

Adaptation of the Five Love Language Scale to Turkish Language

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ABSTRACT

Marriage is a social environment created by individuals with the purpose of sharing their lives and founding their family, and it is of great importance so that the individual can adapt to his environment and becomes a beneficial person to the society. For this reason, it is assumed that knowledge of love language of individuals, developing factors related to marriage harmony satisfaction and conducting new researches will increase the life satisfaction and happiness in marriage. In addition, it is believed that signification of lives of individuals and their reinforcement in emotional and material sense will create the basis of healthy families. The aim of this study is to adapt the Five Love Language Scale developed by Egbert and Polk (2006) to Turkish culture. The sample of this research consists of 459 individuals, 257 of whom are females and 202 of whom are males. Scholars at Education Faculty were utilized in order to perform the validation and reliability study of the scale which was developed for English speaking couples to measure the love language of married individuals and after a preliminary test the scale was adapted to Turkish language.

Keywords: love language, marriage, marriage harmony, marriage satisfaction, scale adaptation

INTRODUCTION

The foundation of family, which is defined as the keystone of society, is based on a relationship between two adults and satisfaction from that relationship (Levinger & Huston, 1990).

Marriage is a social environment created by individuals with the purpose of sharing their lives and founding their family, and it is of great importance so that the individual can adapt to his environment and becomes a beneficial person to the society. For this reason, it is assumed that knowledge of love language of individuals, developing factors related to marriage harmony satisfaction and conducting new researches will increase the life satisfaction and happiness in marriage.

Most harmonious and satisfactory marriages are made by individuals coming from healthy families; they also emphasize the importance of psychological satisfaction in marriage and claim that communication between spouses and their roles in family life are of critical importance for psychological satisfaction in marriage. Thus, it is highly significant that spouses make joint decisions and regulate their roles and duties inside the house based on this joint decision so that the integrity of the relationship can be assured (Satir, 2001).

Structure of the family should be healthy and perform its societal functions so that it could have a structure to support the social, mental, psychological and physical development of family members could be supported; he also underlines that starting from the first stages of life, relations within a family affect the entire life of an individual and have an influence on every area of our existence, from the personality and relations of individuals to their child-raising styles.

According to Chapman (1992), in addition to material and spiritual satisfaction, love language satisfaction is also a critical element. Love language is defined as any means through which we convey our emotions and feelings to the person to whom we show close interest and loyalty and perceive feelings and opinions sent by them.

Contribution of this paper to the literature

- 'Love language' changes with respect to gender and social values, therefore, it is essential to educate individuals and societies on 'love language' to build healthier communication skills.
- Without Love Language, expectations of the partner cannot be met and the quality of the marriage becomes badly affected.
- Adaptation of this scale into Turkish is not only beneficial to consultants, psychologists and researchers but also to married couples on guiding healthy relationships.

Scale adaption can be defined as a process through which answers are sought to such question as the extent to which the scale is proper for the new culture so that it can be used in different cultures, the extent to which the psychometric features (reliability, validity) in the new culture are sufficient, and the extent to which it reflects the psychometric features in the new culture and the translation of the scale is made to a different culture (Deniz, 2007).

Gladding (2002) state that usage of scales in marriage and family consulting has considerable importance so that spouses can see what they need in direct and reliable means in accordance with their needs and display the problems.

Erkuş (2012) argues that some of the studies conducted in the field of psychology were added to our culture by means of adaptation. He emphasized that the functionality of these studies is directly related to the reliability and validity of the study. For this reason, he underlines that although the problem of the study looks important in terms of the contribution to literature, all studies and analysis would prove fruitless if the measuring tool is not sufficient. On the other hand, Büyükşahin (2004) concluded in a study by bringing together all adaptation studies conducted on couples in Turkey that most of these studies were on marriage and couples. In addition, as a result of conducted studies, it turned out that demographic factors had a major role on marriage life and some demographic variables were effective on establishing a healthy relationship in the marriage (Çelik, 2006). For example, it was observed that such variables as education levels, marriage ages, marriage periods and number of children of spouses were correlated with marriage harmony.

