

Democratic behaviour tendency scale at school: A validity and reliability study*

Nail Değirmenci¹, Bahadır Kılcan², Yusuf İnel³ and Ali Gökalp⁴

Abstract

This study aims to develop a measurement tool to find out the democratic behaviour tendencies of middle school students at school. For this purpose, the scale items were created by drawing upon the relevant literature and consulting with experts. The triple Likert-type scale, prepared by considering the levels of middle school students, was administered to a total of 512 students studying in five middle schools in the Denizli, Uşak, and Afyon provinces in the fall semester of the 2021-2022 academic year. The Exploratory Factor Analysis (EFA) revealed that the scale structure consisted of 12 items gathered under 3 factors "Being Respectful", "Being Responsible" and "Equal Treatment" and factor loads varied between .49 and .74. The correlation analysis revealed that the correlation coefficients of the items collected under the factors forming the scale were higher than .20. The Confirmatory Factor Analysis (CFA), which was carried out to confirm the structure formed with the EFA, revealed that the model formed was perfectly compatible with the collected data and the factors differed significantly, according to the Chi-Square (X^2), significance and measurement values. It was also found that the developed scale explained 46.40% of the total variance and the Cronbach's Alpha value for the overall scale was .72. It was concluded that the measurement tool is a valid and reliable structure that can be used to determine the democratic behaviour tendencies of middle school students at school.

Keywords:

Middle school students, democratic tendency, scale development.

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¹Corresponding author, Gazi University, Institute of Education Sciences, Department of Turkish and Social Sciences Education, Turkey, naildegirmenci1@gmail.com

²Gazi University, Faculty of Education, Department of Turkish and Social Sciences Education, Turkey, bahadir@gazi.edu.tr

³Uşak University, Faculty of Education, Department of Turkish and Social Sciences Education, Turkey, yusuf.inel@usak.edu.tr

⁴Uşak, Türkiye, gokalpali_1984@hotmail.com

INTRODUCTION

The history of the concept of democracy, which was encountered for the first time in philosophical and political thoughts in ancient Greek civilization, dates back to the 5th century BC (Demir, 2013). Being able to express one's thoughts freely and rejecting the power of a single person are some particularly important democracy attempts observed in the Greek city-states in this period. As a term, democracy can be defined as the majority rule because the groups that make up the minority can become the majority and have this right. However, democracy does not mean that the majority can put pressure on minorities (Afşar, 2017). Democracy is not considered a form of government but a way of perceiving life and way of life (Gayet-Viaud, 2015; Oğuz, 2011). In line with this definition, democracy can be considered a factor that affects the lives, attitudes, and behaviours of individuals. The acceptance of democracy as a way of life by the individuals who make up the society is possible not only with the administrative dominance of democracy but also with the establishment of a democratic culture in the attitudes and behaviours of the society that makes up the state. Thus, it is insufficient for individuals to simply know the concept of democracy, but it is crucial that there are individuals who have adopted it, internalized democratic values, and can reflect this in their lives. The permeation of this concept into the whole society means that the culture of democracy gains meaning in that society. In societies where democratic culture prevails, individuals

- Recognize that every one of the individuals forming the society is valuable,
- Believe that individuals have the right to continue self-development and self-actualization,
- Are aware of the responsibility of the decisions made by individuals, and,
- Are aware that their views cannot be stigmatized, and that all opinions deserve respect (Council of Europe, 2016; Şişman, Güleş & Dönmez, 2010).

The internalization of the culture of democracy in society and the adoption of each of the above-mentioned items by individuals is possible with the education given in institutional and non-institutional environments. In societies where the culture of democracy is dominant, the function of education is to help develop character, behaviour, and values. This can only happen healthily with the richness of communication and freedom provided to the child. Therefore, the skills and values required by democracy can be instilled in individuals in the family and school environment (İnel, 2019). According to Dewey (2019), schools, which are described as democratic organizations, are institutional environments where students spend most of their time. Therefore, the school has a key place and responsibility in the formation of a democratic culture. For a culture of democracy to be formed in society, schools are expected to raise individuals who have democratic values, are responsible, respectful to others in society, can think critically and freely, and are places where individuals learn to work together by division of labor. Thus, it would not be wrong to say that democracy begins at school (Şişman et al., 2010). In schools, which reflect society in themselves and are a small example of society, all the stakeholders of the school (environment, parents, school management, teachers) build a democratic school culture in connection with each other to keep the values of democracy alive and bring them to the individual.

