

The Development of the Turkish Serenity Scale: A Validation Study*

Serdar Alkınⁱ

Ondokuz Mayıs University

Yücel Öksüzⁱⁱ

Ondokuz Mayıs University

Abstract

The goal of this study was to develop a Serenity Scale suitable for Turkish culture. The scale's construct validity was investigated using exploratory factor analysis (EFA) and confirmatory factor analysis (CFA). The association between the Serenity Scale, Peace Scale, and Authentic Happiness Scale was examined in order to assess the criterion-related validity. The Cronbach alpha internal consistency coefficient was determined and the equivalent halves approach was employed for the reliability analysis. In addition, the item discrimination coefficient was calculated by calculating the difference between the upper and lower 27% score averages. The research data were collected online from two distinct groups of people aged 18-35. A three-factor structure with 21 items was obtained with 306 participants in the EFA stage and 365 participants in the CFA stage, for a total of 671 participants, according to the results of the EFA and CFA performed within the context of the research. The Cronbach alpha internal consistency coefficients calculated for the wholesale scale in the three-factor final structure were calculated as .90. The correlation value between the scores of the two halves of the form, which was divided into odd and even numbers in the equivalent halves method was examined. A strong positive correlation was found between the two halves of the method of comparing the upper 27% and lower groups of 27%, which was applied to test the reliability of the measurement tool, it was revealed that the difference between the mean scores of the upper and lower 27% groups was significant. As a result, it can be stated that the Serenity Scale is a reliable and valid measurement tool.

Keywords: Serenity, Young adults, Validity, Reliability

DOI: 10.29329/ijpe.2023.579.3

Submitted: 01/03/2023

Accepted: 12/06/2023

Published: 01/08/2023

* This study is part of the first author's PhD thesis, which is being supervised by the second author.

ⁱ **Serdar Alkın**, Expert, Graduate Education Institute, Ondokuz Mayıs University, ORCID: 0000-0001-8934-3007

Correspondence: pd.serdaralkin@gmail.com

ⁱⁱ **Yücel Öksüz**, Prof. Dr., Faculty of Education, Ondokuz Mayıs University

INTRODUCTION

Throughout the history of humanity, many researchers have worked and discussed about concepts and actions such as peace, feeling peaceful, reaching peace, happiness, well-being, and feeling good. These concepts and actions are frequently mentioned in daily life and are used interchangeably without realizing it. Despite the confusion of meaning in daily life, these concepts and actions mean different things. In the dictionary of the Turkish Language Institution (TDK), the concept of happiness is defined as “the state of being proud of achieving all aspirations completely and continuously” (TDK, 2022). For many people in the West, happiness is about feeling good; It expresses the dominance of positive emotion over negative affect, a general satisfaction or satisfaction with life. Happiness is subjective and consists of both emotional and cognitive evaluations of people's own lives (Argyle et al., 1989; Diener 1984). Looking at the concept of serenity; It is seen in the dictionary of TDK that it has meanings such as "rest, peace of mind, comfort, peace" (TDK, 2022). Serenity can be thought of as a personal and unique way of life that includes behavioral and cognitive elements associated with feeling calm and comfortable (Floody, 2014).

In the literature, it is seen that different definitions are made about the concept of serenity. While Bodley (1955) stated that serenity is a reflection of one's existence, Garvey (1977) compared serenity to a spiritual supermarket. Whitfield (1984) defined serenity as a higher level of consciousness and a spiritual concept. Pfau (1988) stated that serenity is an intact higher faculty of the soul and defined it as a state of serenity beyond all understanding. In addition to all of these, serenity, a spiritual condition that reduces stress and promotes optimal health (Roberts & Cunningham, 1990), a permanent inner peace that helps console clients going through difficult life events (Gerber, 1986), and a universal health experience connected to quality of life are all crucial (Kruse, 1999). However, according to Boyd-Wilson et al. (2004), serenity is a spiritual characteristic that encompasses inner peace despite ups and downs. They also said that serenity allows one to experience sadness while maintaining composure. Serenity is a spiritual concept. Clark et al. (1984) distinguished joy from serenity in terms of arousal level. Joy includes high arousal, while serenity includes low arousal. Unlike joy and contentment, serenity is not dependent on external events. It is sustained in good times as well as bad times (Gerber, 1986; Oates, 1979).

Roberts & Cunningham (1990), starting from the preliminary research and definitions, started to work on the concept analysis and measurement tool about serenity. In the study they conducted, they asked five experts for their opinions on the concept of serenity and defined ten attributes on which at least four of them agreed. The diagram of these attributes is given in Figure 1.