Developing or adapting a scale requires expertise. A scale has to be developed or adapted according to certain standards so that it can be recognized by the scientific society. Haphazardly constructed questions are not suitable for scientific researches (Edenborough, 1999).

Researchers who want to develop or adapt a scale must have information on the structure of the variable which they are trying to measure and theoretical structure to which this variable is related (Cohen & Swerdlik, 2010).

Psychological tests used in researches based on psychometric approach are frequently preferred as they are more easily applicable compared to other data gathering methods, can be objectively scored, and allow for performing reliable and valid observations.

Under the light of all definitions, it is believed that happy, harmonious and satisfactory marriages will improve the qualified structure of individuals in their relationships and quality of their marriage.

Such concepts as marriage relationship, marriage satisfaction, marriage happiness and marriage harmony provide the foundation of several studies and are examined by not only psychologists and psychiatrist many scientists from a variety of science branches (Erberk et al., 2005). For this reason the importance of factors affecting marriage satisfaction is increasing.

Marriage of spouses who can interact with each other, agree on issues important for the family and solve their problems in a positive way are defined as marriage harmony, which also defines the satisfaction and happiness in marriage life of spouses as a result of harmonious synergy. At this point, as it is a general concept, it is confused with marriage satisfaction, but in harmony of couples, similar to marriage satisfaction, the characteristics of relation between subjective perceptions of individuals is evaluated (Erberk et al., 2005).

Chapman argues that love can basically be shown in 5 different languages, primary love language of every person is different and people with different love language can have problems in love language communication as they speak different love languages.

This thesis of Chapman is based on "love storage" metaphor. He related the concept of marriage quality to the fullness of love storage. Defining that love languages of spouses can be different, he argues that love storages of spouses speaking different love languages are not filled which causes problems in the relationship. In order for the love storages of spouses be filled, it is emphasized that spouses should know love language of each other and behave accordingly. These love languages are as follows:

1. Confirmatory words: this is the love language with verbal compliments and words of admiration. According to Chapman (1992), using verbal compliments and encouraging words when a spouse feel unsafe makes

sure that the other spouse sees the world through the eyes of his/her spouse and reveal the potential in times when spouses feel non confident.

2. Quality time: this is the love language through which spouses show their love by sharing it, listening and jointly taking part in meaningful activities (Chapman, 1992).
3. Buying presents: According to Chapman (1992) who states that presents are visual expressions of love, presents show the value of a relationship.
4. Service behaviors: role sharing of spouses within the family constitute service behaviors and cover the acts that each spouse like to be performed. These behaviors construct the love language through which spouses satisfy each other by serving each other and express their love by doing things for each other (Chapman, 1992).
5. Physical contact: as a way of conveying love, physical contact covers touching and sexual relationship. Chapman (1992) states that some people do not feel confidence and love without physical contact.

According to Floyd (2006), although the languages of love are being used and spoken, they must be in the direction of the expectations of the receiver. Otherwise the love storages of partners will not be filled (Chapman, 1992). Based on this assertion, if partners show their love in line with their own expectations, this is called "behavioral love" and it means that the behavior is displayed not according to the love language of the partner but his own love language. In this case, the expectations of the partner cannot be met and the quality of the marriage cannot be improved (Egbert & Polk, 2006). Therefore, marriage and family counselors must have a multi-dimensional viewpoint towards evaluation of marriage and family.

In Turkey, the first studies for adaptation to Turkish language were Marriage Harmony Scale by Tutarel-Kışlak (1999), and Britchnell Co-evaluation Scale by Tuğrul et al. (1993). These studies were adapted to Turkish culture in order to measure the harmony between spouses (Yılmaz, 2001; cited in Bal, 2007).

The purpose of the study is to adapt to Turkish language the 'Five Love Language' scale developed by Egbert and Polk (2006) in order to measure the love language of individuals and measure its reliability and validity on the people of Northern Cyprus.

