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The scale of teachers' management of undesirable student behaviours: A validity and reliability study

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Abstract

This study aims to develop a scale to determine the Teachers' Management of Undesirable Student Behaviours. The study to determine the construct validity and internal consistency was carried out in the general screening model. The study groups consist of 822 students (458 for AFA; 364 for DFA) studying at various high schools in the centre and districts of Kırklareli in the 2020-2021 academic year. According to the exploratory factor analysis, it was seen that the scale consists of 3 factors and 21 items. The reliability of the scale was determined from the reliability analyses conducted with the Cronbach Alpha (α) coefficient and McDonald's Omega coefficient. The total Cronbach Alpha (α) value of the scale is 0.90. As a result of the test, it was understood that all substances are distinctive because the "t" values are significant at the. 001 level. According to the result of the confirmatory factor analysis, all items are significant under the relevant factors. These results show that the Scale of Teachers' Management of Undesirable Student Behaviours is a valid and reliable scale. The scale can be used at the national and international levels to determine teachers' levels in managing undesirable student behaviours.

Keywords: Teacher, student, undesirable behaviour, management, STMUSB.

1. Introduction

1.1. Introduce the problem

1.2. Human beings learn how to behave after being born. They do not have instinctive behaviours like other living things. Because of this, a person has to observe and learn from every behaviour that they are going to conduct. In this process, as a person learns by observation, they are subjected to learning from adults both in a programmed and unplanned way. In that case, adults and instructors who will be observed should not

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forget that they are an educator and should behave like one. Here, parents and adults continue the education in an informal way, while the teacher does the same both informally and formally. Therefore, the teacher has more responsibility as an educator. In this process, the teacher, based on scientific principles, tries to convert most undesirable student behaviours into desired ones. The competence of the teacher is also an important factor.

1.3. Theoretical Framework and Literature Review

A teacher is a person who guides the formation of changes in the behaviour of individuals that will add quality to their own lives and to society by employing knowledge about their profession (Şahin, 2004). From this perspective, teaching is a specialty profession. In other words, teaching is a profession that should not be acquired by anyone but by those who are experts. In this context, the teacher is a conductor providing the harmony between the different instruments and notes, a referee making sure the rules are abided, and a doctor holding the pulse of the class. (Jones & Jones, 1982; Aydın, 2015, p. 20). In general, the task of teachers is to maintain order in the classroom, get the students ready for education and training, and keep them awake (Stevenson, 1991). This is important because, in a study conducted on this subject, it was found that teachers devote 19% of their time to ensuring that order is maintained in the classroom (Açıkgöz, 1992). The teacher has the role of confidant, parent, information provider, judge, and disciplinarian in the school (Tezcan, 1994). Variables such as teachers' professional experience, teaching style, personality, health, and culture also affect classroom management. In addition, the way the teacher perceives the students in the classroom also reveals their understanding of discipline (Erdoğan, 2001). While creating the learning environment, the teacher should organize the psychological conditions related to the discipline, the environment consisting of school, classroom and educational equipment, classroom management, and emotional-social atmosphere (Çalık, 2009, p. 3). The focus of the organization is the students. An activity in which students are ignored does not make sense from an educational point of view.

A student is an individual who engages in and is affected by educational activities, who gains cognitive, affective and psychomotor behaviours as a result of this influence, and whose gains are desired to be changed in a purposeful and positive way. The student learns not only various knowledge and skills at school but also values, opinions, and behaviour, which are as effective on the student as knowledge and skills. Undoubtedly, the student comes to school with a number of positive or negative behaviours. Before coming to school, they acquire most of the behavioural patterns from their family. In addition, it is very difficult for schools to correct some undesirable habits of the students acquired from their families (Bursalıoğlu, 1987) because quitting habits takes a lot of hard work and time. On the other hand, there are several variables that affect student behaviour. Students in the same class may differ in various aspects, such as gender, age,

physical characteristics, abilities, environment, income level, parents ' education level, socio-economic status, values, beliefs, family structure, etc... Due to these variables, it is natural that there are differences in their way of expressing themselves, their perspective and behaviours (Dönmez, 2010, p. 51). This situation requires the teacher to be aware that different and undesirable behaviours will occur in the classroom.

Behaviours that interfere with educational activities in the classroom cause disruptions in the conduct of activities and disrupt the order of the classroom are called undesirable behaviours (Burden, 1995, p. 15). Martin and Pear (2007) define undesirable behaviour as the difference between the behaviour of students and the teacher's expectation. At the same time, the students want to behave in accordance with their nature, while the teacher wants these behaviours to be appropriate for school. This is where the difference arises. In short, any kind of behaviour that prevents and makes it difficult to achieve educational goals is called undesirable behaviour (Ilgar, 2007, p. 65). Swearing, physical violence, talking loudly, talking about irrelevant matters, cheating, off-duty behaviours, eating and drinking in a manner that does not comply with the rules, damaging the classroom equipment, and disobeying the teacher (Wragg, & Dooley, 1996, pp. 21-46), aggression, corruption, interrupting the lesson, avoiding taking responsibility (Charles, 1996, p. 2) are perceived as undesirable student behaviours in the literature. Also, harming friends, their belongings, school, or classroom equipment, breaking the rules, turning the classroom into a place where classes cannot be held, or sabotaging the lesson can also be defined as undesirable behaviours. Apart from these, other behaviours conducted by students can also be described as unwanted behaviour by the teacher. It can be said that the personality of the teacher, their upbringing and culture are effective in this qualification. In this context, the non-pedagogical perspectives of the teachers will cause harm to the students.

