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Developing Quality of Life Scale
Making Its Validity and Reliability for Turkish Population

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Abstract

Orijinal Makale

The purpose of this study is to develop the Quality of Life Scale (QoLS) and to assess its validity and reliability for the Turkish population. The research is a descriptive research. Research data is limited to individuals on social media as it collected by electronic questionnaires between 1st October and 15th December 2019. The random sampling method was used in this study and the sample group consisted of 689 individuals (Xyears= 39.80 ± 1.67). E-forms were distributed to individuals via social media and data across all of the survey were evaluated with consistency. Explanatory factor analysis (EFA) applied to the data set consisting of 86 items in total. 14 items with variance values less than 0.5 and factoring factors other than the expected factor removed from the data set, and EFA reapplied to the remaining 72 items and KMO (0.927) and the results of the Bartlett's sphericity tests found as (X2 = 33792.063, SD = 2556, p = 0.000). Factors obtained as a result of EFA were named as; Family Relationship, Perceived Income Level, Physical Health, Work/School Life, Feeling Safe, Social Pressure, Time Allocation, Neighborhood Relation, Satisfaction with Living Environment, Satisfaction with Social Environment, Perceived Environmental Safety, Finding The Home Sufficient, Being Volunteer, Spiritual Life, Satisfaction with Education, Having Tools/Equipment and Well-Being. According to the results of the research, the Cronbach's Alpha coefficient of the QoLS was found to be 0.957 and the variance explained by the scale was 72.832%. Confirmatory Factor Analysis also applied to the data set and statistically sufficient fit results obtained in all fit indices. Considering the aforementioned findings and results, it is possible to say that the developed QoLS is valid, reliable and sufficient for the Turkish population.

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Yaşam Kalitesi Ölçeğinin Geliştirilmesi, Türk Popülasyonu İçin Geçerlilik Güvenirliliğinin Yapılması

Öz

Original Article

Bu çalışmanın amacı, Yaşam Kalitesi Ölçeği'ni (YKÖ) geliştirmek ve Türk popülasyonu için geçerlilik güvenirliliğini yapmaktır. Araştırma tanımlayıcı bir araştırmadır. Araştırma verileri elektronik anketle toplandığı için sosyal medyada yer alan bireylerle sınırlıdır. Bu çalışmada tesadüfi örneklem metodu kullanılmıştır ve örneklem grubu 689 bireyden (Xyaş=39.80 ± 1.67) oluşmaktadır. E-form 1 Ekim-15 Aralık 2019 tarihleri arasında sosyal medya üzerinden yayılmış cevaplanan ve veriler arasında tutarlılığı olan anketlerin hepsi değerlendirmeye alınmıştır. Toplam 86 maddeden oluşan veri setine Açıklayıcı faktör analizi (AFA) uygulanmış, varyans değerleri 0.5 den küçük olan ve olması gereken faktör dışında faktörlerde faktörleşen 14 madde veri setinden çıkarılmış ve geri kalan 72 maddeye yeniden AFA yeniden uygulanmış ve KMO (0.927) ve Bartlett küresellik testlerinin sonuçları (X2=33792.063, SD=2556, p=0.000) olarak bulunmuştur. Yapılan AFA sonucunda elde edilen faktörler; Aile İlişkisi, Algılanan Gelir Düzeyi, Fiziksel Sağlık, İş/Okul Hayatı, Kendini Güvende Hissetme, Toplumsal Baskı, Zaman Ayırma, Komşuluk İlişkisi, Yaşanılan Çevreden Memnuniyet, Sosyal Çevreden Memnuniyet, Algılanan Çevre Güvenliği, Yaşanılan Evi Yeterli Bulma, Gönüllü Olma, Manevi Hayat, Alınan Eğitimden Memnun Olma, Araç-Gerece Sahip Olma ve İyi Olma Hali olarak isimlendirilmiştir. Araştırma sonucuna göre, YKÖ ölçeğinin Cronbach's Alpha katsayısı 0.957 ve ölçeğin açıkladığı varyans %72.832 olarak bulunmuştur. Veri setine Doğrulayıcı Faktör Analizi de uygulanmış olup tüm uyum indekslerinde istatistiki olarak yeterli uyum sonuçlarına ulaşılmıştır. Söz konusu bulgular ve sonuçlar göz önünde bulundurulduğunda geliştirilen YKÖ'nün bu haliyle Türk popülasyonu için geçerli, güvenilir ve yeterli olduğunu söylemek mümkündür.