METHOD

In this section, the model of the research, working group from which the data were obtained, the adaptation to be used in data collection and explanations on data analysis are included.

Model of the Research

As research model, scanning model was used which is a descriptive research model (Karasar, 1984). In this study, general scanning model, which is a quantitative research pattern, was used. For the purpose of reaching a general judgment about the universe, work was conducted on the entire universe or the sample taken and the results were generalized to the universe.

Universe and Sample of the Research

Target universe of this research consists of the Turkish people of Northern Cyprus and the sample consists of married individuals who voluntarily took part in the study. When the sample is being formed, convenience sampling, which is a non-probabilistic sampling type, was used for convenience in reaching married couples and application. In convenience sampling the probability of selection is not known and making generalizations is not proper, it is sufficient that those who will be included in the sample have certain characteristics (Balci, 2007). In the scale studies the size of the sample and working group was determined; attention was paid to ensure that the size of the sample group is at least five times larger than the number of items in the sample by MacCallum, Widaman, Zhang and Hong (1999) and Erkuş (2003).

In the study Five Love Languages was applied to 459 people. Incomplete answer papers were not taken into evaluation.

As can be seen from **Table 1**, 56% of the study group consists of female individuals and 44% consists of male individuals.

Table 1. Distribution of numbers and percentages of participants

	Variables	Number of participants (n)	Percentage (%)
Gender	Female	257	56.0
	Male	202	44.0
	Total	459	100.0

Data Collection Tools

In this study, "Five Love Languages Scale" which was developed after validation and reliability works are performed by the researcher is used; with the purpose of measuring demographic features, age, age of spouse, sex, nationality, level of education, spouse's level of education, vocation, spouse's vocation, as well as years of marriage, number of children and pattern of marriage were asked to the individuals taking part in the study.

Five Love Language Scale

'Five Love Language' which was the measuring scale used by Egbert and Polk (2006) in their studies is a 5 Likert type scale consisting of 20 items. In this scale there are 4 items for measuring service behavior dimension, 4 items for measuring physical contact dimension, 4 items for measuring confirmatory words dimension, 4 items for measuring quality time dimension and 4 items for measuring buying presents dimension. In their study, Egbert and Polk (2006) performed factor analysis looking at the cross-validity of the items of the scale applied to a sum of 101 people and checking on the structural validity of articles constructed by Chapman (1992) they formed new items. The items of the scale which was tested twice was validated as per the results of these tests and a scale was obtained which consisted of 20 items. In order to translate this scale into Turkish, contact was established with the authors mentioned in this article and the desire to adapt it to Turkish was conveyed. The authors stated through e-mail that the scale could be adapted to Turkish. After permission process work for adapting 'Five Love Language' began. It was translated from English to Turkish and back from Turkish to English in order to ensure the language equivalency of the obtained judgement expressions.

Personal Information Form

The personal information form used in the study was organized for the study which consisted of 11 questions. Personal information form consists of demographic data such as age, age of spouse, sex, nationality, level of education, spouse's level of education, vocation, spouse's vocation, as well as years of marriage, number of children and pattern of marriage.

Adaptation of Data Collection Tool

Principal stages were followed in developing five love language scale. The first stage was translation of the scale to Turkish language followed by pre-test application. After pre-test application the scale was given its final shape and Cronbach alpha consistency coefficient was determined, its conformity to factor analyses was tested and supported by item correlations.

Translation Work

As for translation work of the scale, it was deemed appropriate that the methods proposed by Brislin (1973), and Campbell and Russo (2001) studies should be used. By following both of these methods, first the scale is translated in target language, the translation is assessed, it is translated back to the language of origin and the back-translation is assessed and the scale items used in the existing study are generated. Items in the English original version of Five Love Language Scale were translated by the researcher and then they were individually translated to the Turkish language by 3 scholars and 1 measuring and evaluation expert at Eastern Mediterranean University, Faculty of Education, Department of Foreign Languages, section of foreign languages, with good command of both English and Turkish languages. These experts were asked to perform translations faithful to the original but which will also be understood by our culture and society. Translations were examined by researchers, discussions were performed and the most suitable pattern was determined which marked the end of translation work. Later, the scale was translated back to the original language by a different translator. Finally, the convenience of the translation was determined and small corrections were made which did not make a significant difference on the meaning and the scale was given its final shape.