Undesirable student behaviours are also the ones that disrupt classroom discipline. However, classroom discipline is extremely important for effective education. The purpose of providing discipline in the classroom should not be to intimidate or punish the students but to help them gain confidence, minimize undesirable behaviours, and support the desirable behaviours (Chemlynski, 1996, p. 43). The realization of these goals depends on the purposeful organization of the classroom environment. As it is known, if a suitable environment is not created to provide education or discipline, students are most affected. (Henson, 1988, p.293). There are usually disruptions in student behaviour towards the end of classes and during the transition from one activity to another (Evertson, & Emmer, 2013). Therefore, the teacher must manage the process correctly with the measures they will take and with the planned activities.

Teachers who frequently encounter undesirable student behaviour in their classrooms are forced to spend most of their time maintaining the class order and controlling students' undesirable behaviours, rather than doing their duty of teaching (Kerrr, &

Nelson, 1989, p. 173). In this case, there is a need to limit those student behaviours, and usually, younger children need to be controlled and guided more than the older ones (Moore, 1992, p. 271). In other words, if students are not fulfilling their responsibilities, the teacher should remind them of the appropriate behaviour (Bull, & Solity, 1987, p. 146). This reminder should be in the appropriate language without annoying or hurting the students.

When the roots of undesirable student behaviours are examined, it is seen that they are induced by the student, school environment, family, classroom environment, teacher, communication barriers and curriculum. Student-related reasons: The student's physical and mental disability, personality, learning level, behaviour, environment, lack of confidence, and ignorance are seen as elements that generate undesirable behaviours, and these behaviours create problems for the school (Brantley, & Baysal, 2011, p. 66). School environment-related reasons: Several variables, such as the arrangement of classrooms in the school, the number of students and classrooms, the state of the garden, the canteen, the gym, physical facilities, management, and the rules, affect student behaviour. Therefore, well-maintained, clean, interesting, well-equipped schools have a positive effect on the behaviour and mood of students (Başar, 2014, p. 22). Family-related reasons: The low socio-economic level of parents, their use of violence against children, and their intensive work life affect the behaviour of students in the classroom negatively. Based on this fact, it can be said that the attitudes and behaviours of the parents affect the attitudes and behaviours of the students (Akar, Erden, Tor, & Şahin, 2010, p. 799). Classroom environment-related reasons: The general appearance of the classroom can be summarized as the layout of the classroom, the number of students, cleanliness, heat, colour, noise, and light (Aydın, 2015, pp. 35-37). Lack or excess of them can generate undesirable behaviours. Teacher-related reasons: Teachers' emotional nature, education, life, appearance, self-confidence, perspective, culture, behaviour have an important effect on the behaviour of students (Yiğit, 2010, p. 7). Communication barriers related reasons: In-class communication barriers originating from both the teacher and the student can be caused by visual and auditory disorders, the students' perspective of the lesson as useless, use of the wrong words and expression technique, the physical conditions of the classroom, being unprepared for the lesson, cultural differences, lack of love and respect, class size, the inadequacy of the teacher, noise, the monotony of the lesson (Memişoğlu, 2010, pp. 141-142). Curriculum related reasons: If the curriculum followed does not correspond to the student level and characteristics, if the lecture method does not suit the student, the student will have difficulty attending and understanding the lesson, and by thinking that the subject exceeds their capacity, they will ignore the lesson and turn their attention on undesirable behaviours (Yiğit, 2010, p. 84).

In order to prevent undesirable behaviours, the teacher must scientifically take several actions. These actions can be listed as understanding the problem, ignoring, warning, making changes in the lesson, giving responsibility, talking to the student, meeting with

the school administration and the student's family (Başar, 2014, pp. 197-210), using the Guidance and Psychological Counselling Service, and managing the undesirable behaviour. It will be more effective in preventing undesirable behaviour if the specified actions are taken in the order indicated here.

In the literature, there are many studies about student misbehaviour, teachers' and students' opinions about undesirable behaviours, strategies for managing undesirable behaviours, student solutions developed against misbehaviour, and strategies to deal with undesirable behaviours (Cangelosi, 2016; Martin, & Pear, 2007; Trust, 2020; Kerry, & Nelson, 1989; Armstrong, 2019; Evertson, & Emmer, 2013; Day, & Bell, 2013; Turan, 2019; Bells, & Arslan, 2018; Chemlynski, 1996; Red, 2019; Wragg, & Dooley, 1996; Şahin, & Adıgüzelli, 2015; Burden, 1995). However, a measurement tool for determining teachers' management of undesirable student behaviours, the validity and reliability of which have been proven, has not been encountered, at least in the previous studies. Therefore, the "Teachers' Management of Undesirable Student Behaviours" scale developed is considered important in terms of filling a gap in the field.