Figure 1. Attributes of the Concept of Serenity

The features in the diagram in Figure 1 showing the ten attributes of serenity form the basis of the theoretical definition of the concept of serenity. Information on these features is given below:

a) Ability to get away from desires, emotions or feelings: This ability allows you to stay away from negative emotions and feelings and stay peaceful. It means abandoning unrealistic expectations and not wanting things that won't happen.

b) Ability to stay connected with an inner world that includes calmness and security: Although the concept has different definitions, it is emphasized that one must be able to reach this shelter in order to attain serenity. Inner refuge is associated with nature, prayer, solitude and meditation. A peaceful individual is one who has developed the ability to reach this refuge.

c) Feeling of connectedness with the universe: Peaceful individuals feel the need to belong. They feel connected to something bigger than themselves. It could be the Creator, the universe, family, group, nature, animals, or a life purpose to which they feel attached. Even if these individuals are alone, they do not feel lonely.

d) Confidence in the wisdom of the universe: Reflects belief that events follow a larger plan, and confidence that even bad experiences, in some way, follow a larger plan. It reflects a person's belief in something beyond himself.

e) The habit of actively pursuing all reasonable ways to solve problems: These people actively engage in changing unfavorable life occurrences and accept responsibility for the events and emotions they may influence. Although they accept the events that they cannot change, they try all ways to solve the problem before this acceptance.

f) Ability to accept unchangeable situations: They accept events that are certain to develop beyond their control. They quit attempting to alter individuals and circumstances once they know that it will be ineffective.

g) The ability to give oneself unconditionally: One's capacity to demonstrate altruism or benevolence contributes to one's sense of serenity. Giving oneself is partly an expression of a sense of belonging. By giving, the serene person also expresses the need.

h) Being able to forgive oneself and others: A serene person has learned to forgive both himself and others, and they are at peace with their past.

i) The ability to put the past and future aside and live in the present: The peaceful person always lives in the "moment". Does not feel guilty about the past and does not worry about the future.

j) A sense of perspective on the importance of oneself and life events: Peaceful individuals have a healthy self-esteem, which includes a sense of humility. He also tends to have a sense of humor. The peaceful individual sees life with a long-range perspective. During this long marathon, he asks himself the following questions:

- How important is my experience in this long marathon?
- Will worrying make a difference?
- What are the important aspects of the problem?

According to Roberts & Cunningham (1990), serenity is a spiritual sense of inner calm, trust, and dedication that exists regardless of what happens outside of oneself. The concept of spirituality in this definition; It refers to a return to values, understanding, purpose in life, relationships, and lofty human traits such as honesty, love and spirit.

Roberts & Cunningham (1990) developed a 65-item scale to evaluate the concept of serenity, which was later reduced to 40 items by Roberts and Aspy (1993). Kruze et al. (2005) revisited the revised scale's psychometric properties. Kreitzer et al. (2009) added to the literature by developing a 22-item short version of the scale. While Demirci and Ekşi (2017) developed a measurement tool for the concept of "peace" in Turkey, this scale was developed using a different conceptual structure. Furthermore, because of the small number of items on the scale, it was thought to be limited in scope, and it was thought that a more comprehensive measurement tool for the concept might be required.

A "serenity"-focused scale with items appropriate for Turkish culture and Turkish language has not yet been developed in Turkey. In the present study the concept of serenity was handled in accordance with the conceptual framework developed by Roberts & Cunningham (1990), and 10 attributes in the conceptual framework were also included while writing Turkish items. Relevant items were submitted for expert review in terms of compatibility with Turkish language and culture. Furthermore, the measurement tool's target audience is young adults between the ages of 18 and 35, and it is anticipated that the scale will be used in other studies to be conducted on individuals in this age group. Besides it is believed that dealing with the concept of peace with different variables will contribute to the literature.

METHOD

Participants

Data were gathered from two distinct groups within the parameters of the study in order to conduct exploratory factor analysis (EFA) and confirmatory factor analysis (CFA). In addition, the data collected in order to test the criterion validity of the measurement tool were obtained at the CFA stage. Details about gender, age and last graduation level of the participants in different parts of the scale development phase are given in Table 1.

