

A Psychometric Analysis of the Kindness Scales

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ABSTRACT

In the study conducted for psychometric analysis of kindness scales, teachers working in the central districts of Van, İpekyolu, Tusba and Edremit constituted the universe of the study. The study group of the research consisted of 395 teachers, who were chosen by random sampling method from the universe of this study and who participated in the study voluntarily. To identify the factor structure of the Kindness Scale, after testing the appropriateness of the data analysis (KMO value of 0.828), the principal component analysis values were used for the factor structure of the scales. For the reliability values, the analysis values of McDonald's Ω (omega) reliability coefficient was used. Accordingly, the Perception of Kindness Scale (PKS) consists of 6 items; the Fear of Kindness Scale (FKS) consists of 7 items; The Kindness towards Oneself Scale (KTOS) consists of 6 items and the Kindness to Others Scale (KOS) consists of 5 items; the variance values explained by the scales were calculated as 54.661%; 62,981; 58,719 and 58,866 respectively. The McDonald's ω values for the sub-dimensions were also observed to be 0.648 for the PKS; 0.816 for the FKS; 0.751 for the SKS and 0.648 for the KOS. In the psychometric evaluation of the Kindness Scale, correlation analysis was applied to obtain the correlation value between the total scores of the Kindness Scales, the Childhood Trauma Questionnaire, and the Tolerance Scale total scores.

Keywords: The Kindness Scales, kindness, scale development, the principal component analysis.

INTRODUCTION

Kindness helps us to make relationships with other people. We want to meet kind people in everyday life and appreciate people who act kindly (Cutler & Banerjee, 2018). Kindness is considered a moral value, and kindness and morality are implicitly associated. The concept of kindness is accepted as a value that reflects both moral, prosocial and personality traits (Barida, Prasetyawan, Sutarno & Muarifah, 2019; Cutler & Banerjee, 2018; Hogan, 1989; Habibis, Hookway & Vreugdenhil, 2016; Youngs, Yaneva & Canter, 2021). The main reason why the concept of kindness is reflected in the minds as a character trait is because social basis and component related to its epistemic cognition. In lexical terms It is an adjective that means humility conveying noble deeds, which is defined by the adjective kind in English (Oxford Dictionary, 2011). The word kindness, which is the noun form of this adjective, means kind act, the quality or habit of being kind, as well as a moral person, a good person (Hornby, 2005; Oxford Dictionary, 2011).

Although kindness is subjective as an idea (Aristoteles, 2020), there are definitions in the literature about kindness. Aristotle, who expresses kindness as helping another without expecting anything in return and as a necessity of being virtuous, states that it is easy for a person to want kindness for himself, but it is difficult to do a kindness to others (Aristotele, 2020). In other words, kindness as a sincere and compassionate response to someone else's request for help is considered to be concerned about the well-being and feelings of another (Barida et al., 2019; Habibis et al., 2016). In this context, kindness can be expressed as helping another in the most general definition (Canter et al., 2017; Santi, 2020).

Kindness is an umbrella concept that encompasses all values (Binfet, Gadermann & Schonert-Reichl, 2016). Kindness, which defines positive emotions such as love, compassion, empathy, happiness, compassion, altruism, includes not only having these emotions but also actions and reactions towards others (Canter et al., 2017). It is a value that encompasses other values such as mercy, compassion, love, empathy, altruism, and cooperation. Besides, kindness integrates cognition, attitude, emotion and act. On the other hand, kindness is a trait related with a state of mind rather than a feeling, and the act of kindness is characterized by its being a moral value (Aristoteles, 2020; Canter et al., 2017; Dixon, 2011; Habibis et al., 2016). Therefore, loving kindness and thinking that it is beneficial is not enough to be a kind person or to evaluate kindness. Kindness must also have a behavioral dimension (Aristotele, 2020) and should be expected or taken for granted by the others.

Kindness entails four main components to be studied: towards self, to others, perception and fear (Aristotele, 2020; Canters et al., 2017; Gilbert & Procter, 2006; Neff, 2003; Neff &

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How to cite this article: ÇEVİK Ö (2022). A Psychometric analysis of the kindness scales Pegem Journal of Education and Instruction, Vol. 12, No. 3, 2022, 245-255

Source of support: Nil

Conflict of interest: None.

DOI: 10.47750/pegegog.12.03.26

Received : 02.02.2022

Accepted : 11.03.2022

Published: 01.07.2022

Dahm, 2015). Kindness towards oneself is similar to kindness to others. Kindness to oneself is doing something good for oneself as one does for another (Gilbert, 2009; Neff, 2003; Neff & Dahm, 2015). It doesn't always have to be a big deal. Kindness towards oneself is not limited to behavior, but also the choices and preferences that a person makes for himself in his own life (Cutler & Banerjee, 2018; Fredrickson *et al.*, 2008). In addition, the ability to show oneself the love, care and compassion shown to another person can also be considered within the scope of kindness towards oneself. Kindness to others is usually the first concept that comes to mind when people think of kindness. Kindness to another, in its most general definition, is the help given to another without expecting any reward or return (Aristoteles, 2020; Canter *et al.*, 2017; Lyubomirsky *et al.*, 2005; Santi, 2020).