For students to acquire democratic values at school,

- All stakeholders of the school need to have respect for differences,
- All individuals in the school need to have active participation and rights to a degree that they will not feel restricted,
- The criteria for each individual in the school to act with the awareness of their responsibility and freedom are important to sustain the school climate (İnel, 2019).

It is critical that not only the students but also all the stakeholders that make up the school act according to the aforementioned principles and that they are supported by implicit teaching programs for democratic values to become the behaviour of students. Considering that values are the dynamics that guide and affect behaviours (Demircioğlu & Tokdemir, 2008; Rokeach, 1973), the acquisition of democratic values by children is the critical threshold for the spread of democratic culture in society,

and values gained in schools and families. Yeşil (2004) states that the cultural changes in societies can also be experienced in schools, which are seen as miniature societies. Therefore, it is a very important element to bring democratic values to children at the level of behaviour in schools. Values such as responsibility, respect, and equality should be emphasized in the curriculum to raise individuals who have embraced democracy, gained the culture of a democratic society, and made it a behaviour. For example, the values in the 2018 Social Studies curriculum were mentioned and students were taught to ensure that they understand the historical processes of the concepts of national sovereignty, human rights, democracy, and republic and their effects on today's Turkey, and to organize their lives according to democratic rules (Ministry of National Education [MoNE], 2018, p. 7). Therefore, various values such as responsibility, respect, and equality are emphasized. The main starting point of the study is these democratic values mentioned.

Creating democratic environments in schools and ensuring that all stakeholders act under democratic values is very important for the development of society, the future of the concept of democracy, and raising future generations accordingly. When the relevant literature is examined, a large number of studies aiming to reveal the democratic attitude of teachers and teacher candidates are found. To mention a few studies, in a doctoral thesis study Yıldırım (2018) worked with high school students and collected data through the Democratic behaviour attitude scale, and the scales of democratic attitudes perceived in the classroom, family, school, and society, and found that high school students' democratic behaviour attitudes were high. In the scale study prepared by Burgueño, Sicilia, Lirola & Alcaráz-Ibáñez (2017) to measure the democratic and autocratic attitudes of physical education teachers, they reached a structure consisting of two factors in which the democratic and autocratic attitudes of the teachers did not change according to gender. In another study conducted with high school students (Akan, 2011), it was concluded that high school students' democracy awareness did not change due to family or gender, but democracy awareness increased in direct proportion with the increase in academic success. Examining the studies conducted in recent years (Aslan, 2019; Bayramoğlu & Kaya, 2018; Bergman & Westman, 2018; Bıyık, 2019; Doğanay & Sarı, 2004; El Shahed, 2017; Erdem & Sarıtaş, 2006; İlhan, Karayığit & Çetin, 2013; Karaçalı-Taze & Aktın, 2019; Karatekin & Elvan, 2016; Kesici, Pesen & Oral, 2017; Konaş, Selçuk & Polat, 2016; Kovacs, 2009; Kükürtçü & Erkan, 2022; Leshchenko, Tymchuk, Pavlenko & Ruban, 2020; Moller, 2006; Saygı-Baran, 2010; Subba, 2014; Üztemur, Dinç & İnel, 2018; Woodlin, 2019), it can be concluded that there are some democracy-related problems at schools and that all the school stakeholders should take joint action to solve these problems.

The scale development studies on democracy in the learning environments generally focus on pre-service and inservice teachers (Abdul Gafoor, 2015; Akbaşlı, Yanpar-Yelken, Sünbül, 2010; Dinç, Sezer, Üztemur & İnel, 2018; Durukan & Ersöz, 2013; Erbil & Kocabaş, 2017; Miklikowska & Hurme, 2011; Özcan, 2016; Shechtman, 2002; Sincar, Şahin, & Beycioğlu, 2019; Şimşek, 2011; Uygun & Engin, 2014; Yeşil, 2004; Yıldırım & Türkoğlu, 2017). The values emphasized in the relevant school democracy literature are responsibility, respect, and equality, and the dimensions of the scale in the current study were formed accordingly. More findings are needed to reveal the state of adopting democratic values, especially among middle school students. Therefore, the current study aims to develop a valid and reliable tendency scale in which democratic values form its dimensions. Thanks to the developed scale, researchers are expected to obtain an instrument to reveal the democratic values of middle school students and offer more effective solutions to the problems that may arise in students' adoption of democratic perspectives.