Table 1. Demographic Information of Participants in Scale Development Stage

		EFA	CFA	Total (n)	%
Gender	Female	207	255	462	68.85%
	Male	99	110	209	31.15%
Age Statistics	Average Age	25.53	23.39	671	100%
	SD	5.49	3.6	671	100%
Graduation Level	Middle School	3	0	3	0.45%
	High school	109	175	284	42.32%
	AssociateDegree	14	10	24	3.58%
	Undergraduate	144	162	306	45.60%
	Master	34	15	49	7.30%
	Doctorate	2	3	5	0.75%

Upon looking at Table 1, it is seen that the total number of individuals who participated in the development of the Serenity Scale is 671. Of the participants, 462 (68.85%) were female and 209 (31.15%) were male. Considering the graduation levels of the participants, 3 of them are secondary school, 284 of them are high school, 24 of them are associate degree, 306 of them are undergraduate, 49 of them are graduate and 5 of them are doctorate.

306 individuals took part in the EFA phase of the study. While 207 (67.6%) of the participants were women, 99 (32.4%) were men; the mean age of this group was 25.56. In the CFA stage, 365 individuals took part. While 255 (69.9%) of the individuals participating in this stage were female and 110 (30.11%) were male, the mean age of the group was 23.39.

Data Collection Tools

The measurement package included a personal information. In addition, the Authentic Happiness Scale (Şanlı, Balcı Çelik, & Gençoğlu, 2019) and the Peace Scale (Demirci & Ekşi, 2017) were used to ensure criterion validity.

Personal Information Form: It was designed by the researchers to collect information about the participants' gender, age, last level of graduation and perceived socioeconomic level.

Authentic Happiness Scale: The scale was developed by Şanlı et al. (2019). The scale is five-point Likert type, contains 16 items and consists of two sub-dimensions. Scoring of the scale is done in two different dimensions, and a total score cannot be obtained from the overall scale. During the development of the scale, the Cronbach alpha internal consistency coefficient was calculated twice. This value, which was found to be .87 in the authentic happiness dimension and .88 in the fluctuating/unstable happiness dimension in the exploratory factor analysis (EFA) phase, was calculated as .84 and .87 in the confirmatory factor analysis (EFA) phase, respectively. The Cronbach alpha internal consistency coefficient was recalculated within the scope of this study and found to be .82 in the authentic happiness dimension and .88 in the fluctuating/unstable happiness dimension.

Peace Scale: The scale was developed by Demirci & Ekşi (2017). The scale has a one-dimensional structure and consists of eight items in a five-point Likert type. In the development study, the Cronbach alpha internal consistency coefficient was found to be .78. The Cronbach's alpha internal consistency coefficient was recalculated within the scope of this study and was found to be .85.

Data Collection

Permission was acquired from Ondokuz Mayıs University's Social and Human Sciences Research and Publication Ethics Committee for the form, which was created after receiving expert opinions and includes 30 items. After that, the scale form was made suitable for online data collection. At the beginning of the created form, the purpose of the research, ethical information and approval are given. The link of the form was shared online in order to reach individuals between the ages of 18-35 and it was requested to be filled by volunteers. Answering the measurement tool took an average of 6 minutes in the EFA stage and 9 minutes in the CFA stage.

Analysis of Data and Application

Content Validity: After the literature review, an item pool consisting of 66 expressions suitable for the attributes of the concept of peace was created. The expressions in the item pool were examined by the researchers, and the expressions containing similarities, incomprehensible in terms of expression and/or measuring two different situations at the same time were eliminated. After these procedures, 35 items remained in the measurement tool. The form with these items was presented to the opinion of two different Turkish language experts in order to evaluate it according to the criteria of being suitable for the Turkish language and being understandable in terms of the target audience. These views were evaluated and the parts that were found to be problematic in terms of expression were corrected. The final version of the form was sent to six lecturers and three lecturers from the field of guidance and psychological counseling via e-mail.

Davis technique was taken into account in the preparation of the scale form sent to the expert opinion and in the evaluation made after the relevant opinions were received. When using the Davis technique, experts evaluate the items and assign them one of four grades: (a) appropriate, (b) the item should be slightly revised, (c) the item should be reviewed seriously, and (d) the item not appropriate. By dividing the number of experts who selected options (a) and (b) by the total number of experts, this

technique calculates the content validity index (CVI) for the item. Items are eliminated if their CVI value is less than 0.8 because they are not deemed adequate in terms of their content validity (Davis, 1992).

After the analysis, it was determined that there were 28 items with a CVI value of 0.8 and above in the measurement tool. While there were items for which expressive correction was made in line with expert opinions even though the CVI value was above 0.8, the two items (items 24 and 29) with a CVI value below 0.8 were re-evaluated by the the researchers, taking into account the expert's opinions. It was decided that the items would be corrected in terms of expression and remain in the measurement tool. Information about the CVI values of the items in the measurement tool and the latest status of the item are given in Table 2.