The perception of kindness, another component of kindness, is the subjective interpretation of stimuli coming from the environment, like all other perceptions (Cutler & Banerjee, 2018; Exline *et al.*, 2011; LeCloux, Loop, Peterson, Wilson, Wood, Fineburg & Dess, 2010; Robson, 2016). Thus, The perception of kindness is nourished by the positive and/or negative beliefs and thoughts, experiences, and experiences of the individual towards kindness (Canter *et al.*, 2017; Exline *et al.*, 2011; Klimecki & Singer, 2015; Otake, Shimai, Tanaka-Matsumi, Otsui & Fredrickson, 2006; Robson, 2016). Fear of kindness is derived from various reasons: thinking if you do a kindness for someone, you will be more likely to be exposed to ingratitude, to be suffered evil, to be taken advantage in the afterlife; the belief that some people do not deserve kindness (Beck & Beck, 2011; Boykin *et al.*, 2018; Cutler & Banerjee, 2018; Gül, 2019; Harris, 2017; Liotti & Gilbert, 2010; Neff & Dahm, 2015; Peker, 2011; Robson, 2016; Sayar, 2011). The concepts of kindness to oneself, perception of kindness, fear of kindness and kindness to others are related to each other. Therefore, an individual who can do a kindness to himself can also do a kindness to others, and this individual's perception of kindness is positive and his level of fear of kindness is low. Similarly, individuals with a negative perception of kindness have a high fear of kindness (Aristoteles, 2020; Canter *et al.*, 2017; Cutler & Banerjee, 2018; Robson, 2016).

When the literature is examined, it is possible to see some scales of kindness. More specifically, Binfet, Gadermann and Schonert-Reichl (2016) developed the School Kindness Scale (SKS). The scale is used to assess students' perceptions of kindness within one specific context—the school. Nonetheless, the measure is designed for children and adolescent, not for teachers. Moreover, this scale measures the student's evaluation of the school environment; it does not measure teachers' perceptions and attitudes towards kindness (Binfet, Gaderman & Schonert-Reichl, 2016). Besides, in the literature, there are measures available to assess individuals' perceptions of a specific situation and the frequency of kindness they do (for

example; The Kindness Scale (Comunian, 1998), Perception of Goodness Scale (Bilge, 2013), Kindness Value Scale (Sarıcı Bulut, 2009), A Kindness Scale (Youngs, Yaneva & Canter, 2021)). However, these scales are not designed to assess adults' positive and negative perceptions, fears, acts, towards oneself. When the literature is examined, it is seen that some individuals have negative perceptions of doing kindness (Aristoteles, 2020; Çiftçi & Kalaycı, 2009; Habibi *et al.*, 2016; Karakoç, Yıldız & Bayram, 2009). Notwithstanding, there is no available any measure to assess both positive and negative perceptions of individuals. In addition, although there are studies showing that there are individuals who are afraid of doing kindness (Aristoteles, 2020; Çiftçi & Kalaycı, 2009; Habibi *et al.*, 2016; Karakoç *et al.*, 2009), there is no psychometric tool in the field that measures kindness in this aspect. In addition, presenting different scales of kindness together is important to measure kindness with its aforementioned aspects.

In this study, it is aimed to develop and validate a brief measure to assess individuals' perceptions of kindness, fear of kindness, kindness towards oneself and to others. It is assumed that childhood traumas and the tolerance level of the person are effective in the emergence of kindness as a behavior (Aristoteles, 2020; Baskerville, 2000; Baskerville, 2000; Canter *et al.*, 2017; Binfet *et al.*, 2015; Cutler & Banerjee, 2018; Youngs *et al.*, 2021; Habibi *et al.*, 2016; Exline, 2011; Otake *et al.*, 2007). For this reason, the link between kindness and childhood traumas as well as tolerance levels was investigated in a study sample consisting of teachers.

It is seen that each of the components under the concept of kindness has an important role in the formation of kindness and each component measures kindness from different aspects. Considering that all subjects require the same sensitivity, it is aimed to develop Kindness scales that include the subjects under the concept of kindness in this study. For this purpose, the following sub-objectives are considered in the study:

1. To develop the Perception of Kindness Scale (PKS),
2. To develop the Fear of Kindness Scale (FKS),
3. To develop The Kindness towards Oneself Scale (KTOS),
4. To develop the Kindness to Others Scale (KOS).

METHOD

The research is a scale-development study. This study is a quantitative and descriptive research.