METHOD

Research Design

This study was designed as a cross-sectional survey. In cross-sectional studies, all data are collected at once, at a certain time (Büyüköztürk, Çakmak, Akgün, Karadeniz, & Demirel, 2017; Durna, 2016). From

this point of view, the cross-sectional survey model was preferred in the research since it aimed to observe the opinions of middle school students about the questions that are thought to be related to democratic values at school and to reach generalizations about the current situation.

Participants and Procedure

To form the study group of the research, a total of 512 middle school students studying in five middle schools affiliated with the Turkish Ministry of National Education (MoNE) in the provinces of Denizli, Afyon, and Uşak in the fall semester of 2021-2022 academic year were determined by convenient sampling. Convenient sampling is a method that depends on existing conditions in which samples can be selected according to time, accessibility, and location (Merriam, 2018). The frequency and percentage distributions of the students included in the study by class and gender are presented in Table 1.

Table 1. Grade and Gender Distribution of The Study Group.

Grade Level	Gender				Total	
	Girls		Boys		f	%
	f	%	f	%	f	%
Grade 5 th	68	13,28	36	7,01	104	20,29
Grade 6 th	88	17,19	54	10,55	142	27,74
Grade 7 th	98	19,34	73	14,26	171	33,60
Grade 8 th	58	11,33	37	7,04	95	18,37
Total	312	61,14	200	38,86	512	100

With the developed measurement tool, a total of 512 data were obtained from middle school students. Of these students, 312 (61.14%) were female and 200 (38.86%) were male; thus, the majority of the students participating in the research were female. In terms of grade variable, a total of 104 (20.29%) students from the 5th Grade, 142 (27.74%) from the 6th Grade, 171 (33.60%) from the 7th Grade, and 95 (18.38%) from the 8th Grade were included in the study. As such, the 7th graders had the highest level of participation.

The responses given by the students to the measurement tool were examined in terms of extreme values, normality distribution, factorability of R, and linearity; as a result, 491 data that were determined to be suitable for the analysis were included in the research. For factor analysis, Tabachnick & Fidell (2012) interpret 300 samples as "good", 500 samples as "very good," and 1000 samples as "excellent". Accordingly, the number of samples reached for this study was deemed sufficient.

Data Collection and Scale Development Procedures

In the process of creating the items of the scale, primarily the relevant literature (Akbaşı, Yanpar-Yelken, Sünbül, 2010; Burgueño, et al., 2017; Doğanay & Sarı, 2004; Duruhan & Ersöz, 2013; Erbil & Kocabaş, 2017; İlğan, et. al, 2013; Miklikowska & Hurme, 2011; Rowland, 2003; Sincar, et al., 2019; Vega-Ramirez, Alavos-Ramos & Merma- Molina, 2021) was examined. While democratic values vary, they generally cluster around the themes of "responsibility", "respect" and "equality". For example, Erbil & Kocabaş (2017) worked on developing a democratic attitude scale for primary school students and emphasized that democratic attitude is directly related to values such as respect, responsibility, and equality. On the other hand, in the study conducted by Miklikowska and Hurme (2011), for democracy to function people should support the democratic values of equality, responsibility, respect, minority rights, and majority rule, both in abstract form and in situations of conflicting values. They have achieved their results.

Based on the literature, an item pool with 38 questions was created. The questions prepared for the dimensions of "being responsible", "being respectful" and "equal treatment" It was sent to a total of 5 transcendental experts, including 1 professor and 2 associate professors, 1 scale specialist, 1 teacher, and 1 language expert, who are experts in social studies and values education. In line with the

suggestions of three experts, 13 items were removed, and some items were revised. For example, regarding equal treatment, the statement "I want my teachers to give me privileged treatment in class." was corrected after the expert opinion "I expect my teacher to treat everyone in the same way." Thus, the scale, which consists of 12 items for being responsible, 6 items for being respectful, and 7 items for equal treatment, was presented with three-level options to determine the students' level of agreement with the democratic tendency statements. These options were scored as "(1) Never", "(2) Sometimes", and "(3) Always", respectively. The scale form draft, thus finalized, was sent by the researcher to the relevant teachers of the schools where the implementation was to be made. Since the schools where the draft scale was given were in different provinces, it took 3 weeks to collect the data.

