2,29	1,49	,46
v6	1,82	1,27	,43

v7	1,64	1,10	,30
v8	1,69	1,14	,44
v9	2,00	1,34	,55
v10	2,11	1,39	,60
v11	2,15	1,37	,60
v12	1,87	1,22	,59
v13	2,03	1,32	,49
v14	2,09	1,46	,47
v15	1,92	1,36	,51
v16	1,97	1,36	,57
v17	1,86	1,26	,65
v18	1,99	1,36	,63
v19	1,83	1,25	,44
v20	2,29	1,44	,58
v21	2,25	1,43	,60
v22	2,25	1,45	,51
v23	2,54	1,60	,43
v24	2,31	1,57	,39
V25	3,18	1,66	,46
V26	3,09	1,65	,58
V27	2,44	1,49	,65
V28	2,36	1,43	,57
V29	2,42	1,48	,58
V30	2,99	1,66	,62
V31	2,42	1,50	,59
V32	2,71	1,57	,62
V33	2,17	1,40	,63
V34	2,29	1,47	,61

V35	2,06	1,31	,64
V36	1,60	1,02	,48
V37	1,96	1,31	,48
V38	1,70	1,13	,51
V39	2,13	1,43	,58

Table 4 presents means, standard deviations, and item total statistics for aggressive teacher behavior scale. The mean score for the scale is 2.15, and the mean for the standard deviations is 0.514. As a result of Pearson moment correlations analysis for item total analysis, it was found that all the items in the scale correlated with the total score at the statistical significance level of 0.01. However, the reliability coefficients for the sub-dimensions of the scale developed are given in Table 5.

Table 5. *The Cronbach Alpha Coefficients for the Sub-dimensions of the Scale*

Sub-dimensions Factors	**Item Number**	**Reliability Coefficient**
Teacher's aggressive behavior	1 2 3 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24	0.91
The effect of aggressive teacher behavior	25 26 27 28 29 30 31 32 33 34 35 36 37 38 39	0.92

When Table 5 is examined, it is seen that Cronbach Alpha reliability coefficients range between 0.91 and 0.92. When the conception that the Cronbach Alpha value in reliability analysis must be at least 0.70 (Anderson, 1988; Kline, 1994; Peers, 1996) is considered, it can be said that in addition to overall reliability of the scale, each sub-dimension of the scale is highly reliable.

Findings Related to Confirmatory Factor Analysis

After the exploratory factor analysis of the scale was carried out, confirmatory factor analysis was conducted to test the accuracy of the model proposed. Unlike the factor analyses carried out through traditional methods, confirmatory factor analysis is used for testing the accuracy of the factor structure determined by researcher earlier. In such analyses, it is hypothesized that more than one latent variable, which is thought to be measured by the items in the scale, is explained by another latent variable, and the appropriateness of this hypothesis for the data set is tested (Jöroskog & Sörbom, 1993; Schumacher & Lomax, 1996; Kline, 2005; Şimşek, 2007). Confirmatory factor

analysis was carried out to test the scale with 38 items and two factors after the exploratory factor analysis. The structure related to confirmatory factor analysis is shown in Figure 2.