2. Method

This part presents the research method, design, study group, data collection and analysis.

2.1. The research model

This study, conducted to measure the student perceptions of teachers about their ability to manage undesirable student behaviours, is a scale development study in the screening model of quantitative research methods. A screening model is a model aiming to describe the features of a group representing the universe, or sometimes a physical environment (school, etc.) according to one or more variables (age, attitude, beliefs, abilities, etc.) (Fraenkel, Wallen, & Hyun, 2012).

2.2. Study group

The development studies of The Scale of Teachers' Management of Undesirable Student Behaviours (STMUSB) were carried out on the data obtained from a total of 822 students who are studying in various types of high schools in the central district of Kırklareli province in the 2021-2022 academic year. The study group was formed by means of easily accessible case sampling (Fraenkel, Wallen, & Hyun, 2012; Yıldırım & Şimşek, 2011). Using this method, study groups were determined for Exploratory Factor Analysis (EFA) and Confirmatory Factor Analysis (CFA). In the scope of the study, first of all, the Basic Components Analysis (BCA) was performed with the data collected from 458 students, and the CFA was performed with the data collected from 364 students. Kline (2005) recommends determining the size of the study group to be 10 times the number of items on the scale. In the study, the size of the study group was determined to

be more than ten times the number of items. The distribution of students according to gender, grade and type of high school is given in Table 1.

Table 1. Distribution of the study group according to demographic variables

Variables	Groups	EFA		CFA	
		F	%	f	%
Gender	Female	294	64,2	192	52.7
	Male	164	35,8	172	47.3
	Total	458	100	364	100
Grade	9th Grade	110	24.0	81	22.3
	10th Grade	128	27.9	133	36.5
	11th Grade	91	19.9	84	23.1
	12th Grade	129	28.2	66	18.1
	Total	458	100	364	100
Type of Highschool	Anatolian	69	15.1	92	25.3
	Science	278	60.7	230	63.2
	Vocational and Technical	111	24.2	42	11.5
	Total	458	100	364	100

According to Table 1, 64.2% of the EFA study group are female, and 35.8% are male students. According to the grade level, 24% of the students are in the 9th grade, 27.9% in the 10th grade, 19.9% in the 11th grade and 28.2% in the 12th grade. According to the type of high school, 15.1% of the students are studying in Anatolian high school, 60.7% are studying in science high school, and 24.2% are studying in vocational-technical high school. Of the CFA study group, 52.7% are female, and 47.3% are male students. According to the grade level, 22.3% of the students are in the 9th grade, 36.5% in the 10th grade, 23.1% in the 11th grade and 18.1% in the 12th grade. According to the high school type, 25.3% of the students study at Anatolian high school, 63.2% at Science high school and 11.5% at Vocational Technical High School.

2.3. Development of data collection tool

Although the measurement tool development steps are described in different sources (Cohen, & Swerdlik, 2009; Crocker & Algina, 1986; Baykul, 2000) in a different number of steps, the steps followed in this process are very similar. In the development of STMUSB, the stages of determining the purpose of scale development and the characteristics to be measured, creating a pool of items, obtaining expert opinion, trial application, the actual application, data analysis and creating the final form were followed.

In the scale development study conducted to determine the student perceptions of teachers about their ability to manage unwanted student behaviour, firstly, the literature was scanned. When the literature was examined, it was found that there is no measurement tool that determines the student's perceptions of the topic. Based on the

literature review, the concepts that are thought to be able to express the students' perspectives of the topic were compiled, and a total of 40 positive draft items were written. Response categories of the items were created in five-point Likert types as "Never," "Rarely," "Sometimes," "Often," and "Always."

After the items were written, the experts were asked to examine whether they were appropriate for the purpose, represented the feature they wanted to measure, were appropriate in terms of language and expression, and their intelligibility and scientific appropriateness. Two of the experts consulted are academists in the field of educational programs, two are in the field of educational management, and one is in the field of measurement and evaluation in education. Experts were asked to evaluate whether they found the items appropriate on three levels (1: Not suitable at all, 2: Partially suitable, 3: Completely suitable); they were asked to state a reason for the unsuitable items and write a correction proposal if there were any. In line with the opinions of the experts (similar-overlapping item, not suitable for the structure, etc.), 13 items were removed, and the remaining 27 were examined by a Turkish linguist in terms of intelligibility and compliance with Turkish grammar rules. At the end of these stages, some items were amended, and the 27-items draft form was made available for pre-trial application.

Before the actual application of the scale, the draft form was applied to 36 high school students for the purposes of testing whether the scale items were comprehensible to the students, detecting spelling errors, and determining the scale implementation period. After the application, students' opinions were received regarding the clarity of the items, and it was concluded that the items were understandable.

After the pre-trial application, BCA was performed by collecting data from 458 students for the construct validity of the scale, and then CFA was performed on the data collected from 364 students to test the accuracy of the obtained construct. In order to determine the reliability of the scale, Cronbach Alpha (α) and composite reliability coefficients were calculated. In addition, the adjusted item-total correlation was calculated for the discrimination levels of the items, and 27% lower and upper group comparisons were made. As a result of the analyses, the final scale form was obtained. The operations performed for construct validity and reliability are discussed in detail in the data analysis section.