Data Analysis

The data obtained from 512 middle school students who answered the scale were transferred to the SPSS analysis program. First of all, the missing data were examined and 8 forms were removed from the dataset, in which a large number of missing data were detected. Then, the Z values of the data set were examined to determine the extreme values (Tabachnick & Fidell, 2012). Accordingly, data outside the range of +3 and -3 had to be excluded from the research (Büyüköztürk, Çokluk, & Köklü, 2013). Therefore, 13 forms were excluded from the data set because they fell outside the acceptable Z value range. Thus, the analyses were carried out on the remaining 491 scale forms.

The data were analyzed using SPSS and Amos programs. Kaiser Meyer Olkin (KMO) test was used to determine whether all the data were suitable for exploratory factor analysis, sample adequacy, and factor extraction, and the Bartlett Sphericity test was used to reveal the relationship between the variables. Upon determining that the obtained data were appropriate, an Exploratory Factor Analysis (EFA) was conducted to reveal the general structure of the measurement tool and to determine whether the items that make up the measurement tool work as expected. This analysis technique aims to bring together a large number of interrelated variables and to reveal a fewer number of conceptually meaningful new variables (Büyüköztürk, 2014). The Confirmatory Factor Analysis [CFA] was performed to determine the compatibility of the structure revealed as a result of this analysis with the existing theory. This analysis is performed to define multivariate analyses and verify the structure created (Koyuncu & Kılıç, 2019). While the EFA is used to gather the statements under factors and determine the relationship between them, the CFA is used to verify whether the expression groups are adequately represented by the determining factors (Aytaç & Öngen, 2012). The division of the measuring instrument into dimensions was determined by the principal components analysis. The Varimax rotation technique was used while performing this analysis. With the analyses performed, Cronbach's Alpha reliability coefficient, item-total correlations, factor loading values, and explained common variances were calculated. While evaluating the structural suitability of the scale through DFA, the fit indexes of χ^2/df RMSEA, SRMR, CFI, IFI, TLI, AGFI, and GFI were examined.

While reaching a general judgment about the structure of the scale, if the KMO value is above 0.50 (Field, 2009), the Bartlett Sphericity test is significant, if there is a difference of less than .10 between the rotated factor loads, it is considered as an overlapping item and the relevant item is discarded (Büyüköztürk, 2011). The explained common variances were at least 41% (Kline, 2011), and factor loads were at least .30 (Field, 2009; Pallant, 2011; Seçer, 2013).

Research Ethics

This research was carried out with the approval of Uşak University, Ethics Committee for Researches on Social Sciences and Humanities with the decision numbered "2022-60" in the session dated 14.04.2022.

RESULTS

Exploratory Factor Analysis Results

An EFA was carried out to ensure the construct validity of the Democratic Behaviour Tendency at School Scale [DBTSS]. First of all, Kaiser Meyer Olkin (KMO) values, which show the sample adequacy value of the piloted scale consisting of 25 items in total, and the Bartlett Sphericity test significance coefficient were examined. The KMO value of the applied scale was found to be above 0.50, which is considered the lowest limit (KMO= .86), and the result of the Bartlett Sphericity test was also found to be significant ($\chi^2= 2425,633$, $df= 387$; $p<0.01$). Based on these values, it was decided that the scale was suitable for principal component analysis.

In the first stage of the principal component analysis, 6 items with inter-item factor load less than .10, 7 overlapping items, and 6 items with factor loads below .30 were removed. As a result of these processes, the number of remaining items in the candidate scale and the eigenvalue of the scale were obtained (See Figure 1).