Table 2. Table of Content Validity Index Values

Item No	Experts who marked a+b	Expert participant total	CVI	State of matter
1	7	9	.8	
2*	7	9	.8	Expression corrected
3*	7	9	.8	Expression corrected
4	9	9	1	
5	8	9	.9	
6	8	9	.9	
7*	8	9	.9	Expression corrected
8*	7	9	.8	Expression corrected
9	8	9	.9	
10*	7	9	.8	Expression corrected
11	9	9	1	
12	9	9	1	
13	9	9	1	
14*	7	9	.8	Expression corrected
15*	7	9	.8	Expression corrected
16	7	9	.8	
17*	7	9	.8	Expression corrected
18*	7	9	.8	Expression corrected
19*	9	9	1	Expression corrected
20*	7	9	.8	Expression corrected
21	7	9	.8	
22**	5	9	.6	Removed
23*	8	9	.9	Expression corrected
24*	6	9	.7	Expression corrected
25	9	9	1	
26*	7	9	.8	Expression corrected
27**	6	9	.7	Removed
28	7	9	.8	
29*	6	9	.7	Expression corrected
30**	6	9	.7	Removed
31**	5	9	.6	Removed
32	9	9	1	Expression corrected
33	9	9	1	Expression corrected
34**	6	9	.7	Removed
35*	7	9	.8	Expression corrected

* Expressive corrections in line with expert opinions

** Items extracted as a result of the evaluation of content validity and expert opinions

When the Table 2 is analysed, it is seen that 12 items in the measurement tool remained the same, 18 items were made expressive corrections, and 5 items were removed from the measurement tool by taking into account the CVI values and expert opinions. After all these evaluations and procedures, a total of 30 items remained in the measurement tool.

Construct Validity: At this stage of the study, the Kaiser-Meyer-Olkin (KMO) coefficient and the Barlett Sphericity Test were used to assess the data's appropriateness for factor analysis. EFA was used to determine the construct validity of the scale using principal component analysis with promax

rotation. Exploratory factor analysis was carried out in line with the responses from a total of 306 participants. In order to evaluate the construct validity of this model, which emerged after EFA, confirmatory factor analysis (CFA) was performed with data obtained from a group of different participants. Confirmatory factor analysis was carried out in line with the responses from a total of 365 participants.

RESULTS

Exploratory Factor Analysis: The scale's construct validity and factor structure were determined using exploratory factor analysis (EFA). This was accomplished through the use of principal component analysis and promax rotation algorithms. The Kaiser-Meyer-Olkin (KMO) sample adequacy value was determined to be 0.908 as a result of the study, indicating that the sample size was adequate for EFA. This value is considered sufficient when it is above 0.50 by Field (2009: 647), and values of 0.90 and above are classified in the "excellent" category. In addition, as a result of the Barlett Test $\chi^2(210) = 2670.662$; $p < 0.05$ and this finding showed that the correlations between the items were large enough for EFA. Table 3 summarizes the Serenity Scale factor analysis findings.

Table 3. Serenity Scale Factor Analysis Findings

Materials	Factor 1	Factor 2	Factor 3
Item 6	0.786		
Item 11	0.784		
Item 12	0.781		
Item 13	0.759		
Item 14	0.415		
Item 16	0.789		
Item 24	0.561		
Item 26	0.561		
Item 28	0.430		
Item 30	0.490		
Item 3		0.760	
Item 15		0.616	
Item 18		0.757	
Item 19		0.703	
Item 22		0.553	
Item 23		0.735	
Item 27		0.544	
Item 7			0.793
Item 8			0.780
Item 9			0.624
Item10			0.885
Self Value	7.384	2.073	1.444
Variance Explained	35.164	9.872	6.878
Total Variance Explained	51.915		

The EFA revealed that the Serenity Scale contained 21 items, had a three-factor structure, and these three factors explained 51.91% of the total variation. As a result, it was determined that Serenity Scale demonstrated a valid feature. Furthermore, the first sub-dimension explains 35.16% of the variance, the second sub-dimension explains 9.87%, and the third sub-dimension explains 6.88% of the variance.

Table 3 shows that the first sub-dimension has ten items, the second sub-dimension has seven items, and the third sub-dimension has four items. When factor loading data are evaluated, it is discovered that this value is .40 or above in all items. These values are accepted as ideal (Field, 2009: 666) and it has been evaluated that the items contribute significantly to the factors. In addition, the sub-dimensions were named as satisfaction, self-discipline and benevolence, respectively.

Confirmatory Factor Analysis: Confirmatory factor analysis was used to examine the model fit of the Serenity Scale's three-component structure acquired through exploratory factor analysis. It

has been understood that the χ^2/df value and the RMSEA value revealed in the path analysis obtained as a result of the CFA are above what they should be. Following the analysis, a modification process was made between the items M7 and M17, M10 and M12, and M20 and M21 in line with the recommendations of the program, and it was observed that the model gave a good fit after these processes (Figure 2).