2.4. Analysis of the data

In order to explore the structure of the Scale of Teachers' Management of Undesirable Student Behaviours (STMUSB), a BCA was conducted on data collected from 458 students. BCA was preferred because it explains the most variance with the least variable. In order to make the factor structure appear more clearly, the Varimax vertical rotation method was used in the analysis of the data (Tabachnick & Fidell, 2007).

There are methods such as scree plot, eigenvalues of factors, explained variance ratio, and parallel analysis in deciding the factor number of the scale. Decision-making based on scree plots and eigenvalues is criticized as it can show the number of factors more than necessary (Cliff, 1998; Hayton, Allen, & Scarpello, 2004; O'Connor, 2000) and parallel analysis methods are recommended with the MAP test (Bagner, Johns, Baumeister, & Goodman, 2006; Buja, & Eyuboglu, 1992; Crawford, Green, Levy, Scott, Svetina, Thompson, 2010; Storch, Murphy, Garrido, Abad, Ponsoda, 2011; Yang, & Xia, 2015; cited in. Karakaya Özyer, 2021). In this study, while deciding on the number of factors, the parallel analysis method was taken as the basis, and the number of factors was determined by taking into account the scree plot, eigenvalues, and explained variance rates.

In order to determine whether the factor structure of the scale discovered by BCA was confirmed, CFA was performed. In addition, in order to obtain evidence of validity, the corrected item-total test correlation and the t-test comparisons of the lower and upper groups of 27% and item distinctions were examined. The Cronbach Alpha, McDonald's omega and composite reliability coefficients were calculated for the reliability of the scale.

Before BCA and CFA were performed, the assumptions of end value, missing value, normality, multiple connections, and data suitability for analysis were reviewed (Kline, 2005; Tabachnick, & Fidell, 2007). In each of the item scores, normality, assumption, skewness and kurtosis coefficients were examined, and P-P was plotted. Tabachnick, & Fidell (2007) state that the normality assumption is provided if the kurtosis and skewness values are between -1.5 and +Dec.5. In the examinations carried out; it was determined that the item scores provided the normal distribution feature and that there were no missing data. Z scores were calculated to determine the extreme values (outlier) of the item scores, and no data was found that went beyond the limits of -3 to +3. The collinearity problem was examined by Pearson Product-Moment Correlation between the items, and it was found that there was no multi-Dec problem ($r<0.80$). In addition, Kaiser-Meyer-Olkin (KMO) and Bartlett Sphericity Tests were used for the suitability of the data for factor analysis and the suitability of the sample size. The fact that the KMO value is close to 1 and the Bartlett Sphericity Test is significant shows that the data are suitable for factor analysis. In the analysis of the data, Jamovi and Lisrel package programs were used.

3. Results

In this section, the BCA and CFA results of the Scale of Teachers' Management of Undesirable Student Behaviours (STMUSB) for the purpose of testing the construct validity, followed by reliability analyses and scale item statistics, respectively, are included.

3.1. Basic components analysis (BCA) results

When the suitability of the data for BCA was examined, it was determined that the KMO value was 0.93, and the Bartlett Sphericity test result was significant ($\chi 2$= 4862.10, df=351, p<0.01). Thus, it was found that the data was suitable for factor analysis. As a result of the BCA conducted without size limitation in order to explore the factor structure of the scale, it was found that there are five factors with an eigenvalue of more than 1. The slope accumulation graph also indicates that the scale may be five-factor. As a result of the data revealed a three-dimensional structure, since these methods show the number of factors too much, When the eigenvalues and the described variance values were examined, the eigenvalue of the first dimension was 5.59, which alone explained 20.7% of the total variance of the scale. The eigenvalue of the second dimension is 3.94, which alone accounted for 14.6% of the total variance. The eigenvalue of the third dimension is 2.83, which alone accounted for 10.5% of the total variance. The three dimensions determined met 45.8% of the total variance of the scale. Since there was little difference in eigenvalue between the fourth sub-dimension and the other sub-dimensions, it was decided that the scale showed a three-dimensional structure. The scree graph obtained from the analysis made by taking into account the BCA method, the Varimax vertical rotation method, and the parallel analysis criterion is given in Figure 1.