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INTRODUCTION

Quality of Life and Its Basic Facts

The concept of quality of life (QoL) attracts the attention of social sciences, medical sciences and public and private sector organizations, including local governments, whose main reason of existence is to serve people. The main objectives of both individuals and these institutions are to increase the happiness of individuals and society, to have a higher life satisfaction, a healthy life, a higher level of well-being and a higher well-being (Ardahan, 2018; McCall, 1975; Diener, 1984,2000; Diener et al. 1985; Miller, 2005; White, 2008; Şeker, 2015).

The search for higher QoL, higher standard of living has been the most fundamental truth of humanity since its existence. Of course, this search includes all areas of life of the individual and / or others whose current situations are insufficient and / or need to be upgraded (Ardahan et al.2016). When a shortage, scarcity, absence or deficiency in an individual's life is eliminated, this will reflect positively on that individual's entire life (Diener et al. 1985).

Making a single definition of the SC is very difficult due to the high number of content and the factors affected (Şeker, 2015). World Health Organization' definition is "the perception of an individual's life in a value and culture system according to his / her own interests, standards, expectations and goals" (Demiray, 2019). Campbell et al. (1976) was defined it as "Happiness, although it is formed by the combination of many components, is the combination of Physical and Mental Health, Well-being and Life Satisfaction". Veenhoven (2000) was defined it as "is an expression of welfare in another concept". McCall (1975) was defined it as "Necessary conditions for ensuring happiness". Shin and Johnson (1978) was defined it as "meeting the desires and expectations of the individual, having the resources to meet the life expectations and seeing this as sufficient". Cılga (1994) was defined it as "individuals' living in their preferred living spaces with their free will, meaningful and fulfilled for themselves". Torlak and Yavuzçehre (2008) was defined it as "a set of perfections that are desired to be experienced throughout life". Geray (1998) was defined it as, "is the standard of living in which the individual can meet basic needs such as nutrition, shelter and security, achieve the physical and spiritual development of the individual, realize himself, make positive contributions to the environment and society he lives in, and be in a healthier environment".

According to the definitions above, QoL is "whole of that individual provides her/his concrete and abstract expectations in all fields of life freely and without any difficulty". While concrete elements consist of measurable things such as car, house, size of house, income, education and profession, abstract elements express the feeling of satisfaction, happiness and well-being of the person with these opportunities (Aydıner Boylu and Paçacıoğlu, 2016).

QoL is a total structure affected by many different factors. The most basic fact of Total Quality Management and Kaizen is that it is first measurable and digitized in order to improve something (Imai, 1994). Measuring the QoL is important both for individuals seeking better and for businesses that provide services to them, to determine what is missing and to which areas individual and managerial resources should be transferred first. For this reason, it is important and necessary to measure QoL. Since the 1960s, many scientists and many organizations, especially the World Health Organization, have been working for this purpose.

Liu (1976) discussed the factors that make life easier, such as air, water, climate, urban

spaces, environmental pollution, of the geography we live in, are considered as elements of the QoL in the criteria. Zenhner (1977) added participation in leisure time activities, physical and mental health, meaningful and fulfilling family life, getting marriage, work and job satisfaction to these criteria. Campbell et al. (1976) discussed QoL on dimensions of physical health, family life, national government policies, friendship relations, working life, societal relations, spiritual and religional belief, recreational life, financial situation. Boyer and Savageau (1981) described opportunities of housing, transportation, education, recreational life, economic situation, health, environment and safe environment related to crime as facts impressing QoL. Evans (1994) discussed QoL on dimensions of satisfaction, sufficiency, social environment, biological, social and physical condition, Satisfaction with Living Environment. Gregory et al. (2009) discussed QoL on financial situation, having a job, satisfaction with living environment, physical and mental situation, educational situation, recreational life, existence of free time, social belonging. OECD Better Life Index (2015) discussed QoL on dimensions of having house, income, social relationships, education, be satisfied with living environment, perceived democratic life, physical/mental health, satisfaction with life, security, and balance of work - social life. Eurostat Quality of Life Indicators (2015) discussed QoL on dimensions of conditions of life, productivity, physical/ mental health, educational level, free time and social life, economic and physical security, governance and fundamental rights, Satisfaction with Living Environment, general experience on life. The Quality of Life Model discussed QoL on dimensions of physical condition, mental situation, psychological situation, physical ownership, social inclusion, social belonging, work/school life, free time activities, physical and intellectual improvement in their study Quality of Life Research Unit (2015). WHOQOL-100 and WHOQOLBREF scales have been developed by the World Health Organization (WHO). There are two forms of the WHOQOL-BREF scale developed by WHO to determine the quality of life. The scales developed under the name of WHOQOL-100 and WHOQOLBREF are compatible with each other. The WHOQOL-100 form contains a total of 100 questions consisting of 24 chapters, six areas as psychological state, environmental characteristics, independence level, physical condition, social relations, spirituality / religion / belief. WHOQOL-BREF is a practical scale developed within the scope of WHOQOL-100 data in terms of ease of use. The Turkish version of WHOQOL-BREF consists of 26 questions in four areas as physical health, psychological state, social relations, and environmental factors. Two of the questions are general. One of the general questions is about health as a whole and the other is about quality of life as a whole. Field scores are evaluated on Physical Field, Spiritual Field, Social Area and Environmental Area. In the WHOQOL-100 scale, three focus group interviews to the national question in Turkey as a result of "social pressure" has been accepted as. Since a question taken here shows the highest harmony with the surrounding area, an item in WHOQOLBREF is named as National Environmental Area.