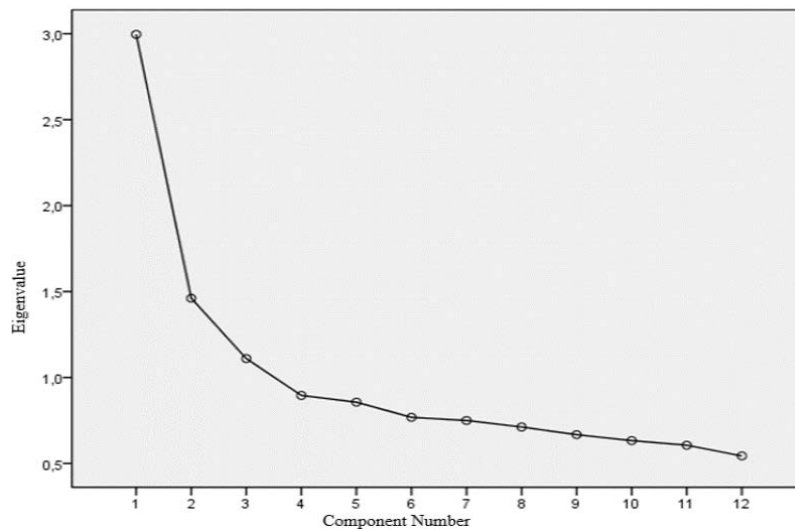


Figure 1. DBTSS Scree Plot

Examining Figure 1, it can be observed that the scale has 3 values with eigenvalues above 1. According to Field (2009), sudden decreases with an eigenvalue above 1 indicate the factors. As seen in Figure 1, when the drastic decreases in the eigenvalue of 1 and above are examined, the scale is observed to exhibit a three-factor structure, which shows that the scale has a structure of 12 items and 3 factors. The total variance and eigenvalues of the scale are given in Table 1.

Table 2. DBTSS Factor Eigenvalues and Variances

Factor Orders	Factors	Factor Eigenvalues	Percentage of Variances (%)	Total Percentage of Variances (%)
1.	Being Respectful	2,996	24,97	24,97
2.	Being Responsible	1,461	12,17	37,14
3.	Equal Treatment	1,110	9,25	46,39

As seen in Table 2, the scale consists of 3 factors. It can be said that this structure supports the findings of the scree graph given in Figure 1. Considering the factors, the total variance explained is 46.39%, and the explanation percentage of variances is 24.97%, 12.17%, and 9.25%, respectively. According to Kline (2011), 41% explained variance is sufficient for scales with multiple factors. Therefore, the percentage of

variance explained can be said to be sufficient for DBTSS. The factor loading values of the items that make up the scale are shown in Table 3.

Table 3. DBTSS Item-Factor Loads

Factor Name	Item No.	Item-Factor Loads			Contribution to Common Variance	Cronbach's Alpha (α)
		Factor 1	Factor 2	Factor 3		
Being Respectful	18.	,70			,54	,61
	13.	,69			,49	
	8.	,65			,43	
	14.	,60			,53	
Being Responsible	7.		,74		,56	,57
	22.		,67		,49	
	4.		,60		,40	
	12.		,53		,35	
Equal Treatment	19.			,72	,53	,59
	17.			,72	,53	
	24.			,58	,49	
	11.			,49	,35	
Overall Scale						,72

When the factors given in Table 3 are examined, the factor loads of the 4 items that make up the first factor are observed to vary between .70 and .60. The items that constitute this factor are "I treat my friends with awareness as I treat my other friends.", "It is not a problem for me to be on the same team with a student from a different culture while playing games.", "It is not a problem for me to do group assignments with my friend who has a difference.", and thus, this factor was named "being respectful". When the second factor consisting of 4 items was examined, the factor loads were found to vary between .74 and .53. The items that make up this factor are, respectively, "I do my homework on time.", "Even if I don't like the task given by my teacher, I try to do it in the best way.", "I fulfill the homework and duties given by my teacher without the need for anyone else to remind me.", "When I make a promise to my friends about something, I will certainly keep it." Thus, this factor was named "being responsible". When the third factor was examined, it was observed that the factor loads of the structure consisting of 4 items varied between .72 and .49. Considering the items that make up this factor, which is "I expect my teacher to treat everyone in the same way in the classroom.", "Our teacher should treat every student the same despite the differences in our lifestyles.", "All individuals deserve respect because they are human.", and "I prepare the homework given in the courses that I am interested in, fondly and meticulously.", it was named "Equal treatment" because it consists of items.

According to Büyüköztürk (2014), factor load values are defined as the coefficient that reveals the relationship of the item with the factor. The factor load of an item determines the level of representation of the factor to which it belongs. In social sciences, factor loads higher than .45 are considered good. The factor loads of the piloted scale vary between .49 and .74; therefore, the items represent the factor they belong to at a good level.

The Cronbach's Alpha value for the overall scale, presented in Table 3, is .72, which was calculated as .62 for the factor of *being respectful* and .57 for the factor of *being responsible*, and .59 for the factor of *equal treatment*. According to George & Mallery (2010), the Cronbach Alpha value is ≥ 0.9 excellent, $0.7 \leq \alpha < 0.9$ good, $0.6 \leq \alpha < 0.7$ acceptable, $0.5 \leq \alpha < 0.6$ weak; and a value of $\alpha < 0.5$ indicates that the reliability of the scale is unacceptable. Therefore, it can be concluded that the reliability level of the entire scale is good. However, it can be said that the internal consistency coefficients for the sub-dimensions of the scale are relatively low. The corrected correlation scores made to reveal the relationship between the items that make up the factors are presented in Table 4.