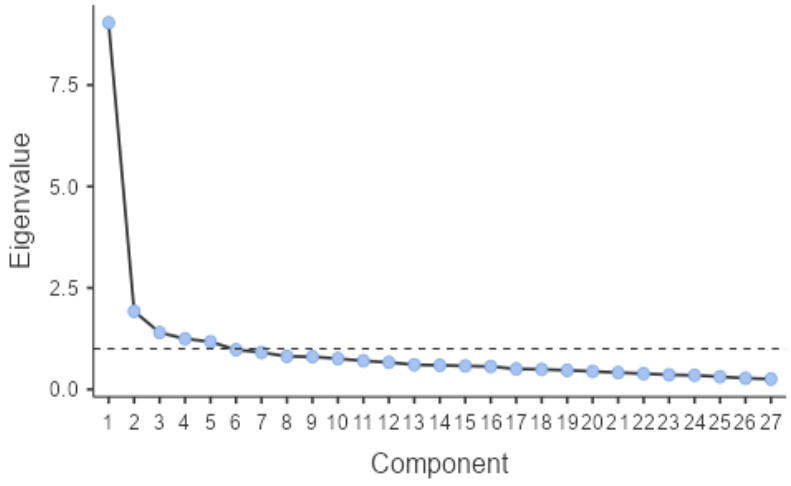

Figure 1: The graph of the eigenvalues of STMUSB

After deciding on the number of factors, the factor loading values of the items were examined. The 2nd and 27th items with item factor loading values below 0.30 and the 8th and 16th overlapping items in more than one factor (less than 0.10 between factor loading values) were removed from the scale, respectively. After four items were removed from the scale, the 9th and 25th items were also removed because they overlapped, and the analysis was repeated. The factor loading values of the remaining 21 items in the scale are given in Table 2.

Table 2. Factor loading values and explained variance of STMUSB items

	Factor			
Item	1	2	3	Explained Variance (%)
M23	0.685			22.9
M20	0.649			
M24	0.649			
M11	0.646			
M13	0.642			
M10	0.635			
M17	0.625			
M26	0.620			
M18	0.614			
M22	0.558			
M15		0.653		16.2
M21		0.638		
M12		0.619		
M19		0.592		
M7		0.577		
M14		0.569		
M1		0.552		
M4			0.790	12.1
M5			0.687	
M3			0.636	
M6			0.629	

When Table 2 is examined, the factor loading values of the items in the first factor vary between 0.685 and 0.558, the factor loading values of the items in the second factor varies between 0.653 and 0.552, and the factor loading values of the items in the third factor varies between 0.790 and 0.629. In the first factor, 10 items, including M10, M11, M13, M17, M18, M20, M22, M23, M24 and M26, account for 22.9% of the total variance; in the second factor, 7 items, including M1, M7, M12, M14, M15, M19 and M21 account

for 16.2% of the total variance, and 4 items in the third factor M3, M4, M5 and M6 account for 12.1% of the total. Three factors explain 51.0% of the variance in total.

Considering the content of items in the theoretical structure and factors, the first factor was called "Preventing Undesirable Student Behaviours," the second factor was called "Reacting to Undesirable Student Behaviours," and the third factor was called "Managing Undesirable Student Behaviours."

3.2. Confirmatory factor analysis (CFA) results

CFA was conducted with the data collected from 364 students in order to confirm the three-factor structure of the scale consisting of 21 items obtained from BCA and to obtain additional evidence for the construct validity of the scale. The path diagram obtained from CFA is given in Figure 2.