All of these studies are measurement tools that work in their entirety. Unfortunately, these scales cannot be used to measure the QoL of both individuals with special needs and healthy individuals. In addition to this, it is necessary to include some important life areas that are missing in these measurement tools in the Quality of Life Scale (QoLS). There was a need for a new measurement tool that eliminates these deficiencies. One of the most important of these is questioning the effect of family relationships that the individual feels belonging to on the

QoL. Family is also a structure that can be handled in three dimensions. The first is the family structure in which solidarity is the most basic fact, which is born into a narrow, not preferred, meaningful and satisfying network of relationships, and the second can be handled in a slightly broader sense; family consciousness in businesses created by systematic managerial approaches, and the third is the social environment formed by the social relationships that the individual intentionally built throughout his life. In this study, all three dealt with in different factors. Family solidarity and family consciousness are also an environment of trust in which the individual can express himself / herself under all circumstances. Other areas of being safe mean both the safety of the neighborhood and the environment, the continuity of the work of the individual, the continuity of his income, the increase in the future, and the ability to stay in office and rise when the requirements are fulfilled. These are also considered within the factors of this study (Ardahan, 2012).

One of the factors addressed in QoL studies and subject to daily conversations is income. Income can be considered as personal income and family income in general. The existence of an individual's personal income, seeing it as sufficient and sufficiency of the family income also shows the general well-being of the individual and the family. Income is important in terms of creating purchasing power that affects all areas of life such as basic needs such as nutrition, shelter, security, high-level needs such as entertainment, hobbies, vacation, self-realization. The relationship between QoL, income and Maslow's hierarchy of needs is linear (Ardahan et al. 2016). In this study, the income factor was arranged to include both personal income and family income by revising the income factor, which is also included in other scales.

In addition to these, the sufficiency of the physical health of the individual, whether the individual has difficulty in fulfilling their daily activities and hobbies, and whether they need the support of others for their personal needs are important. If the individual can perform all the activities in his life without difficulty, if he can support it with nutrition and exercise, and if he can provide continuity, a QoL that makes the individual happy and strong will be formed (Ardahan et al.2015). Physical health, which is one of the other measurement tools, was addressed with similar items in this scale in a form to measure the physical health and competencies of both sick individuals and healthy individuals.

Loving school for students, liking work for employees is one of the important factors that positively affect QoL and life satisfaction. It is both important and necessary to include this part of the society in the QoL scale processes, especially in countries like ours, where high school, university and higher education students have an important share in the population of the country (Ardahan, 2014a). While business life and work environment have been handled in other QoL studies, the scale developed in this study will ensure that it is in the sample of its students. Both school and work environment; cooperation, communication, environmental ecology, liking, satisfaction with the place where we are and whether or not to worry about the future. Satisfaction with school, which is not in other measurement tools, is included in this scale.

Of course, individuals interact with their spouse, mother, father, family members, close relatives, close acquaintances and other members of the society while living in their own ecology. While some of this interaction is aimed at motivating and encouraging the individual to do something, which describes the meaningful and fulfilling relationship, some of them

create a negative effect, pressure. This happens in the lives of individuals as the thought of "Family Pressure", "Neighborhood Pressure", and “What Someone Else Says". While the positive effect positively affects the QoL, the negative effect decreases the QoL (Deniz Öz and Ardahan, 2019).

Time management is necessary for the individual to devote time to himself/herself, his/her social environment, family, close friends, to establishing relationships that make life meaningful, to be able to do activities and to sustain them all. Misuse of time requires reorganization and management of time, and the QoL is possitively affected by the success of this (Ardahan, 2004).