Population and Study Group

This research is a scale development study and teachers working in the Central Districts of Van (Edremit, Tusba and İpekyolu) were selected for the universe of this study. Due to the Covid-19 Pandemic, the universe has been preferred to be accessible on the virtual space. For this reason, a data collection template and a data collection link were sent via Google Drive

Table 1: The Sample Variables

Variables		<i>f</i>	%
Gender	Female	225	57,0
	Male	170	43,0
Field of Study	Classroom Teachers	55	13,9
	Religious Culture and Moral Knowledge Teacher	41	10,4
	Mathematics Teacher	36	9,1
	School Counselor	33	8,4
	Turkish Teachers	31	7,8
	Social Studies Teacher	27	6,8
	English Teachers	23	5,8
	Sciences Theacher	20	5,1
	Others	129	32,7
	Seniority	1-5 Years	190
6-10 Years		117	29,6
11-15 Years		42	10,6
16-20 Years		8	2,0
21-25 Years		22	5,6
Grade Level	26 Years and Over.	16	4,1
	Preschool	20	5,1
	Elementary School	81	20,5
	Middle School	177	44,8
	High School	117	29,6

to 1000 people determined randomly through sampling from this population. The sample consisted of 395 volunteer teachers. The sample variables are provided in Table 1.

As summarized in Table 1, participants of the current study were 395 subjects, 225 (57.0 %) of which were female and 170 (43.0 %) of which were male. Most of the participants were in different fields of studies ($n = 129$, 32.7%), grade school teachers ($n = 55$, 13.9%) and religious culture and moral knowledge teachers ($n = 41$, 10.4%), 36 participants were mathematics teachers (9.1%), 33 participants (8.4%) were school counselors, 31 participants (7.8%) were Turkish teachers, 27 participants (6.8 %) were social studies teachers, 23 participants (5.8 %) were English teachers and 20 participants (5.1%). While most of the participants had 1-5 years of seniority ($n = 190$, 48.7%), 117 participants (29.6%) had 6-10 years of seniority, 42 participants (10.6%) had 11-15 years of seniority, 8 participants (2.0%) had 16-20 years of seniority, 22 participants (5.6%) had 21-25 years of seniority and 16 participants (4.1%) had 26 and over years of seniority. Whereas most of the participants were working at middle school ($n = 177$, 44.8%), 117 participants reported working at high school (29.6%), 81 participants reported working at elementary school (20.5%) and 20 participants reported working at preschool (5.1%).

Data Collection Tools

In order to examine the validity of the Kindness Scale for similar scales, the Tolerance Scale and the Childhood Trauma Scale, considered to be associated with the concept of kindness in the literature, and personal information form containing the variables were used. The Personal Information Form and information about the scales are presented below.

The Personal Information Form. This form was created by researchers. In the form, there are questions aimed at obtaining information about the gender, seniority, school level and branch of the participants.

The Tolerance Scale. The scale developed by Erhanlı (2014) is a 5-point Likert type and consists of 11 items. The individual marks his/her opinion on the item he/she read between 1 and 5 and marks only one of them. The sum of the answers given to all the items determines the tolerance levels of the individual. There is only one reverse scored item in the scale, and the scale scores vary between 11 and 55 points. The increase in the total scores to be taken from the scale is an indicator of the high tolerance levels of the individual.

The Childhood Trauma Scale. The scale, which was developed by Bernstein et al. in 1994, was adapted into Turkish by Şar et al. in 2012. The 5-point Likert-type scale consists of 28 items. The scale measures childhood sexual, physical and emotional abuse. Items 2, 5, 7, 13, 19, 26, 28 in the scale are reverse scored. The cut-off point was not calculated for the Turkish version of the scale, but some estimations were made based on the findings of the 2012 study "The Validity and Reliability of the Turkish Adaptation of the Childhood Mental Trauma Scale" by Vedat Şar, Erdiñ Öztürk, and Eda İkkardeş. The findings of this study suggest that exceeding 5 points for sexual and physical abuse, that is, giving a yes answer to any of the questions, even if at the lowest level, should be counted as a positive statement. It is understood that this limit can be reduced to 7 points for physical neglect and emotional abuse and 12 points for emotional neglect. For the total score, it is seen that this limit can be around 35 (Şar et al., 2012).

The Scales

A review of theories and research was initially on kindness to identify salient areas reflecting kindness. Because individual's perception of kindness, fear of kindness, kindness to himself and kindness to others were identified as key areas, items involved to assess individuals' kindness of these dimensions. While preparing the item pool of the scale, which contains 65 items, the relevant literature was used and expert opinions were obtained from 1 professor in the field of psychological counseling and guidance, 1 professor and 2 associate professors in the field of philosophy. The items in the pool were evaluated by 5 Turkish teachers, and as a result of the evaluation, some items in the draft were changed and some items were removed

from the draft. As a result of this evaluation, 55 articles remained in the draft. Then, the final version of the draft was presented to 5 experts. While some items were corrected, some items were removed. In its final form, a draft of 45 items was formed.