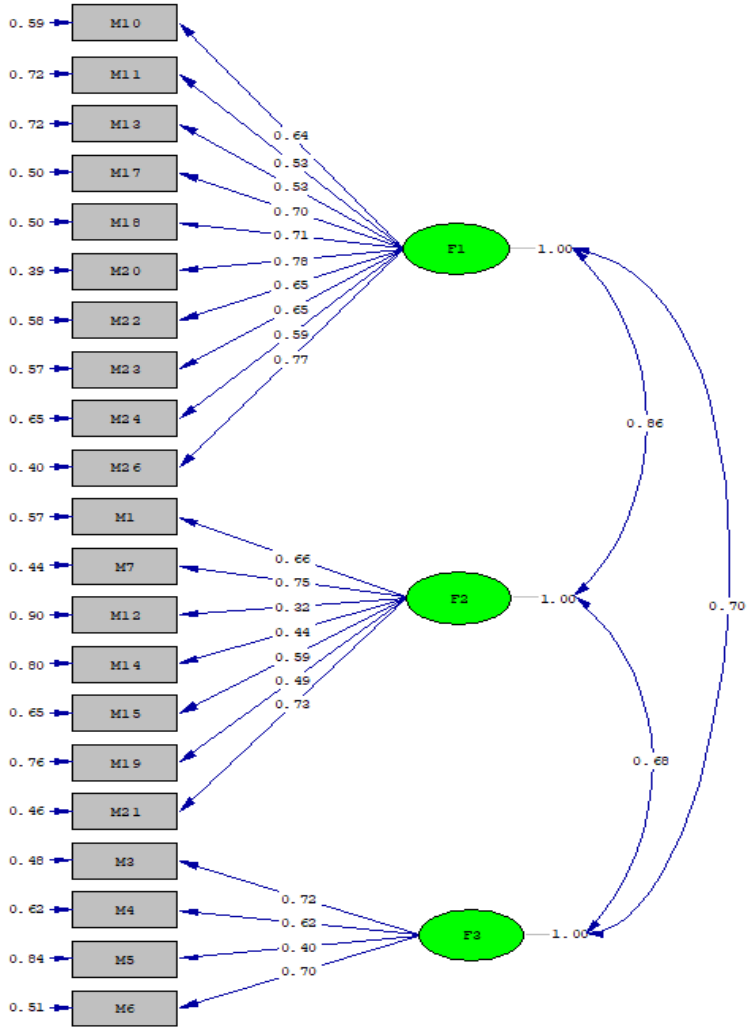

Figure 2: Path Diagram of the CFA Result of the STMUSB

Figure 2 shows the standardized factor loading values of the items in the relevant factor and the error variances of the items. Firstly, the significance of the standardized factor loading values of the items was examined, and it was found that all of them were significant. Then, the standardized loading values of the items were examined. The standardized factor loading values of the items in the first factor is between 0.78 - 0.53, the items in the second factor are between 0.32 - 0.75, and the items in the third factor are between 0.40 - 0.72. It was observed that the standardized factor loading values of the items were above 0.30, as expected. The fact that the error variance of the items in the CFA is above 0.90 is a condition that weakens the data adaptation of the model. In such cases, it is stated that items with high error variance can be removed from the scale (Kline, 2005; Çokluk, Şekercioğlu, & Büyüköztürk, 2010). When Figure 2 is examined, it is seen that the error variances of the items are less than 0.90. The Values of the Goodness of Fit Index obtained from CFA of the three-factor structure are given in Table 3.

Table 3. The goodness of Fit Values of the Three-Factor Structure

χ^2	Sd	χ^2/sd	AGFI	GFI	CFI	NFI	NNFI	RMSEA	SRMR
665.91	186	3.58	0.82	0.85	0.85	0.81	0.83	0.084	0.061

When Table 3 is examined, it is seen that the χ2 value is 665.91, and the value obtained by dividing the χ2 value by the degree of freedom is 3.58. The fact that this ratio is 5 and below is an indication that the model fit is good (Çokluk, Şekercioğlu and Büyüköztürk, 2010). When other goodness-of-fit values are examined, it is seen that the AGFI value is 0.82, and the GFI value is 0.85. According to Byrne (1998), the fact that the value of AGFI and GFI is above 0.80 indicates acceptable compatibility. The fact that the CFI, NFI and NNFI compliance index values are 0.90 and above indicates acceptable compliance. In this case, the values of CFI (0.85), NFI (0.81) and NNFI (0.83) indicate that the model is poorly adapted. The fact that the RMSEA value is below 0.08 and the SRMR value is below 0.10 indicates acceptable compliance. Although the RMSEA value (0.084) is close to the acceptable compliance value, it is seen that the SRMR value (0.061) is less than the acceptable compliance.

In the end, when all the analysis results obtained with CFA and the fit index values are evaluated together, it can be said that the 3-factor structure of the 21-items of STMUSB generally shows acceptable compliance with the data and the scale structure is verified.

3.3. Reliability analysis results

Cronbach's Alpha (α) internal consistency coefficients of the entire scale and its sub-dimensions and McDonald's omega and compound reliability coefficient were calculated for the reliability of the STMUSB. Composite reliability is an internal consistency

coefficient calculated from factor loadings and error variances obtained from DFA (Bacon, Sauer, & Young, 1995). The reliability analysis results of STMUSB are given in Table 4.

Table 4. The reliability analysis results of STMUSB

Sub-dimension	Item	Cronbach Alfa (α)	McDonald's omega
Preventing Undesirable Student Behaviours (F1)	10	0.88	0.88
Reacting to Undesirable Student Behaviours (F2)	7	0.79	0.80
Managing Undesirable Student Behaviours (F3)	4	0.71	0.72
Total Scale	21	0.90	0.91

As shown in Table 4, the Cronbach Alpha (α), McDonald's omega coefficients and compound reliability coefficients for the total and sub-dimensions of the scale are more than 0.70 for each sub-dimension. In addition, the composite reliability coefficient obtained from the entire scale was found to be 0.83. In general, it is accepted that the scales with a reliability coefficient of 0.70 and above are reliable. In this light, it can be said that STMUSB has high reliability.

3.4. İtem analysis

In order to determine the levels of the distinctiveness of the items included in the STMUSB, the item sub-dimension total correlation was calculated, and sub-upper group comparisons of 27% were made. The Pearson Product Moment Correlation Coefficient was used to calculate the adjusted item subscale total correlation, and the unrelated sample t-test was used to compare the sub and upper groups of 27%. The findings obtained from the item analysis are given in Table 5.

Table 5. İtem analysis results of STMUSB

Sub-Dimension	Item	Sub-Dimension When the İtema is Removed Cronbach Alfa(α)	Corrected Item Sub-Dimension Total Correlation	t value	
Preventing Undesirable Student Behaviours (F1) Cronbach Alfa (α) =0.88	M23	0.866	0.656	20.073*	*sd=246* *p<.001
	M20	0.866	0.665	19.202*	
	M24	0.875	0.529	13.828*	
	M11	0.874	0.549	14.207*	
	M13	0.874	0.563	17.620*	
	M10	0.874	0.556	14.529*	
	M17	0.869	0.630	23.034*	
	M26	0.867	0.654	18.383*	
	M18	0.864	0.682	24.880*	
	M22	0.869	0.622	20.380*	
Reacting to Undesirable Student Behaviours (F2) Cronbach Alfa (α) =0.79	M15	0.744	0.601	23.570*	*sd=276* *p<.001
	M21	0.741	0.620	22.245*	
	M12	0.804	0.283	9.051*	
	M19	0.769	0.477	15.743*	
	M7	0.750	0.571	17.611*	
	M14	0.760	0.521	15.875*	
	M1	0.754	0.559	16.385*	
Managing Undesirable	M4	0.575	0.598	14.104*	

Student Behaviours (F3)	M5	0.706	0.402	18.178*	*sd=296*
Cronbach Alfa (α) =0.71	M3	0.647	0.485	19.851*	**p<.001*
	M6	0.634	0.500	20.617*	

According to Table 5, it is seen that the lowest corrected item total correlation is in item 12. The item-total correlations of the other items ranged from 0.40 to 0.68. Since the threshold value for corrected item-total correlations is 0.30, it can be stated that the items under each dimension, except for 12, adequately represent the desired structure, and the distinctiveness of the items is sufficient (Büyüköztürk, 2010; Erkuş, 2012).