Table 2. Examination of convenience of data for factor analysis KMO and Barlett Test

Kaiser-Meyer-Olkin (KMO) Sample Measurement value competence		.905
Chi-square value		9076.488
Barlett Test	Sd	190
P(p<0.05)		.000

Ensuring Equivalence of Items

After the translation was completed, judgmental and statistical methods were used with the purpose of testing the equivalence of words and expressions in the draft form with the original scale. Single Translation Method, which is a judgmental method, was employed. The most important reason for choosing this method is that in single translation method the item equivalence is being examined and evaluated according to the target language. As a result, expression suitable for the target language to which the scale would be translated can be organized according to the joint opinions of experts with good command of the topic and a structure suitable to the expression in original language can be adapted to the target language (Hambleton & Bollwark, 1991). In back- Translation Method, item equivalence is examined in the original language. For this effect, the form translated to the target language is translated back to the original language and the original form and the form back-translated to the original form are compared and evaluated. As comparisons are made in the original language the problems in target language cannot be sufficiently determined (Savaşır et al., 1992). In addition, although the understandability in the group where the scale will be applied is not a concern in back-translation method, data can be collected with single translation method on how it is interpreted in the group where the scale will be applied. In this context as back-translation method is not sufficient using on its own and due to some limitations (Hambleton & Kanjee, 1993; Savaşır et al., 1992) single translation method was preferred.

In order to evaluate both Turkish translations sent by translators in terms of words, concepts and expression, and to prepare a draft form suitable for the culture to which the scale would be adapted, another group of expert translators was used. For this effect, the translations were examined by special translator in terms of concept and expressions, compared with original language and evaluated. In addition, in order to evaluate the appropriateness in terms of linguistics of the Turkish translation of the draft form a Turkish language expert was employed in line with the opinions of experts, scale items were evaluated one by one and necessary changes were made. Then, in order to evaluate the understandability and convenience of the scale to the individuals on whom it would be applied, 75 couples were asked the meaning of each item and information on equivalence of items was collected. Taking into consideration how individuals interpreted the items, adjustments were made on the expressions on the scale.

In addition, in order to test statistically the consistency between English form and corrected Turkish form of Five Love Language Scale, linguistic equivalence study was conducted (Hambleton & Bollwark, 1991). Linguistic equivalence study was conducted by 3 scholars and 1 measuring and evaluation expert at Eastern Mediterranean University, Faculty of Education, Department of Foreign Languages, section of foreign languages, with good command of both English and Turkish languages.

Five Love Language Scale

Five Love Language Scale consists of two sections consisting of questions related to "demographic information" and "five love language". In the first section where demographic features are asked, age, age of spouse, sex, nationality, level of education, spouse's level of education, vocation, spouse's vocation, as well as years of marriage, number of children and pattern of marriage are asked. In the second section, there are questions about Five Love Language.

Then a study was conducted on the convenience for factor analysis. Factor analysis is a statistical technique which aims at explaining measuring with few factors by bringing together the variables which measure the same structure or qualification. Factor analysis is defined as a process of revealing new concepts (variables) names as factorizing or joint factor or obtaining the functional defining of concepts using factor load values of the items (Büyükoztürk, 2007). Convenience of the data for factor analysis can be examined with Kaiser- Meyer-Olkin (KMO) coefficient and Barlett sphericity test. KMO coefficient gives information on whether data matrix is suitable for factor analysis, and the convenience of data structure for factor extraction. For factorability it is expected that KMO turns out higher than .60. Barlett test examined on the basis of correlations whether there is any relation between variables (Büyükoztürk, 2007).