In order to develop the Kindness Scales, first of all, an item pool of 45 items was created, with 10 items for the “the Perception of Kindness Scale”, 15 items for the “the Fear of Kindness Scale”, 10 items for the “the Kindness to Oneself Scale”, and 10 items for “the Kindness to Others Scale”. The scales were submitted to the opinion of 3 field experts and 2 measurement experts for the content and the face validity. Within the framework of relevant theoretical views and measurement tools, the experts stated that because individual’s feelings, thoughts and behaviors were identified as key areas of kindness, items should also involve these dimensions. In addition to this, they suggested that items with the same meaning and repetition should be removed from the form. After the content validity study, the questionnaire was formed in line with the opinions of the experts, and the scale consisted of 26 items. The “Perception of Kindness Scale” consisted of 6 items, the “Fear of Kindness Scale” consisted of 7 items, the “Kindness towards Oneself Scale” consisted of 6 items, and the “Kindness to Others Scale” consisted of 5 items. The Kindness Scale, which consists of these four sub-scales, is expressed as a five-point Likert scale as “not at all suitable for me”, “somewhat suitable for me”, “suitable for me”, “very suitable for me” and “completely suitable for me”. Thus, a 26-item pre-draft form was sent to 395 teachers.

Development of the Kindness Scales Trial Form

National and international literature on the concept of kindness has been examined. After reviewing the literature

on the concept of kindness, the scales related to kindness (The Kindness Scale (Comunian 1998), Perception of Goodness Scale (Bilge, 2013), Kindness Value Scale (Sarıcı Bulut, 2009), A Measuring Kindness (Youngs et al., 2021) were examined. Then, it was examined in which ways these scales dealt with the concept of kindness and how it was examined.

In the first stage, expert opinions were taken for the content validity of the scale. Opinions were received from a total of 5 experts working in the field of guidance and psychological counseling. Evaluation of expert opinions was made by considering the Davis technique. The Davis technique ranks expert opinions as (a) appropriate, (b) item should be slightly revised, (c) item should be reviewed seriously, and (d) item not appropriate. In this technique, the number of experts who chose option (a) and (b) is divided by the total number of experts to obtain the content validity index for the item, and instead of comparing this value with a statistical criterion, a value of 0.80 is accepted as a criterion (Davis, 1992). 1-11. items were written for the Perception of Kindness Scale. As a result of the content validity study, the items 1, 3, 6, 7 and 11 were removed from the measurement tool, while item 10 was revised. 12-23. items were written for the Fear of Kindness Scale. As a result of the content validity study, items 13, 88, 20, 22 and 23 were removed from the scale, while the item 16 was revised. The 24-34. items were written for the Kindness towards Oneself Scale. As a result of the content validity study, the items 25, 27, 28, 31 and 33 were removed from the scale. The 35-45. items were written for the Kindness to Others Scale. As a result of the content validity study, the items 37, 40, 42, 43, 44 and 45 were removed from the scale, while the item 39 was revised. As such, the measurement tool consisted of 26 expressions. The content validity study according to the Davis Technique is shown in Table 2.

Table 2: The content validity study according to Davis Technique

Item No.	The sum of the experts who said (a+b)	Expert participant total	KGO	The Perception of Kindness Scale	The Fear of Kindness Scale	The Kindness towards Oneself Scale	The Kindness to Others Scale
1*	2	5	0,4	X			
2	5	5	1				
3*	2	5	0,4	X			
4	4	5	0,8				
5	5	5	1				
6*	1	5	0,2	X			
7*	2	5	0,4	X			
8	5	5	1				
9	5	5	1				
10**	3	5	0,6				
11*	2	5	0,4	X			
12	4	5	0,8				

Item No.	The sum of the experts who said (a+b)	Expert participant total	KGO	The Perception of Kindness Scale	The Fear of Kindness Scale	The Kindness towards Oneself Scale	The Kindness to Others Scale
13*	1	5	0,2		X		
14	5	5	1				
15	5	5	1				
16**	3	5	0,6				
17	4	5	0,8				
18*	1	5	0,2		X		
19	5	5	1				
20*	2	5	0,4		X		
21	5	5	1				
22*	2	5	0,4		X		
23*	2	5	0,4		X		
24	4	5	0,8				
25*	1	5	0,2			X	
26	5	5	1				
27*	1	5	0,2			X	
28*	2	5	0,4			X	
29	4	5	0,8				
30	4	5	0,8				
31*	2	5	0,4			X	
32	5	5	1				
33*	1	5	0,2			X	
34	5	5	1				
35	5	5	1				
36	4	5	0,8				
37*	2	5	0,4				X
38	4	5	0,8				
39**	3	5	0,6				
40*	2	5	0,4				X
41	4	5	0,8				
42*	1	5	0,2				X
43*	2	5	0,4				X
44*	2	5	0,4				X
45*	1	5	0,2				X

* Items discarded as a result of the content validity

** Items revised as a result of the content validity

Data Analysis

Principal component analysis was determined as the method for constructing validity of the Kindness Scales. Principal component analysis is a multivariate statistic that is frequently used as a factorization technique. With this technique, the total variance of p variables can be explained by the linear component of n common factors (Büyüköztürk, 2014). Since the scale consists of sub-scales and more than one sub-dimension with sub-dimensions in each scale, the calculation of McDonald's Ω (omega) reliability

coefficient was used. McDonald's ω reliability coefficient is recommended if the items are congeneric measurement in multiple graded tests (Yurdugül, 2006). McDonald's Ω (omega) was evaluated with the reliability coefficient. The criterion correlation validity of the measurement tool was evaluated by Spearman correlation analysis performed between the total score of the Kindness Scales and psychological variables. In addition, the suitability of the obtained data for factor analysis was tested with Kaiser-Meyer-Olkin (KMO) and Barlett tests.