When the difference between the item score averages of the 27% sub and upper groups was examined, it was determined that the average difference between the sub and upper groups in all items was significant at the 0.001 level. As Erkuş (2012) stated, significant t values are an indicator of item distinctiveness. Accordingly, it can be said that all of the items in the scale are distinctive.

4. Discussion

Undesirable student behaviour is an important factor that negatively affects educational activities in the classroom. It is stated that teachers who have undesirable student behaviours in their classrooms spend a lot of energy on dealing with them, and this leads to burnout on their part (Camp, 1987; Kulinna, 2008). Teachers must understand how to deal with disruptive student behavior and manage the process. In this context, it is necessary to know the extent to which teachers manage undesirable student behaviours. Therefore, it was necessary to develop a measurement tool to determine the Teachers' Management of Undesirable Student Behaviours. Looking at the literature, it can be seen that studies have been conducted under different names for the topic. Studies generally include disciplinary problems faced by teachers in the classroom and solution strategies for these problems, strategies for teachers to manage undesirable behaviours in the classroom, the undesirable behaviours that teachers experience in the classroom management process and the strategies they use against these behaviours, teachers' opinions about undesirable student behaviours, undesirable student behaviours and solutions developed (Güven, 2020; Kerry, & Nelson, 1989; Arslan, 2019; Turan, 2019; Chemlynski, 1996; Kızıl, 2019; Evertson, & Emmer, 2013; Şahin, & Adıgüzelli, 2015; Martin, & Pear, 2007). Based on the existing research, it was necessary to develop a measurement tool to determine Teachers' Management of Undesirable Student Behaviours. With the help of this tool, you can figure it out and take the steps you need to.

With the validity and reliability study conducted, "the Scale of Teachers' Management of Undesirable Student Behaviours" was developed. In the process of developing the scale, the necessary expert opinions were obtained about the prepared items, a scale of 21 items was created, and analyses were made based on data obtained from a total of 822

students, 458 for the EFA and 364 for the CFA of the scale. A separate working group was used for the EFA and CFA conducted at the stage of developing the scale, and more than ten times the number of items in the scale was reached in regard to the number of participants. Making a choice in this direction is evaluated as a feature that increases the validity and reliability of the scale.

As a first step in the validity study, the structural validity of the scale was examined. Here, the EFA was conducted on 21 items, and a three-dimensional scale appeared. The first sub-dimension (preventing undesirable student behaviours) is composed of 10 (items 10, 11, 13, 17, 18, 20, 22, 23, 24 and 26), the second sub-dimension (reacting to undesirable student behaviours) 7 (items 1, 7, 12, 14, 15, 19 and 21) and the third sub-dimension (managing undesirable student behaviours), 4 (items 3, 4, 5 and 6). The eigenvalue of the first dimension was 5.59, which alone accounted for 20.7% of the total variance of the scale. The eigenvalue of the second dimension is 3.94, accounting for 14.6% of the total variance. The eigenvalue of the third dimension is 2.83, which accounts for 10.5% of the total variance. The three dimensions determined met 45.8% of the total variance of the scale. In a structural validity test, the total variance explained by all the sub-dimensions of the test should be above 40% (Büyüköztürk, 2011). In this context, the fact that the variance explained by the scale is over 40% (45.8%) shows the strength of the scale.

Looking at the model fit index values in confirmatory factor analysis, it is seen that the χ^2 value is 665.91, and the value obtained by dividing the χ^2 value by the degree of freedom is 3.58. The fact that this ratio is 5 and below is an indication that the model compliance is good (Çokluk, Şekercioğlu, & Büyüköztürk, 2010). When other goodness-of-fit values are examined, it is seen that the AGFI value is 0.82, and the GFI value is 0.85. According to Byrne (1998), the fact that the value of AGFI and GFI is above 0.80 indicates acceptable compatibility. The fact that the CFI (0.85), NFI (0.81) and NNFI (0.83) compliance index values are 0.90 and above indicates acceptable compliance. The fact that the RMSEA value is below 0.08 and the SRMR value is below 0.10 indicates acceptable compliance. Although the RMSEA value (0.084) is close to the acceptable compliance value, it is seen that the SRMR value (0.061) is less than the acceptable compliance. In the end, when all the analysis results obtained with the CFA and the compliance index values were evaluated together, it was proved that the 3-factor structure of the 21-item SDSS showed acceptable compliance with the data in general and the scale structure was verified. This, in turn, increases the validity and reliability of the developed scale.