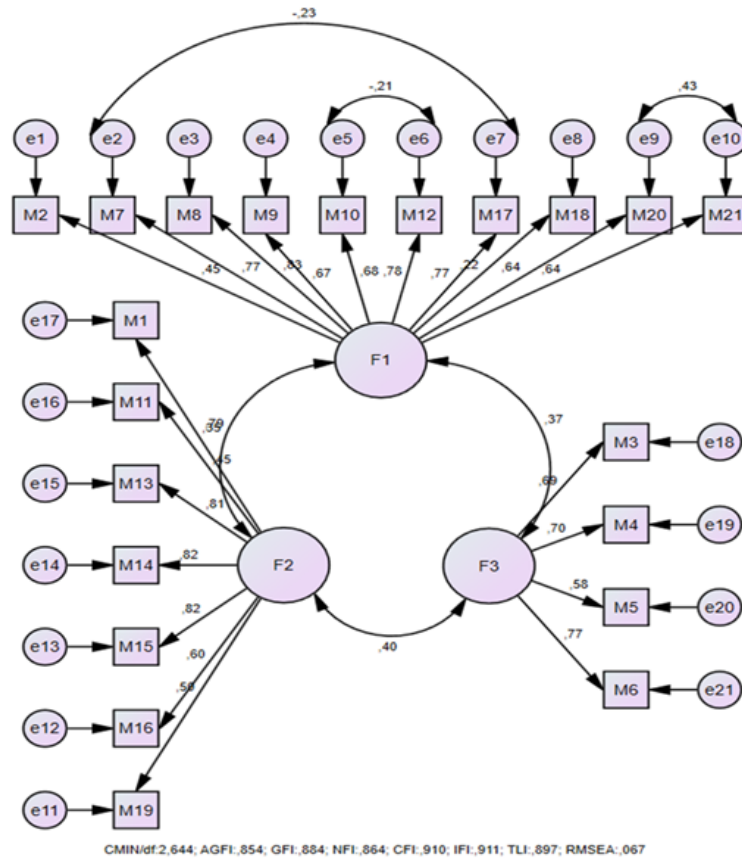


Figure 2. Post-Modification CFA Results

The fit index values and reference values obtained in the repeated CFA after the modification are given in Table 4.

Table 4. Model Fit Indices

indexes	Value	Acceptable values
χ^2/df	2.64	≤ 3 (Kline 2005)
GFI	.88	$\geq .85$ (Jöreskog & Sörbom 1988)
RMSEA	.07	$\leq .08$ (Browne & Cudeck 1993; Hair et al., 2006; Steiger, 1989)
NFI	.86	$\geq .80$ (Bentler & Bonett 1980; Marsh et al., 1988)
CFI	.91	$\geq .90$ (Bentler, 1990; Bentler & Bonett 1980; Vidaman & Thompson, 2003)
IFI	.91	$\geq .90$ (Bollen, 1989)
PNFI	.75	$> .50$ (Mualik et al., 1989)
PGFI	.70	$> .60$ (Byrne, 2010)

*All acceptable values are shown in bold

In line with the findings obtained from the CFA performed as a result of the modification process, it can be said that the model fit of the Serenity Scale is at a sufficient level.

Criterion-Related Validity: To examine the Serenity Scale's criterion-related validity, its link with the Authentic Happiness Scale and the Peace Scale was investigated. Since the total score could not be obtained in the Authentic Happiness Scale, the correlation with the dimensions of authentic

happiness and fluctuating/unstable happiness was considered. The results obtained are given in Table 5.

Table 5. Findings Related to Similar Scale Validity of Serenity Scale

Scale/Dimension	1	2	3	4
(1) Serenity Scale	1	.80	-.48	.74
(2) AHS (Authentic Happiness)*		1	-.44	.72
(3) AHS (Unstable Happiness)*			1	-.63
(4) Peace Scale				1

Upon looking at table 5, it is seen that Serenity Scale has a strong positive ($r = .80$) correlation with the authentic happiness sub-dimension, moderately negative ($r = -.48$) correlation with the unstable happiness sub-dimension, and a strong positive ($r = .74$) correlation with the Peace Scale. In line with the findings obtained, it can be said that the criterion validity of the Serenity Scale has been achieved.

Reliability: First, Cronbach Alpha reliability analysis was performed to determine the reliability of the Serenity Scale. Information regarding this analysis is given in Table 6.