Table 4. Corrected Correlation Analysis Results for Factor-Item Scores

Factor Name	Item No.	r
Being Respectful	18.	,46
	13.	,39
	8.	,38
	14.	,36
Being Responsible	7.	,39
	22.	,37
	4.	,32
	12.	,33
Equal Treatment	19.	,35
	17.	,40
	24.	,41
	11.	,33

Note: n= 491

As seen in Table 4, the corrected correlation coefficients for each item range from .32 to .46. The fact that these values are higher than .20 indicates that the factor that the item belongs to contributes significantly to the purpose it wants to measure (Büyüköztürk, 2014). It is expected that the correlation between expressions is greater than .30 (Eisen, Ware Jr, Donald & Brook,1979; McHorney, Ware Jr, Lu & Sherbourne,1994).

Confirmatory Factor Analysis Results

A CFA was carried out to reveal the compatibility of the structure revealed about the scale with the EFA with the existing theory and to determine the relationships among the structures that make up the scale. However, before this analysis, the correlation values between the factors forming the scale were examined to see whether there was a multicollinearity problem. A correlation of .80 and above between the structures shows that the scale has serious structural problems and measures approximately the same thing. The results of the correlation analysis performed are presented in Table 4.

Table 5. The Arithmetic Mean, Standard Deviation, and Correlations of the Factors

Factors	\bar{X}	Sd	Being Respectful	Being Responsible	Equal Treatment
Being Respectful	2,61	,44	1		
Being Responsible	2,53	,40	,40**	1	
Equal Treatment	2,70	,38	,61**	,64**	1

Table 5 shows that no relationship above .80, which is accepted as the threshold value, was found among the factors in the correlation analysis. This finding shows that the existing structure is suitable for the CFA analysis. When the correlation values between the factors were examined, it was found that each factor was moderately significant and positively related to others. In addition, when the average of the answers given by the students to the factors forming the scale was evaluated, *being respectful* was found to be 2.61, *being responsible* to be 2.53, and *equal treatment* to be 2.70. Considering that the highest score to be obtained from each of the items forming the scale is 3, it can be said that the values that make up the factors that reflect the democratic tendency are relatively high. The standardized regression coefficient values of the 3-factor scale are presented in Figure 2.