FINDINGS

Kaiser–Meyer Olkin (KMO) coefficient and Bartlett sphericity test were performed to test the suitability of the data for factor analysis. If KMO is greater than 0.60 and has a value closer to 1. the Bartlett test is significant, indicating that the data are suitable for factor analysis (Büyükoztürk, 2014). The normality distribution of the total score obtained from the Kindness of Scale was tested with Kolmogorov-Smirnov.

The values of the Barlett Sphericity test and the KMO value of each sub-scale of the Kindness Scale, which consists of four sub-scales, namely the “Perception of Kindness Scale”, “The Fear of Kindness Scale”, the “Kindness to Oneself Scale” and the “The Kindness to Others Scale” were given below.

Findings of the Kindness Scales

We can see that the Bartlett’s test of sphericity and the KMO were significant: The KMO was 0.677 and the Bartlett’s test of sphericity was ($\chi^2 = 319,513$; $p > 0.000$) for the Perception of Kindness Scale; The KMO was 0.828 and the Bartlett’s test of sphericity was ($\chi^2 = 846,697$; $p > 0.000$) for the Fear of Kindness

Scale; The KMO was 0.783 and the Bartlett’s test of sphericity was ($\chi^2 = 483,084$; $p > 0.000$) for the Kindness towards Oneself Scale; The KMO was 0.729 and the Bartlett’s test of sphericity was ($\chi^2 = 221.317$; $p > 0,000$) for the Kindness to Others Scale. The KMO, the Bartlett’s test of sphericity, the Skewness and Kurtosis value, the standard deviation, minimum, maximum and arithmetic mean for data are shown in Table 3.

As a result of Varimax rotation and Principal Components Analysis, it was seen that all items in the draft form of the scale had a load value of over 0.350. According to the results of the analysis, the distinctiveness of the scale items belonging to the Kindness Scales are shown in Table 4.

The Perception of Kindness Scale consists of two factors. The eigenvalues of the scale were calculated as 1.882 for the first factor and 1.398 for the second factor. According to these values, the first factor explains 31,362% of the total variance of the scale, and the second factor explains 23,298% of the total variance. The total variance explained by the two factors together is 54,661%. The first factor is included in the scale with three (1, 2, 5) and the second factor is included in the scale with three (3, 4, 6) items. The load values of the factors in the scale vary between 0.642

Table 3: Descriptive statistics of the Kindness Scales

The Scales	The KMO	The Bartlett’s test of sphericity		Skewness	Kurtosis	The Standard Deviation	Minimum	Maximum	Arithmetic Mean
		χ^2	p						
The Perception of Kindness Scale	0.677	319,513	0,000	1,061	1,762	3,31263	,00	21,00	3,6878
The Fear of Kindness	0.828	846,697	0,000	1,149	1,685	5,04770	,00	28,00	7,6345
The Kindness towards Oneself Scale	0.783	483,084	0,000	1,262	3,494	6,15605	,00	45,00	9,4492
The Kindness to Others Scale	0.783	483,084	0,000	1,262	3,494	6,15605	,00	45,00	9,4492

Table 4: Validity Analysis Results of the Kindness Scales

The Scales	Items	Factor 1	Factor 2	Item Total Correlation
The Perception of Kindness Scale	1. Kindness is necessary for social solidarity.	,849	,093	,517
	2. Doing a favor to someone in need is a virtue.	,825	,038	,458
	3. Asking for favors is a sign of weakness.	,071	,719	,258
	4. Helping people is not a favor.	,029	,674	,221
	5. Mercy/compassion leads people to kindness.	,642	,230	,411
	6. Being kind is a sign of weakness.	,249	,602	,330
	Variance %	31,362	23,298	
Total Variance	54,661			
Cronbach’s alpha for the the total scale		,625		

<i>The Scales</i>	<i>Items</i>	<i>Factor 1</i>	<i>Factor 2</i>	<i>Item Total Correlation</i>
The Fear of Kindness Scale	1. People, who you do kindness, do not get the kindness in perspective.	,101	,883	,507
	2. People will take advantage of you if you are do kindness to them.	,234	,854	,604
	3. Everybody don't deserve kindness.	,804	-,017	,443
	4. People are not as trustworthy as you would do them a favor.	,720	,358	,649
	5. People are too bad to deserve kindness.	,704	,273	,569
	6. You will see evil from someone you do kindness.	,606	,216	,458
	7. People quickly forget the kindness you do.	,480	,572	,611
	Variance %	33,181	29,800	
	Total Variance	62,981		
Cronbach's alpha for the the total scale		,804		
The Kindness Towards Oneself	1. I don't treat myself well when I make mistakes.	,020	,873	,378
	2. Doing kindness to me makes me feel bad.	,844	,136	,557
	3. I feel helpless when people do me favors.	,833	,165	,568
	4. I think that people see me as weak or helpless when good deeds are done to me.	,399	,569	,487
	5. I don't ask people for help when I have a problem.	,555	,318	,455
	6. I cannot tolerate my faults.	,377	,525	,439
	Variance %	44,480	14,239	
	Total Variance	58,719		
Cronbach's alpha for the the total scale		,737		
The Kindness to Others Scale	1. When I see weak people, I get angry at them.	,034	,852	,360
	2. Doing kindness hurts me.	,837	,016	,380
	3. I find kindness people fake.	,313	,707	,471
	4. It is not right to do kindness to people.	,670	,202	,375
	5. When I do kindness, I am harshly self-critical.	,532	,380	,392
	Variance %	41,525	17,342	
	Total Variance	58,866		
Cronbach's alpha for the the total scale		,631		