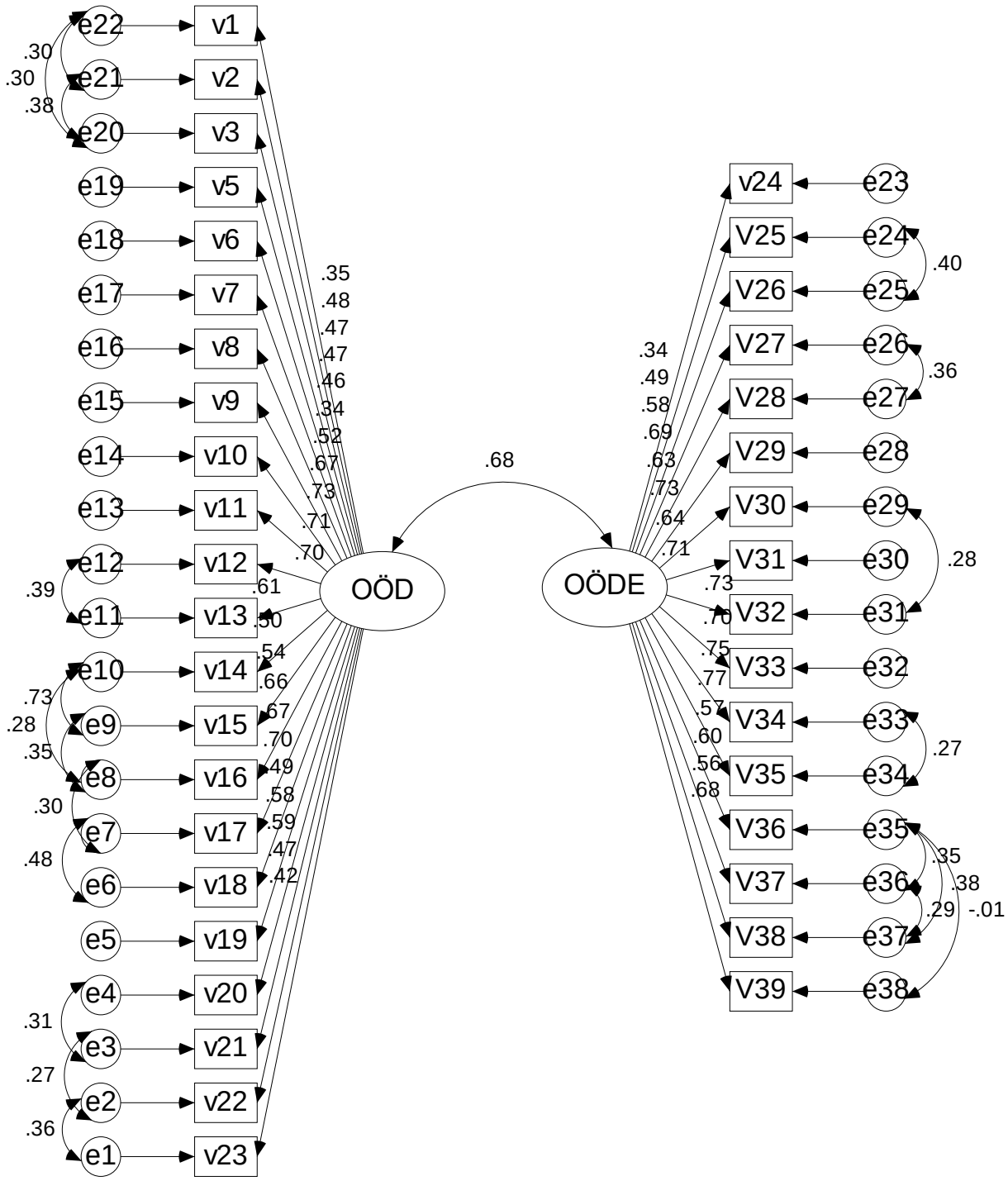

Figure 2. *The Connection Diagram of Confirmatory Factor Analysis of the Scale*

When Figure 2 was examined, X^2/ as a result of confirmatory factor analysis, sd rate was found to be 2.52 (X^2/sd=1628.31/644). In the related literature, it is stated that the ratio of chi-square goodness of fit and degree of freedom must be 3-4 at the very most or lower than this (Kline, 2005). X^2/sd ratio's being lower than 3 indicates that factor structure is consistent. In addition, standardized values are shown in the diagram. In Figure 2, since none of the values between latent variables and observed variables is over 1, it is thought that correlation values among the observed values are at the appropriate level (Jöroskog & Sörbom, 1993; Schumacher & Lomax, 1996; Thompson, 2004; Kline, 2005). In the related literature, it is accepted that the GFI and AGFI indices' being equal to 1 signals perfect fit (Schumacher & Lomax, 1996; Hooper, Coughlan & Mullen, 2008). In this study, the GFI was calculated to be 0.79 and the AGFI found to be 0.76, so it can be said that these values are enough for consistency. However, in this study, the RMSEA value was calculated to be 0.06 as well, and this value is equivalent to an acceptable goodness of fit (Jöroskog & Sörbom, 1993; Schumacher & Lomax, 1996; Brown, 2006). The CFI value's being equal to or higher than 0.95 signals perfect goodness of fit (Thompson, 2004). The CFI value was calculated to be 0.85 in the study. This obtained value signifies fine goodness of fit. However, though the NFI value that equals to 0.95 or exceeds it signals perfect fit (Sümer, 2000), the NFI was calculated to be 0.78 in the study. These values obtained also signify goodness of fit. Finally, the PGFI value's being equal to 1 means that the model is perfectly plain and pure. The PGFI value in the present study was calculated to be 0.69, and this value is considered to be enough in the literature (Sümer, 2000). The results obtained imply that this value is within acceptable limits, but it is not perfect. These findings verify the factor structure of the scale for aggressive teacher behaviors. As a consequence, it can be stated that under the light of the data obtained the items in question are appropriate for a two-factor structure.

Results and Discussions

The aim of this study is to develop a reliable and valid measurement tool to evaluate the degree of teacher's undesirable behavior towards students in the educational environment. The Undesirable Teacher Behavior Scale with totally 38 items was administered to 357 university students and as a result of exploratory factor analysis, it was found that the scale had two factors.