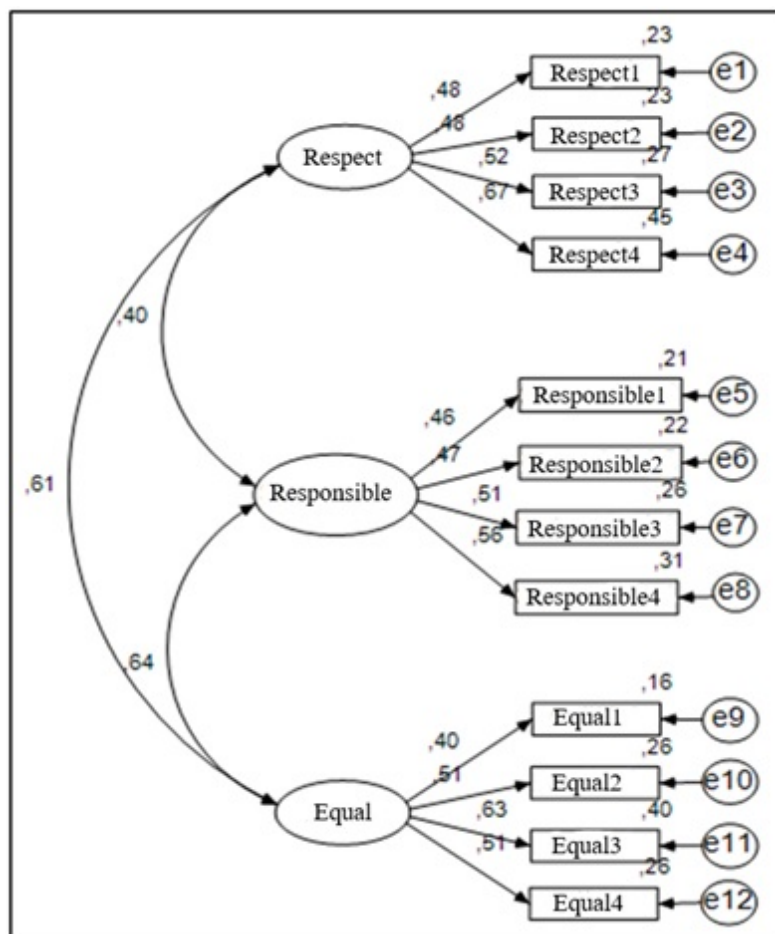


Figure 2. CFA Results for the DBTSS

As can be seen in Figure 2, the factor loads of the items collected under the factors in the model vary between .40 and .67. When the coefficients between the variables that make up the scale are examined, it is clear that the factors of the scale exhibit interrelated characteristics. The fit indices of the model that emerged as a result of the CFA analysis are given in Table 5.

Table 6. Comparison of the Determined Measurement Values and Reference Fit Index Values

	DBTSS Measurement Values	Perfect Fit Range *
p	,00	0,05 > p
X²/df	1,571	0 ≤ X ² /df ≤ 2
RMSEA	,03	0 ≤ RMSEA ≤ .05
SRMR	,04	< .05
IFI	,96	0,95 ≤ IFI ≤ 1
TLI	,95	0,95 ≤ TLI ≤ 1
CFI	,96	0,95 ≤ CFI < 1
GFI	,97	0,95 ≤ GFI < 1
AGFI	,96	0,95 ≤ AGFI < 1

X² = 80,127 df = 51

Note: * Byrne, 2016; Kline, 2011

As shown in Table 6, the model fit values of the scale are among the perfect criterion values, which show that the created model is verified. Besides CFA, for the construct validity of the scale by Psaila & Roland

(2007); It is recommended to look at convergent (convergent) validity, which shows the relationship of scale items with each other and with the factors they create, and discriminant validity values, which show the low correlation of scale items with factors other than their factors. Accordingly, the correlation squares (r^2) between the average variance extracted (AVE) and composite reliability (CR) values of the scale and the sub-dimensions of the scale were calculated (see Table 7).

Table 7. DBTSS AVE and CR Validity

	Factors	AVE	CR	1	2	3
1	Being Respect	.29	.50	-		
2	Being Responsibility	.25	.50	.16	-	
3	Equal Treatment	.27	.52	.37	.41	-

As seen in Table 7, the AVE calculated for the sub-dimensions of the scale was between .25 and .29; CR is seen to vary between .50 and .52. According to Hair, Anderson, Tatham & Black, (1998), in the case of $AVE < .50$, convergent validity is stated as acceptable if the condition $CR > AVE$ is met. Accordingly, it can be said that the scale has convergent validity. However, except for the responsibility sub-dimension, the correlation squares calculated for the other sub-dimensions are greater than the AVE. Therefore, it is difficult to say that the scale has discriminant validity (Straub, 1989).

DISCUSSION AND CONCLUSION

This study aimed at developing a valid and reliable measurement tool to be used in determining the democratic behaviour tendencies of middle school students. For this purpose, principal components analysis was carried out to test the construct validity of the scale, and as a result, the structure consisting of 3 factors explaining 46.39% of the total variance was obtained. According to Kline (2011), the percentage of total variance explained in structures with multiple factors must be at least 41%. When the factor structure of the scale was examined, the first factor consisted of 4 items and was named "being respectful". The second factor consisted of 4 items and was named "being responsible". The third factor, consisting of 4 items, was named "Equal treatment". The factor analysis revealed that the factor loads of the items collected under the aforementioned 3 factors varied between .49 and .74. Therefore, the fact that the factor loads are above the minimum limit of .30 stated (Field, 2009; Pallant, 2011; Seçer, 2013), indicates that the validity level of the scale is high.

In the reliability analysis of the scale, Cronbach's Alpha value was calculated to be .62 for the "being respectful" factor, .57 for the "being responsible" factor, and .59 for the "equal treatment" factor. The Cronbach's Alpha value for the overall scale was found to be .72. The corrected correlation values, which emerged as a result of the correlation analysis carried out to reveal the relationship between the items that make up the factors, vary between .32 and .46. According to Büyüköztürk (2014), the aforementioned values being higher than .20 indicates that the factor to which the item belongs contributes significantly to the purpose it aims to measure. In addition, a value between .21 and .40 indicates a good level of item discrimination, and a value above .41 indicates a very good level of discrimination (Şencan, 2005). Therefore, it can be said that the items that make up the scale contribute significantly to the purpose of the factors to which they belong, and item discrimination is at a good level.