* The Perception of Kindness Scale (Factor 1: Positive Perception; Factor 2: Negative Perception)

** The Fear of Kindness Scale (Factor 1: Mistrust; Factor 2: Thanklessness)

*** The Kindness Towards Oneself (Factor 1: From Others 2: From Oneself)

**** The Kindness to Others Scale (Factor 1: Failure to Do Kindness 2: Dislike for Kindness)

and 0.849 for the first factor; between 0.602 and 0.719 for the second factor. The correlations of the items in the scale with each other vary between 0.221 and 0.517. McDonald's ω value was checked for the reliability of the scale. McDonald's ω calculated for all items of the PKS was determined as 0.648. The factors of the scale were written according to the statements of the items. The responses to the scale items were in the form of a 5-point Likert-type scale, from 0 (not at all like me) to 4 (always like me). Three items (3,4,6) from the scale is reversed scored. The highest score obtained from the scale is 24. Scores are averaged to create a total score in which higher scores indicate higher levels of positive perception.

The Fear of Kindness Scale consists of two factors. The eigenvalues of the scale were calculated as 2,323 for the first factor and 2,086 for the second factor. According to these values, the first factor explains 33,181 % of the total variance of the scale, and the second factor explains 29,800 % of the total variance. The total variance explained by the two factors together is 62,981%. The first factor is included in the scale with four (3, 4, 5, 6) and the second factor is included in the scale with three (1, 2, 7) items. The load values of the factors in the scale vary between 0,606 and 0,804 for the first factor; between 0,572 and 0,883 for the second factor. The correlations of the items in the scale with each other vary between 0,458

and 0,649. McDonald's ω value was checked for the reliability of the scale. McDonald's ω calculated for all items of the FKS was determined as 0,816. The factors of the scale were written according to the statements of the items. The responses to the scale items were in the form of a 5-point Likert-type scale, from 0 (not at all like me) to 4 (always like me). The highest score obtained from the scale is 28. Scores are averaged to create a total score in which higher scores indicate higher levels of fear of kindness.

The Kindness towards Oneself Scale consists of two factors. The eigenvalues of the scale were calculated as 2,669 for the first factor and 1,000 for the second factor. According to these values, the first factor explains 44,480% of the total variance of the scale, and the second factor explains 14,239% of the total variance. The total variance explained by the two factors together is 58,719%. The first factor is included in the scale with three (2, 3, 5) and the second factor is included in the scale with three (1, 4, 6) items. The load values of the factors in the scale vary between 0,555 and 0,844 for the first factor; between 0,525 and 0,873 for the second factor. The correlations of the items in the scale with each other vary between 0,378 and 0,568. McDonald's ω value was checked for the reliability of the scale. McDonald's ω calculated for all items of the KTOS was determined as 0,751. The factors of the scale were written according to the statements of the items. The responses to the scale items were in the form of a 5-point Likert-type scale, from 0 (not at all like me) to 4 (always like me). The highest score obtained from the scale is 24. Scores are averaged to create a total score in which higher scores indicate higher levels of kindness towards oneself.

The Kindness to Others Scale consists of two factors. The eigenvalues of the scale were calculated as 2,076 for the first factor and 1,017 for the second factor. According to these values, the first factor explains 41,525% of the total variance of the scale, and the second factor explains 17,342% of the total variance. The total variance explained by the two factors together is 58,866%. The first factor is included in the scale with three (2, 4, 5) and the second factor is included in the scale with two (1, 3) items. There are two aspects of kindness

to others: the inability to do kindness to another person due to the feelings and thoughts of the person himself; not being able to show kindness to another person due to situations originating from someone else (Shorr & Shorr, 1995; Otake, Shimai, Tanaka-Matsumi, Otsui & Fredrickson, 2006). The items in the first factor (2, 4, 5) measure the state of not doing favors due to one's own self, while the items in the second factor (1 and 3) measure the state of not being able to do favors due to someone else. For this reason, the scale measures kindness to others with two factors.