Before conducting factor analysis, the convenience of data to factor analysis was tested with Kaiser-Meyer-Olkin (KMO) and Barlett test. As a result of this test it was concluded that the scale was suitable for performing factor analysis. The result of Barlett test and KMO value is presented in [Table 2](#).

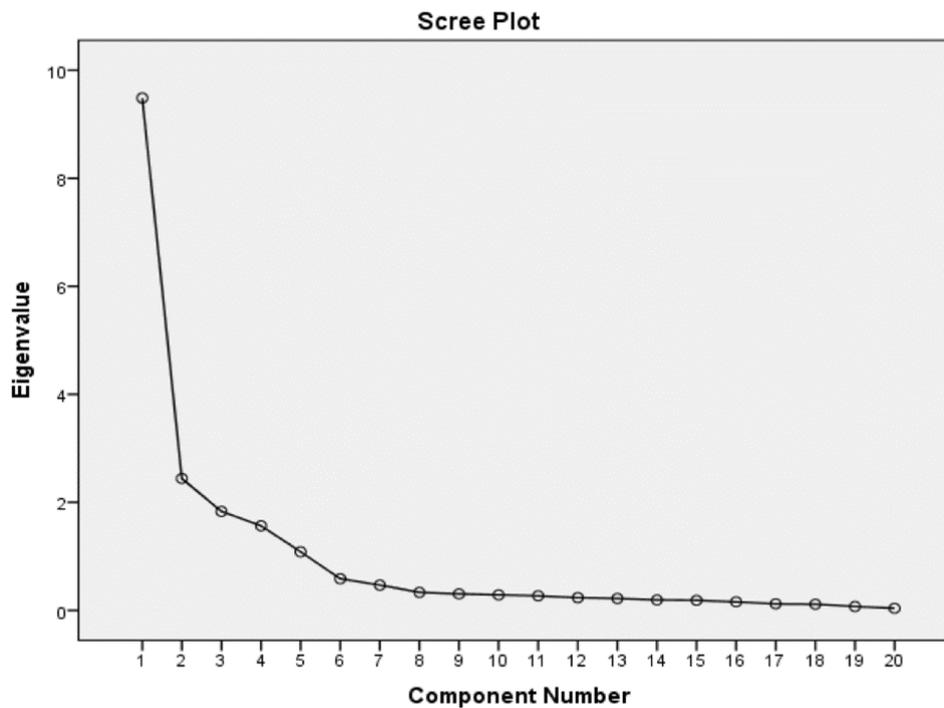


Figure 1. Line graph showing number of factors

Table 3. Cronbach Alpha coefficient values of Five Love Language as per 5 sub-dimensions

Sub-dimensions	Reliability coefficients
Service behavior	0.852
Physical contact	0.965
Confirmatory words	0.951
Quality time	0.924
Buying presents	0.894

As can be seen in Table 2, that Kaiser-Meyer Olkin is found as 0.905 shows that the sample size is perfect. As defined in the referred literature studies, it is stated that KMO value has to be above 0.6 and 0.6 is accepted as medium, 0.7 is accepted as good, 0.8 is accepted as very good, and 0.9 is accepted as perfect (Bastas, 2016; Kurnaz & Yigit, 2010; Toraman, Ferit, & Aydin, 2015). Chi-square value of the Barlett test result was determined as 9076.488. In addition, finding a p value smaller than 0.05 significance level shows that the relation between variables is sufficient for performing a factor analysis. Line chart was examined in order to determine the number of factors which can best display the relations between items in the scale. The line graph obtained for 20 items is given in Figure 1.

When Figure 1 is examined, it can be seen that the fastest reduction was witnessed in the line graph of component number 1. After the factor number 5, it is understood that the graph gains a horizontal outlook. Accordingly, it is clear that the number of significant factors included by the scale is 5. The factors 1 to 5 explain 18.98, 17.04, 16.68, 15.72 and 13.59 of the variance relatively. All five explain 47.42 of the total variance.