Table 6. Reliability Analysis Results of Serenity Scale

Dimensions	Number of Items	EFA	CFA
		Cronbach Alpha Values	Cronbach Alpha Values
Serenity Scale (Total)	21	.90	.91
Factor 01 (Satisfaction)	10	.87	.87
Factor 02 (Self Discipline)	7	.80	.82
Factor 03 (Benevolence)	4	.80	.77

When Table 6 is examined, the reliability of the scale at the EFA stage was $\alpha = .90$, the reliability of the satisfaction sub-dimension $\alpha = .87$; reliability of the self-discipline sub-dimension $\alpha = .80$; While the reliability of the benevolence sub-dimension was found as $\alpha = .80$, the reliability of the scale was found as $\alpha = .91$ in the CFA phase. In addition, the reliability of the satisfaction sub-dimension was $\alpha = .87$; reliability of the self-discipline sub-dimension $\alpha = .82$; The reliability of the benevolence sub-dimension was determined as $\alpha = .77$. As a result, it was agreed that the Serenity Scale, including the sub-dimensions, is a reliable measurement tool based on data obtained in both the EFA and CFA stages. Because a Cronbach Alpha value of .70 and above is considered sufficient for the reliability of a measurement tool (Büyüköztürk, 2011: 171).

Equivalent halves (two halves) method was also used to test the reliability of the measurement tool. The 21 items in the scale were divided into two groups as odd item numbers and even item numbers, and were included in the analysis. As a result of the analysis, it was determined that the Cronbach Alpha value of 11 items in the first half was $\alpha = .84$, and the Cronbach Alpha value of 10 items in the second half was .80. While the correlation value between forms was found as .87, the Gutmann Split Half correlation value was found as .93.

The final analysis applied to test the reliability of the measurement tool was the method of comparing 27% upper and 27% lower groups. It is expected that the mean scores obtained from the scale will differ between these two groups, and the responses of the upper and lower groups to the items should be different from each other (Büyüköztürk, 2007). According to the total score of the scale, the scores of the 27% group at the top and the 27% group at the bottom were analyzed with the independent samples t-test, and the difference between the scores of these groups was found to be significant. Independent samples t test results comparing the scores of the upper 27% and lower 27% groups are given in Table 7.

Table 7. Difference Test Results of Upper and Lower 27% Groups

Groups	N	\bar{X}	S	d	t	p
Top 27% Total	98	95.06	,4.03	194	35.42	.000
Bottom 27% Total	98	65.13	,7.33			

When Table 7 is examined, the difference between the mean score of the 27% upper group ($\bar{X}_{\text{upper}27\%} = 95.06$) and the subgroup score of 27% ($\bar{X}_{\text{lower}27\%} = 65.13$) is significant ($t(194) = 35.42, p < 0.05$).

DISCUSSION

The Serenity Scale was developed in this study, and its construct validity was investigated using exploratory factor analysis and confirmatory component analysis. In order to test the criterion-related validity, the relationship between Serenity Scale's Peace Scale and Authentic Happiness Scale was examined. For the reliability analysis, the Cronbach alpha internal consistency coefficient and the equivalent halves technique were used. In addition, the item discrimination coefficient was calculated by calculating the difference between the upper and lower 27% score averages.

The exploratory factor analysis revealed that the measuring instrument contained 21 items, a three-component structure, and these three factors explained 51.91% of the total variance. Item factor load values were found to be .40 and above in all items. These values are accepted as ideal (Field, 2009: 666) and it has been evaluated that the items contribute significantly to the factors. The three-factor structure, which was reached as a result of the exploratory factor analysis, was discussed in the confirmatory factor analysis with the data obtained from a different research group. As a result of CFA, acceptable goodness of fit values were obtained (Bentler, 1990; Bentler & Bonett, 1980; Bollen, 1989; Brown, 2006; Marsh et al., 1988). Obtained findings show that the structure of Serenity Scales, which consists of three factors, has been confirmed. In the correlation analysis conducted within the scope of concordance validity, it is seen that Serenity Scale has a strong positive correlation with the authentic happiness sub-dimension, a moderately negative correlation with the unstable happiness sub-dimension, and a strong positive correlation with the Peace Scale.

It is understood that the Cronbach alpha values obtained as a result of the reliability analyzes are over .70 and have high reliability (Nunnally & Bernstein, 1994). In the equivalent halves method, the items were divided into odd and even numbers, and the correlation value between the scores of the two halves was examined. A strong positive correlation was found between the two halves. In the method of comparing the 27% upper and 27% lower groups, which was applied to test the reliability of the measurement tool, it was revealed that the difference between the mean scores of the upper and lower 27% group was significant.