The load values of the factors in the scale vary between 0,532 and 0,837 for the first factor; between 0,525 and 0,873 for the second factor. The correlations of the items in the scale with each other vary between 0,360 and 0,471. McDonald's ω value was checked for the reliability of the scale. McDonald's ω calculated for all items of the KOS was determined as 0,648. The factors of the scale were written according to the statements of the items. The responses to the scale items were in the form of a 5-point Likert-type scale, from 0 (not at all like me) to 4 (always like me). The highest score obtained from the scale is 24. Scores are averaged to create a total score in which higher scores indicate higher levels of kindness to others.

Descriptive statistics for the sub-scales of the Kindness Scales are shown in Table 5.

When the scores of the sub-scales of the Kindness Scales are examined, it is seen that whereas the mean score of the Kindness towards Oneself is the highest with 9,4492±6,15605, the mean score of the Kindness to Others is lowest with 1,1878±1,86988.

Confirmatory factor analysis was applied to test the accuracy of the structure consisting of 26 items and four sub-dimensions obtained as a result of the exploratory factor analysis (CFA). The fit index values for the scale are given in Table 6.

The chi-square, chi-square/degree of freedom and goodness-of-fit indices calculated for this structure when tested are shown in Table 7. In addition, the evaluation criteria accepted for the indices according to Schermelleh-Engel, Moosbrugger, and Müller (2003) are also shown in the table.

The t-test values of the CFA result of the four-factor structure are given in Table 7. When Table 7 is examined, it is seen that the t-test values of the first dimension are between 7.35 and 10.80, the t-test values of the second dimension are between 4.66 and 6.70, the t-test values of the third dimension are between 8.22 and 13.18, and the t-test values of the fourth dimension are between 6.54 and 9.26. It shows that if the t

Table 5: Descriptive Statistics for the Study Measures

<i>The Scales</i>	<i>Mean</i>	<i>S.s.</i>	<i>Min.</i>	<i>Max.</i>
The Perception of Kindness Scale	3,6878	3,31263	,00	21,00
The Fear of Kindness Scale	7,6345	5,04770	,00	28,00
The Kindness towards Oneself	9,4492	6,15605	,00	45,00
The Kindness to Others	1,1878	1,86988	,00	12,00

Table 6: CFA Results of the Four-Dimensional Implicit Structure Established with CFA

<i>Model</i>	χ^2	χ^2/sd	<i>NNFI</i>	<i>NFI</i>	<i>CFI</i>	<i>RMSEA</i>
Four-Factor Structure	662,32	2,70	0,92	0,89	0,93	0,066
Criteria		3,0	≥0,95	≥0,95	≥0,95	≤0,08

value found is greater than 2.58, it is significant at the .01 level, and if it is greater than 1.96, it is significant at the .05 level (Jöreskog & Sörbom, 2000; Kline, 2011). Items whose

t value is not significant in CFA should be removed from the model, or the number of participants is considered low for factor analysis (Byrne, 2010). According to the results of the t test values calculated in CFA for this study, all t values were found to be significant at the .01 level. Consequently, it is understood that the number of participants is sufficient in the research. Therefore, it is seen that there are no items to be removed from the model.

It was seen that the structure created by considering the literature research was statistically confirmed. The model created as a result of CFA is given in figure 1.

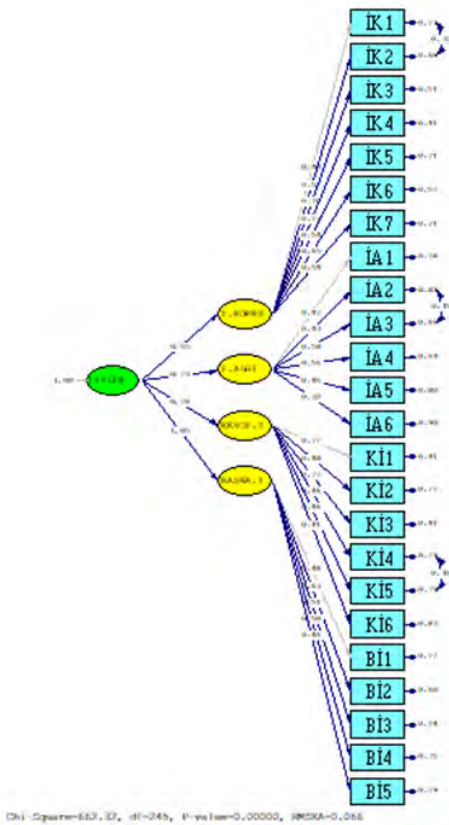


Fig. 1: Measurement Model for the Kindness Scales

The Concurrent Validity

The Tolerance Scale and the Childhood Trauma Questionnaire were used to test the congruent validity of the Kindness Scales. Since the assumption of normal distribution was not met, Spearman correlation analysis was performed. Analysis results are presented in Table 8.