Reliability of five love language scale was calculated according to Cronbach Alpha reliability formula and the total reliability coefficient of Five Love Language consisting of 20 items was determined as 0.938. Alpha coefficient which could be sufficient in a Likert type scale must be as close to 1 as possible (Tezbaşaran, 1996).

Individual reliability coefficients were calculated for all 5 sub-dimensions of the scale and, as seen in Table 3, coefficient of these sub-dimensions were calculated as 0.852, 0.965, 0.951, 0.924, and 0.894, respectively.

According to the results obtained from Table 4, the factor loads of 4 items under factors 1 to 5 are 0.857 to 0.933, 0.813 to 0.926, 0.917 to 0.962, 0.765 to 0.893 and 0.609 to 0.901 respectively. Factor analysis is the process of calculating the correlation between variables depending on the answers given by participants and grouping the variables which are relate to each other and measure the same dimension (Ural & Kılıç, 2005).

In line with these findings, it can be said that the scale has a simple and stable structure. After the performed factor analysis the sampling competence was calculated as 0.938.

Table 4. Factors of Five Love Language and factor loads

	Component				
	1	2	3	4	5
I make positive comments to my partner.	.933				
I make compliments to my partner for his/her good deeds.	.924				
I tell to my partner when he/she does a good thing.	.884				
I make compliments to my partner.	.857				
I spend my spare time with my partner.		.926			
We have an effective communication with my partner.		.920			
I spare time to my partner so that we can do things both of us enjoy.		.917			
During our communication I effectively listen to my partner.		.813			
I touch my partner.			-.962		
I kiss my partner.			-.941		
I hug my partner.			-.925		
I hold my partner's hand.			-.917		
I buy surprise presents to my partner even if it is not a special day.				-.893	
I bring small gifts to my partner when I come back from travel.				-.888	
I choose gifts with spiritual value for my partner.				-.831	
I buy birthday presents to my partner with which he/she will feel special.				-.765	
I undertake insignificant errands for my partner.					.901
When my partner does not have time, I complete on his/her behalf the works which I do not like doing.					.861
I help my partner so that the environment is tidy.					.637
I help my partner whenever he/she needs.					.609

FINDINGS

Findings as Regards Reliability and Validity of the Scale

In this part of the study findings are regards validity and reliability analysis performed while adapting the scale are discussed.

Findings as Regards Structural Validity of the Scale

Five Love Language scale was adapted to Turkish language so as to measure the pattern of married individuals of showing their love in TRNC. Basic components factor analysis was performed for structural validation of the scale. Factor loads were determined using Oblimin method. As a result of basic components factor analysis conducted with Oblimin method, it has been seen that the 20 items constituting the scale grouped under 5 factors.

After Oblimin rotation the variance explanation ratio of the scale which was collected in five sub-scales is 47.42 percent. The lower limit of loads explaining total variance in factor analysis studies is accepted as 40 percent (Kline, 1994; cited by Baloğlu and Karadağ, 2008). The determined factors, from first to fifth, explain 18.98, 17.04, 16.68, 15.72 and 13.59 of the variance related to the scale. After factor rotation, it was determined that all five factors of the scale consisted of 4 items each.

Findings as Regards Reliability Coefficient (Cronbach's Alpha) of the Scale

Findings as regards reliability analysis performed for scale adaptation work which is the primary purpose of the study are as shown in [Table 5](#).

As can be seen in [Table 5](#), reliability of Five Love Language Scale was calculated according to Cronbach Alpha reliability formula and the total Cronbach Alpha reliability formula of Five Love Language Scale consisting of 20 items in total was determined as 0.938. For the 5 sub-dimensions of the scale separate reliability coefficients were calculated and the reliability coefficient of the first to fifth sub-dimensions was calculated as 0.852, 0.965, 0.951, 0.924, and 0.894 respectively.