The Serenity Scale consists of 21 items in 5-point Likert type grouped under three factors. Agreeing with each item is graded as strongly agree (5), agree (4), undecided (3), disagree (2), and strongly disagree (1). The scale yields a result with a minimum of 21 and a maximum of 105 points. 2 items (Item 2 and Item 18) in the scale are reverse scored. The remaining items contribute positively to the score.

The concept of serenity in Turkey has been discussed in a limited number of studies and in a different theoretical background (Demirci & Ekşi, 2017; Öksüz & Karalar, 2019; Şimşir, 2020). As a result of reviewing the literature and examining serenity on a different theoretical basis, it was thought that a more qualified and inclusive measurement tool might be needed for this concept. In this context, a measurement tool suitable for Turkish language and Turkish culture was developed in accordance with the conceptual framework put forward by Roberts and Aspy (1990). The target audience of the scale is young adults between the ages of 18-35, and it is anticipated that the scale can be used in other studies to be conducted on individuals in this age range. It is thought that considering the concept of peace with different variables will contribute to the literature.

Conflicts of Interest: No potential conflict of interest was declared by the authors.

Funding Details: The authors declared that this study has received no financial support.

CRedit Author Statement:

Author 1: Conceptualization, Research, Methodology, Data refinement, Formal analysis, Review, Writing - original draft, Writing-Review and Editing, Visualization.

Author2: Supervision and editing.

Ethical Statement: Ethical permission (30.06.2022- 2022/646) was obtained from Ondokuz Mayıs University's Social and Human Sciences Research and Publication Ethics Committee for this research.

REFERENCES

- Argyle, M., Martin, M., Crossland, J. (1989). Happiness as a function of personality and social encounters. In J.P. Forgas, J.M. Innes (Eds.), *Recent advances in social psychology: An international perspective* (pp. 189- 203). Amsterdam: North Holland, Elsevier Science.
- Bentler, P. M. (1990). Comparative fit indexes in structural models. *Psychological Bulletin*, 107(2), 238–246.
- Bentler, P. M., & Bonett, D. G. (1980). Significance tests and goodness-of-fit in the analysis of covariance structures. *Psychological Bulletin*, 88, 588–606.
- Bodley, R. V. C. (1955). *In search of serenity*. Boston: Little, Brown.
- Bollen, K. A. (1989). A new incremental fit index for general structural equation models. *Sociological Methods & Research*, 17, 303–316.
- Boyd-Wilson, B. M., Walkey, F. H., & McClure, J. (2004). Serenity: Much more than just feeling calm. *Advances in Psychology Research*, 29, 35-55.
- Brown, T. A. (2006). *Confirmatory factor analysis for applied research*. New York: Guilford.
- Browne, M. W., & Cudeck, R. (1993). Alternative ways of assessing model fit. In: K. A. Bollen & J. S. Long (Eds.), *Testing structural equation models* (pp. 136–162). Beverly Hills, CA: Sage.
- Büyüköztürk, Ş. (2007). *Sosyal Bilimler İçin Veri Analizi El Kitabı* (8. Baskı). Ankara: PegemA Yayıncılık.
- Büyüköztürk, Ş. (2011). *Sosyal Bilimler İçin Veri Analizi El Kitabı*. Ankara: Pegem Akademi Yayıncılık.
- Byrne, B. M. (2010). *Structural equation modeling with AMOS: Basic concepts, applications, and programming (2nd edition)*. MA: Routledge.
- Clark, S. C, Milberg, S., & Erber, R. (1984). Effects of arousal on judgment of others' emotions. *Journal of Personality and Social Psychology*, 46(3), 551-560.
- Davis LL. Instrument review: Getting the most from a panel of experts. *Applied Nursing Research*, 1992; 5: 194-7.