Another factor analysis, CFA, aimed to reveal the relationship between the structures that make up the scale and verify the structure. Within the scope of this analysis, the Chi-Square value and significance level were determined first. A chi-square value of 2 or less indicates a perfect fit between the model and the data. On the other hand, the significance level of the value being $.05 >$ is considered an indicator that the dimensions differ significantly from each other (Büyüköztürk, 2014; Byrne, 2016; Kline; 2011). The Chi-Square value of the scale was calculated as ($X^2 = 80.127$, $df = 51$ [$X^2/df = 1.571$], $p < .05$). Therefore, it was concluded that the model-data fit of the study was excellent and the dimensions in which the items

were clustered differed significantly. With its validity and reliability tested, DBTSS consists of 3 different dimensions and 12 items. Each item in the scale was scored in a 3-point Likert type as (1) "Never", (2) "Sometimes", and (3) "Always". No reverse item was included in the developed scale. Furthermore, the minimum score to be obtained from the whole scale is 12, and the maximum is 36. The scale is suitable for students between the ages of 10 and 14, and the estimated response time is 5 minutes.

Democratic values in the literature; freedom, equality, justice, sensitivity, tolerance, respect, responsibility, freedom of expression, reconciliation, critical thinking, etc. It has been noted that such diversity (Chunlong, 2019; Dinç & Üztemur, 2016; Dowd, Carlson & Mingming, 1999; Üztemur, Dinç & İnel, 2018; Yeşil, 2002). The sub-dimensions of the scale developed in this research, on the other hand, consisted of democratic values such as respect, responsibility, and equality, and the research is limited in this aspect. From this point of view, researchers who will develop a democratic values scale at school can add different values to their scales. Thus, comprehensive information can be obtained about the democratic tendencies of middle school students. Consequently, the developed scale is expected to be helpful for researchers in determining the democratic behaviour tendencies of middle school students at school.

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Author Biographies

Nail Değirmenci was born in Denizli. He started his education life at Atatürk primary school and completed his high school education at Acıpayam High School. The author, who started his undergraduate education in Çanakkale Onsekiz Mart University, Faculty of Education, Department of History Education in 2011, graduated in 2016. He completed his master's degree at Uşak University, Graduate Education Institute in 2018, and started his doctorate at Gazi University in 2021.

Bahadır Kılcan won the Gazi University Kırşehir Education Faculty Elementary Education Department Social Studies Teaching program and graduated in 2005. A year later, he started his master's degree at Niğde University Social Sciences Institute Social Studies Teaching Program. In 2009, she completed her master's degree with her thesis titled "Teachers' Views on Teaching Values in the 6th Grade Social Studies Curriculum (Kırşehir Province Example)". In 2010, she enrolled in Gazi University Institute of Educational Sciences, Department of Primary Education, Social Studies Education, PhD program. He completed her doctoral education in 2013 by defending her doctoral thesis named "Examination of Student Perceptions Regarding the Values in the Social Studies Curriculum". The author, who was appointed as a lecturer at Gazi University Gazi Faculty of Education in 2014, still continues this duty.

Yusuf İnel was born in Burdur. He completed his education at Gazi Primary School and his middle and high school education at Burdur Cumhuriyet High School. He started his undergraduate education in 2002 and graduated from Süleyman Demirel University Burdur Education Faculty Social Studies Teaching undergraduate program in 2006. He completed his master's degree at Gazi University, Institute of Educational Sciences in 2011, and his doctorate at the same university and institute in 2014. He worked as a research assistant at Uşak University Faculty of Education between

2008 and 2015. In 2015, he was appointed as a Doctor Lecturer to the Department of Social Studies Education, Faculty of Education, Uşak University. The author, who won his Associate Professorship in 2020, continues his studies in the fields of Social Studies Education and Teacher Training.

Ali Gökalp was born in Uşak. He completed his primary, middle and high school education in İzmir. The author, who started his undergraduate education in Afyon Kocatepe University, Uşak Faculty of Education, Department of Social Studies Teaching in 2003, graduated in 2007. In 2017, he completed his master's degree at Uşak University, Graduate Education Institute, and then started his doctorate at the same university and institute in 2018 and graduated in 2021.