The items with a factor load that equals to 0.31 or exceeds this number were selected for analysis since they were considered to be functioning. he results of the factor analysis indicated that the scale had 38 items. In this study, eigenvalue was taken as 3.00 and two factors with an eigenvalue of over 3.00 were identified. According to the analysis carried out, in the piloting version, there were 22 items in the first factor and 16 in the second. According to the results of rotated principal component analysis, it was found that the scale had two factors, and the total variance rate explained by these factors was 32.771 for Factor-1 (violent teacher behavior) and 08.117 % for Factor-2 (the effect of violent teacher behavior). In addition, for the whole

scale it was calculated to be 40.888 %. The higher the variance rates reached, the stronger the factor structure of the scale gets. However, it is not possible to reach high variance rates in social sciences (Tavşancıl, 2005). Thinking that variance rates ranging from 40 % to 60 % are considered ideal in the literature (Scherer, 1988), we can say that the variance rate in this study is at an ideal level. In addition, in the analyses carried out, the KMO value was calculated to be 0.923, and Bartlett's test result was X^2=7229/sd=703 (p<.000). The result of Bartlett's test was found to be significant at 0.05 level. According to Bartlett test, there is a correlation between the variables, and factor analysis is carried out on these variables. The Cronbach Alpha reliability coefficient of the whole scale was calculated to be 0.94. The Cronbach Alpha reliability coefficient of the first factor of the scale was 0.91 and it was 0.92 for the second one. When the conception that the Cronbach Alpha value in reliability analysis must be at least 0.70 (Anderson, 1988; Kline, 1994; Peers, 1996) is considered, it can be said that in addition to overall reliability of the scale, each sub-dimension of the scale is highly reliable.

In addition to this, it was found that there was a positive linear correlation between the learners' score in the scales and the factors in them. As a result, it can be said that there is a consistency between the sub-scales and factors. However, Şimşek (2007) states that even though a scale without a strong theoretical background gives very good results in exploratory factor analysis, the same results may not be obtained in confirmatory factor analysis. Therefore, the researcher considered it appropriate to carry out both exploratory factor analysis and confirmatory factor analysis. After the exploratory factor analysis, confirmatory factor analysis was also carried out for the scale. A scale's providing the researcher with appropriate values in confirmatory factor analysis as well [X^2/sd=1628.31/644; GFI= 0.79; AGFI= 0.76; RMSEA= 0.06; PGFI= 0.69; CFI= 0.85; NFI= 0.78] can be considered as a sign of a strong theoretical background for the scale (Jöroskog & Sörbom, 1993; Schumacher & Lomax, 1996; Tabascnick & Fidell, 2001; Thompson, 2004; Kline, 2005; Brown, 2006). The values obtained through the exploratory and confirmatory factor analyses imply that the scale is valid, reliable and has strong a theoretical background.

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APPENDIX-1

Undesirable Teacher Behavior Scale

Directions: For a research study, we would like to get your opinions on negative teacher behaviors that you experienced during the time you were at high school. Please read each item carefully. Then put an (x) sign that in the place that explains your situation. Don't write your name and surname on the form. On no account will your responses be used against you. This is a survey intended for a research study. Therefore, if you respond to this survey in a sincere manner, you are sure to contribute to this scientific study. Thank you very much for your help.

Gender M ( ) F ( )

		I strongly agree(5)	I agree(4)	I am undecided(3)	I disagree(2)	I strongly disagree
	Undesirable behavior exhibited by the teacher					
1.	He/she thought that I was not suitable for the school.					
2.	He/she used to say that I was psychologically ill.					
3.	He used to say that I did not have adequate reasoning ability.					
4.	He/she would mock my failures or mistakes in the lesson.					
5	She used to mock my outer appearance (A physical characteristic)					
6.	He/she used to mock my name.					
7.	To exclude me from class activities, he/she used to assign tasks that were impossible for me to do.					
8.	He/she used to behave as if I did not exist.					

9.	He/she constantly interrupted me and did not allow me to speak.					
10.	When I raised my finger to get a permission to speak, he/she did not use to let me.					
11.	Whenever I wanted to talk to him/her, he/she avoided speaking to me by making up an excuse.					
12.	He/she intentionally kept me waiting for a long time.					
13.	He/she used to attack my private life.					
14.	He/she used to reveal things related to my private life.					
15.	He/she used to say negative things about me when I was absent.					
16.	He/she used to tell the principal and other teachers negative things about me.					
17.	He/she used to tell my family negative things about me.					
18.	He/she used to send me to the principal even in the case of the smallest problem.					
19.	He/she used to criticize my works and homework.					
20.	He/she used to give bad marks without informing me about the reason.					
21.	He/she used to give punishments arbitrarily.					
22.	He/she used to shout, insult and curse for no reason.					
	The effect of undesirable teacher behavior on you					

23.	He/she used to resort to physical violence.					
24.	I thought that the teacher was repulsive.					
25.	I used to feel angry towards the teacher.					
26.	I used to feel that I was isolated by the teacher.					
27.	I always thought about what the teacher did.					
28.	I used to feel sad.					
29.	I used to hate the lesson that he/she taught.					
30.	I used to feel afraid during the lesson hours.					
31.	I used to fail to concentrate on the teacher's lesson.					
32.	I used to hate school and I did not want to go there.					
33.	I lost my self-confidence.					
34.	I used to feel desperate.					
35.	I used to have difficulty in sleeping at nights.					
36.	I was embarrassed.					

37.	I used to have stomachaches and headaches.					
38.	I used to feel that my self-esteem and pride were harmed.					