- Demirci, İ. (2017). *Huzurlu ve mutlu yaşamın değerler ve karakter güçleri bağlamında karma bir araştırmayla incelenmesi*. Yayınlanmamış doktora tezi, Marmara Üniversitesi Eğitim Bilimleri Enstitüsü, İstanbul.
- Demirci, İ. ve Ekşi, H. (2017). Huzur Ölçeği'nin Geliştirilmesi ve Psikometrik Özelliklerinin İncelenmesi. *Değerler Eğitimi Dergisi*, 15(33), 39-60.
- Diener, E. (1984). Subjective well-being. *Psychological Bulletin*, 95(3), 542-575.
- Field, A. (2009). *Discovering Statistic Using SPSS for Windows*. London: SAGE Publications
- Floody, D. R. (2014). *Serenity and Inner Peace: Positive Perspectives*. 107–133. https://doi.org/10.1007/978-1-4614-9366-2_5
- Garvey, K. (1977). The serpentine serenity of EST. *Christianity Today*, 21, 13-15.
- Gerber, W. (1986). *Serenity: Living with equanimity, zest, and fulfillment by applying the wisdom, of the world's greatest thinkers*. Lanham, MD: University Press of America.
- Hair, J., Black, B., Babin, B., Anderson, R., & Tatham, R. (2006). *Multivariate data analysis* (6th ed.). Upper Saddle River, NJ: Prentice-Hall.
- Jöreskog, K. G., & Sörbom, D. (1988). *LISREL 7: A guide to the program and applications*. Chicago,IL: SPSS Inc.
- Kline RB. *Principles and Practice of Structural Equation Modeling*. New York: Guilford Press; 2005. p.154-186.
- Kreitzer, M. J., Gross, C. R., Waleekhachonloet, O. anong, Reilly-Spong, M., & Byrd, M. (2009). The brief serenity scale: a psychometric analysis of a measure of spirituality and well-being. *Journal of Holistic Nursing : Official Journal of the American Holistic Nurses' Association*, 27(1), 7–16. <https://doi.org/10.1177/0898010108327212>
- Kruse, B. G. (1999). The lived experience of serenity: Using Parse's research method. *Nursing Science Quarterly*, 12(2), 143-150. <https://doi.org/10.1177/08943189922106576>
- Kruse, B. G., Heinemann, D., Moody, L., Beckstead, J., & Conley, C. E. (2005). Psychometric properties of the serenity scale. *Journal of Hospice and Palliative Nursing*, 7(6), 337–344. <https://doi.org/10.1097/00129191-200511000-00014>
- Marsh, H. W., Balla, J. R., & McDonald, R. P. (1988). Goodness-of-fit indexes in confirmatory factor analysis: The effect of sample size. *Psychological Bulletin*, 103, 391–410.
- Mualik, S. A., James, L. R., Van Alstine, J., Bennett, N., Lin, S., & Stilwel, C. D. (1989). Evaluation of goodness of fit Indices for structural equation models. *Psychological Bulletin*, 105(3), 430–445.
- Nunnally, J. C., ve Bernstein, I. H. (1994) *Psychometric theory* (3rd ed.). New York, NY: McGraw-Hill, Inc.
- Oates, W. E. (1979). *Nurturing silence in a noisy heart*. Garden City, NY: Doubleday.
- Öksüz, Y., ve Karalar, M. (2019). Üniversite Öğrencilerinin Huzur ve Otantiklik Düzeyleri Arasındaki İlişkinin İncelenmesi. *Eğitim Kuram ve Uygulama Araştırmaları Dergisi*, 5(3), 321-336.
- Pfau, R. (Speaker). (1988). *Serenity* (Cassette Recording). Indianapolis: S.M.T. Guild.

- Roberts, K. T., & Aspy, C. B. (1993). Development of the Serenity Scale. In *Journal of nursing measurement* (Vol. 1, Issue 2, pp. 145–164).
- Roberts, K. ve Cunningham, G. (1990). Serenity: Concept analysis and measurement. *Educational Gerontology*, 16(6), 577-589. <https://doi.org/10.1080/0380127900160607>
- Steiger, J. H. (1989). *Causal modeling: A supplementary module for SYSTAT and SYGRAPH*. Evanston, IL: SYSTAT.
- Şanlı, E., Balcı Çelik, S., & Gençoğlu, C. (2019). Validity and Reliability of The Authentic Happiness Scale. *Khazar Journal of Humanities and Social Sciences*, 22(1), 5–20. <https://doi.org/10.5782/2223-2621.2019.22.1.5>
- Şimşir, Z. (2020). *Üniversite öğrencilerinin yaşamında öz-disiplin: Azim, yaşam doyumu ve huzur bağlamında karma bir araştırma*. Yayımlanmamış doktora tezi, Necmettin Erbakan Üniversitesi Eğitim Bilimleri Enstitüsü, Konya.
- Türk Dil Kurumu Sözlük. 04 Aralık 2022 tarihinde (<https://sozluk.gov.tr/>) adresinden erişildi.
- Vidaman, K. F., & Thompson, J. S. (2003). On specifying the null model for incremental fit indices in structural equation modeling. *Psychological Methods*, 8(1), 16–37.
- Whitfield, C. L. (1984). Stress management and spirituality during recovery: A transpersonal approach. Part 1: Becoming. *Alcoholism Treatment Quarterly*, 1(1), 3-54.