On the other hand, reliability coefficients of the 5 sub-dimensions in the original form of the scale are 0.85, 0.77, 0.81, 0.80 and 0.83.

Table 5. Cronbach Alpha coefficient values according to the 5 sub-dimensions of Five Love Language and 5 sub-dimensions in the original scale

Sub dimensions	Reliability coefficients (Egbert & Polk, 2006) in Original Scale	Reliability coefficients
Service behavior	0.852	0.85
Physical contact	0.965	0.77
Confirmatory words	0.951	0.81
Quality time	0.924	0.80
Buying presents	0.894	0.83

DISCUSSION

In this study the Five Love Language Scale developed by Egbert and Polk (2006) was adapted to Turkish. In this scope Turkish and English field experts conducted the translation of the scale to Turkish and a preliminary test was performed after taking the opinions of English language field experts and teachers. As a result of language reliability work of Five Love Language Scale, it was seen that the relation between all items in English and Turkish form was significant. For validation of Five Love Language Scale, the data obtained from the performed application were subjected to KMO and Barlett test so as to determine their convenience to factor analysis. KMO coefficient gives information on whether data matrix is suitable for factor analysis and data structure is suitable for factor extraction. Quantification of the obtained data is of importance so that reliability and validity of the research can be increased and its repeatability can be ensured (Şimşek & Yıldırım, 2011). For factorability it is expected that KMO is higher than .60. Barlett test examines the possible relation between variables on the basis of partial correlations (Büyüköztürk, 2007). KMO and Barlett test data show that the dataset is suitable for factor analysis.

Adaptation of this scale into Turkish is not only beneficial to consultants, psychologists and researchers but also to married couples on having healthy relationships. Research on 'love language' have been found in the literature. However, researchers in Northern Cyprus and Turkey never used the 'Five Love Language' scale in their research. Therefore, the gap in the literature was the most important factor for choosing this research topic.

Gender and social gender roles define individuals in societies and give meaning to their social status, shaping individuals' behavior. Therefore, it is important to distinguish the differences between gender and social gender roles which is believed to be related to each other. Gender (sex) defines physical, biological and genetic makeup of an individual from birth. On the other hand, social gender role is when an individual gathers characteristics throughout life and socialization. For Millett (1987) 'Sex and Gen' that gender (sex) is more of a psychological and cultural concept rather than a biological concept. 'Love language' changes with respect to gender and social values, therefore, it is essential to educate individuals and societies on 'love language' to build healthier communication skills.

CONCLUSION

The purpose of this study is to adapt to the Turkish culture Five Love Language scale developed by Egbert and Polk (2006) and to perform the reliability and validation works thereof. The second purpose is to examine the scale adapted to Turkish culture according to some socio-demographic variables of married individuals and compare love languages. According to the findings of factor analysis performed with the data obtained from performed analysis, it was concluded that the scale measured the same structure as its original form. According to the results of the performed factor analysis, a 5 factor structure parallel to the original form appeared. The first to fifth factors explain 18.98, 17.04, 16.68, 15.72 and 13.59 percent of the variance respectively. In sum all the five factors explain 47.42 of the total variance. When the variance percentages of the factors are examined it is clear that all five factors are significant.

The factor loads of the 4 items each under service behavior sub-dimension under first factor, physical contact sub-dimension under second factor, confirmatory words sub-dimension under third factor, quality time sub-dimension under fourth factor and buying presents sub-dimension under fifth dimension varied between 0.857 to 0.933, 0.813 to 0.926, 0.917 to 0.962, 0.765 to 0.893 and 0.609 to 0.901 respectively. Under the light of these findings it can be claimed that the scale has a simple and stable structure. After the factor analysis performed, the sampling competence was determined as 0.938. According to the analysis findings it was concluded that the scale was structurally valid. Cronbach Alpha coefficients which was performed in order to measure the reliability of Five Love Language showed that the scale showed high resemblance to parallel to its original form.

According to the findings of the research, Five Love Language has a valid and reliable structure.

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