Considering the internal consistency coefficients of the Scale, the McDonald's Omega coefficient of the "Preventing Undesirable Student Behaviours" sub-dimension was 0.88, and the Cronbach Alpha (α) coefficient was 0.88; In the dimension of "Reacting to Undesirable Student Behaviours," McDonald's Omega coefficient was 0.80, Cronbach

Alpha (α) coefficient was 0.79; It is seen that McDonald's Omega coefficient is 0.72, Cronbach Alpha (α) coefficient is 0.71 in the dimension of "Managing Undesirable Student Behaviours," and McDonald's Omega coefficient of the total Scale is 0.91 and Cronbach Alpha (α) coefficient is 0.90.

5. Conclusions

The findings obtained from the scale development studies show that “The Scale of Teachers' Management of Undesirable Student Behaviours" is a valid and reliable scale. This scale, which has been proven to be valid and reliable, can be used at the national and international levels. It paves the way for the education of teachers who have an inability to manage undesirable student behaviours. This affects the students and the educational activities in a positive way. Students can develop positive behaviours which affect their academic success, and educational activities can take place in a more positive environment.

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Appendix A. Turkish form of scale

	Öğretmenlerimiz,	Hiçbir zaman 1	Nadiran 2	Ara Sıra 3	Çoğu zaman 4	Her zaman 5
1	Öğrencilerce yapılan istenmeyen davranışları görmezden gelir.					
2	Öğrencileri istenmeyen davranışlardan uzaklaştırmak için farklı seçenekler sunar.					
3	Derslerde değişik araç gereçleri kullanır.					
4	Bir öğrencinin istenmeyen bir davranışının giderilmesi konusunda ailesinden yardım alır.					
5	İstenmeyen davranışın önlenmesi için okul rehberlik servisinden yardım alır.					
6	İstenmeyen davranışı yapan bir öğrenci ile sınıf dışında uygun bir ortamda görüşür.					
7	Sınıfta uyulması gereken kuralları öğrencilerle birlikte belirler.					
8	Olması muhtemel sorunları önceden görüp önlem alır.					
9	Yapılması istenen davranışların gerekçelerini açıklar.					
10	Sınıfta tüm öğrencilerin derse etkin katılımını sağlar.					
11	Olumsuz davranışından dolayı doğrudan öğrenciyi yargılamaz.					
12	Öğrencilerin istenmeyen davranışları karşısında genellikle sakindir.					
13	Öğrencilerin yaptığı olumsuz davranışlarından dolayı cezalandırma yoluna gitmez.					
14	Bir öğrencinin olumsuz davranışından dolayı tüm sınıfı suçlamaz.					
15	İstenmeyen davranış gösteren öğrenci ya da öğrencileri nazik bir dille uyarır.					

16	İstenmeyen davranışı yapanı değil, davranışı yargılar.					
17	Sınıfta bir sorun olduğunda öncelikle sorunu anlamaya çalışır.					
18	İstenmeyen davranış gösteren öğrenci ya da öğrencilere göz teması kurarak uyarıda bulunur.					
19	İstenmeyen davranış gösteren öğrenci ya da öğrencilere beden dilini kullanarak uyarıda bulunur.					
20	Öğrencilerin olumsuz sonuçlar doğuracak davranışlarına müdahale eder.					
21	İstenmeyen davranış gösteren öğrenci ya da öğrencilerin yanında durarak davranışa müdahale eder.					

Appendix B. English form of scale

	Teacher,	Never	Seldom	Sometimes	Frequently	Always
		1	2	3	4	5
1	Ignores infrequent undesirable behaviours by students.					
2	Offers different options to distract students from undesirable behaviours.					
3	Uses different tools and materials during the lessons.					
4	Receives help from parents to eliminate an undesirable behaviour of a student.					
5	Receives help from the school's counselling service for the prevention of the undesirable behaviour.					
6	Talks to the student who commits the undesirable behaviour in a suitable environment outside the classroom.					
7	Determines the rules that must be followed in the classroom together with the students.					
8	Sees the problems that are likely to happen in advance and takes precautions.					
9	Explains the reasons for what behaviours are expected from the students.					
10	Ensures the effective participation of all students					

	during the lesson.	
11	Does not judge the student directly for the negative behaviour.	
12	Is usually calm and kind when encountering undesirable student behaviours.	
13	Does not punish students for their negative behaviours.	
14	Does not blame the whole class for the negative behaviour of a student.	
15	Warns student or students who conduct undesirable behaviour by using gentle words.	
16	Judges the behaviour, not the one who conducts it.	
17	When there is a problem in the classroom, first tries to understand it.	
18	Warns student or students who conduct undesirable behaviours by making eye contact.	
19	Warns student or students who conduct undesirable behaviours by using body language.	
20	Interferes with the behaviour of students, which will have negative consequences.	
21	Interferes with behaviour by standing next to a student or students who show undesirable behaviours.	

Scale consists of 3 sub-dimensions: 1-"Preventing Undesirable Student Behaviours (item 1-10)", 2-"Reacting to Undesirable Student Behaviours (item 11-17)" and 3-"Managing Undesirable Student Behaviours (item 18-21)".