Table 8 shows the correlations between the Kindness Scales and the Tolerance Scale and the Childhood Trauma Questionnaire. The scores of the Tolerance Scale were positively related to the Childhood Trauma Questionnaire; however, this correlation wasn't significant ($r = .020, p > .05$). The result may be significant in a larger sample group and/or a different sample group. The scores of the Perception of Kindness Scale were negatively and significantly related to the Childhood Trauma Questionnaire ($r = -.126, p < .05$). The scores of the Fear of Kindness Scale were positively and significantly related to the Tolerance Scale ($r = .199, p < .01$). The scores of the Kindness towards Oneself Scale were positively

Table 7: T-test Values Obtained from CFA for Scales

Item No.	t	Item No.	t	Item No.	t	Item No.	t
İ.K1	8.17*	İ.K7	7.35*	I.A6	4.66*	K.I6	7.36*
İ.K2	10.80*	I.A1	6.20*	K.I1	8.10*	B.I1	9.26*
İ.K3	8.37*	I.A2	5.57*	K.I2	8.60*	B.I2	7.75*
İ.K4	8.67*	I.A3	6.70*	K.I3	13.18*	B.I3	6.97*
İ.K5	7.35*	I.A4	6.64*	K.I4	8.22*	B.İ4	6.85*
İ.K6	8.13*	I.A5	5.88*	K.I5	8.24*	B.İ5	6.54*

*p<.01

Table 8: Relationships Between the Kindness Scales and Other Scales

Dimensions	The Tolerance Scale		The Childhood Trauma Questionnaire	
	r	p	r	p
The Tolerance Scale	1,000	.	,020	,685
The Perception of Kindness Scale	-,064	,205	-,126*	,012
The Fear of Kindness Scale	,199**	,000	-,022	,660
The Kindness towards Oneself Scale	,176**	,000	-,072	,153
The Kindness to Others Scale	-,021	,684	-,073	,147
n	395	395	395	395

* p<.05, ** p<.01

It was concluded that the instrument (the Kindness Scales) was related to the related scales used to test its external validity. For the reliability of the study, the analysis values of the McDonald's Ω (omega) reliability coefficient of the scales were used. Accordingly, The Perception of Kindness Scale (PKS) consists of 6 items; The Fear of Kindness Scale (FKS) consists of 7 items; The Kindness towards Oneself Scale (KTOS) consists of 6 items and The Kindness to Others Scale (KOS) consists of 5 items. Respectively, the variance values explained by the scales were calculated as 54.661%; 62,981; 58,719 and 58,866. It was observed that the McDonald's ω values for the sub-dimensions were also 0.648 for the PKS; 0.816 for FKS; 0.751 for KTOS and 0.648 for KOS. In addition, confirmatory factor analyzes were used to verify the created structure as a model, and it was seen that the fit indices of all scales were within the acceptable or perfect fit limits.

For the congruent validity of the Kindness Scales, the relationship between the sub-scales and the Childhood Trauma Scale and Tolerance Scale was examined. A negative significant correlation was found between the Perception of Kindness Scale and the Childhood Trauma Questionnaire. This result is in agreement with the literature. Individuals exposed to childhood traumas have negative schemas for situations such as kindness. Therefore, it can be said that there is a negative relationship between childhood traumas and positive perception of kindness. A positive and significant relationship was found between the Fear of Kindness Scale and the Tolerance Scale. This result is in agreement with the literature. Individuals with high tolerance levels experience less anger and have low aggression levels (Duran et al., 2016). Therefore, a person with a low level of fear of kindness, which is a negative situation such as anger and aggression, has a high tolerance level. In addition, a positive and significant relationship was found between the Kindness towards Oneself Scale and the Tolerance Scale. This finding is consistent with the existing literature. Studies in the literature show that doing kindness to oneself or being compassionate towards oneself increases the ability to cope with negative emotions. Therefore, it can be said that there is a positive relationship between tolerance and kindness. In addition, individuals with a low level of self-criticism are more compassionate and better towards themselves (Longe et al., 2010). This situation is seen in people who have a high tolerance level both for their own mistakes and the mistakes of others. However, no significant correlation was found between the Kindness to Others Scale, the Childhood Trauma Questionnaire and the Tolerance Scale. Despite this, it is seen that The Kindness to Others Scale has a negative correlation with both scales. In this respect, it is similar to the literature. A person who has experienced traumas in childhood does not show positive feelings towards others in his future life (Duran et al., 2016; Harris, 2017; Liotti & Gilbert, 2010; Neff & Dahm, 2015).

As a result, it can be said that the Kindness Scales and its subscales are a valid and reliable scale as a result of the analysis. The Kindness Scales, which consists of four subscales and 26 items, can be scored separately for each subscale. One or the other sub-scales of the Kindness Scales can be used alone, depending on the study subjects of the researchers.

No significant correlation was found with the Kindness to Others Scale, the Childhood Trauma Questionnaire, and the Tolerance Scale, but it was shown that these scales were related to each other. This relationship may be significant in studies with larger sample groups. Therefore, these scales can be used in larger sample groups in future studies. Besides, in this study, work with different teachers has been conducted. Therefore, it is recommended to work with different sample groups. However, this scale can be used with different sample groups. For this scale, the adult group was studied, and items were written for adults. That's why scales are used for adults. Studies can be carried out for different age groups in this way. It is also recommended to conduct studies examining different variables with the Kindness Scales too.

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