The location and size of the house inhabited, the adequacy of household items have a direct effect on the individual's QoL. One of the most important indicators of being an individual starts with having a personal, private and autonomous space. This is especially important in crowded family structure in terms of creating a private space and privacy for people (Rogerson, 1997).

In addition to the safety of the environment where the house is located, the place where the house is located and the city where the house is lived have a significant effect on the individual's QoL. Having opportunities to meet the recreational, social, hobby and personal needs of the individual in terms of infrastructure, climate and geographic characteristics will provide the individual with a happier, more satisfied and high QOL life. Surely, in addition to these, there is also neighborhood relationship. Although the house itself and its surroundings are important, what is more important is that the individual has neighbors that are suitable for himself and family life, that do not contradict and do not create conflicts. In Turkish culture, the saying “don't buy a house, buy neighbor” also describes the relationship of neighborhood (Geray, 1998; Ardahan, 2014b).

In addition to these, the existence of the social world of the individual, the existence and quality of the relationship with them, the existence and quality of the interaction, taking initiative in social issues when necessary, and the existence of factors affecting social capital such as volunteering are among the important factors that affect the QoL positively. At the same time, the harmony between the ecology of the society and the spiritual life of the individual is also important in terms of QoL for the individual to express himself/herself, to create an environment of social trust, and to live himself/herself without hiding. Of course, the individual's well-being, ability to be away from stress and anxiety, feeling mentally well, and being able to express himself under all circumstances are also important for QoL (Ardahan, 2012, 2014b).

Charity and volunteering studies, which are included in the work of Ardahan's (2016) study and are not included in other QoL scales, but have an important place in daily life, added to the current study as the volunteer factor because it positively affects individuals' life satisfaction, sense of satisfaction, well-being and QoL.

Daily life and home life requires the need for ownership of many items, tools and equipment. It is important to have every necessary items, tools and equipment in a home, but most of the time they either do not exist or do not work even if they are available. Just as important as having these items, it is important to being able to borrow them from others. This makes the individuals feel safe, ready for anything and peaceful in the social environment to which they

belong. This is one of the factors affecting the QoL positively. Therefore, borrowing unowned items from others is included in the current study.
These dimensions are included in other scales because individual's active recreational lives positively affect their life satisfaction, sense of satisfaction, well-being, physical health and QoL. All of these dimensions are also included in the current study.

METHOD

The purpose of this study is to develop the Quality of Life Scale (QoLS) and to make its validity and reliability for the Turkish population. The research is a descriptive research. Research data is limited to individuals on social media as it collected by electronic questionnaires between 1st October and 15th December 2019. The random sampling method was used in this study and the sample group consists of 689 individuals (X_{years} = 39.80 ± 1.67). Electronic questionnaire form consisting of two parts was used as data collection tool. In the first part of the questionnaire, the questions from which demographic data, in the second part, the item list to be used for the development of the QoLS were included in. E-forms were distributed to individuals who have replied to spread all across Turkey via social media, returned questionnaires were accepted after being edited.

Electronic questionnaire items were made ready for implementation by going through a two-stage process. In the first stage, the items were added or replaced in line with the opinions of two recreation experts and a sociologist. The list of items prepared in the second stage was presented to 25 male and 25 female volunteer participants with different demographic characteristics for a face-to-face on the understandability of the items and whether there were any missing or misunderstood items. Some items were changed in terms of writing in line with the common suggestions of approximately 75%, and some items were removed.
The items extracted were those on the individuals' sexual lives and their relationships with their spouse (s). The main reason for this is as mentioned by Sungur (1998) in his study; in our society, the fact that talking about sexual life, emotional life and partner / partner relationships is still seen as taboo, that myths about this issue are still believed and that the facts should be kept secret, even if they are expressed.
During development on items of QoLS benefited scales listed as below;

- Life-facilitating elements of the geography used by Liu (1976) in his work such as air, water, climate, urban spaces, environmental pollution,
- Participation in free time activities, physical and mental health, meaningful and fulfilling family life, marriage, work and job satisfaction in Zenhner's (1977) study,
- Campbell et al. (1976) used in their work; physical health, family life, national government policies, friendship relations, business life, social relations, spiritual and religious belief, recreational life, financial status,
- Boyer and Savageau's (1981) used in their work; related to housing, transportation, educational opportunities, recreational life, economic situation, health, environment and safe environmental dimensions, and crime,
- In Evans' (1994) study; satisfaction, competencies, social environment, biological, social and physical condition, satisfaction with the environment in which we live.

- Gregory et al. (2009) used in their studies; financial status, job ownership, satisfaction with the living environment, physical and mental status, educational status, recreational life, availability of leisure time, social belonging dimensions,
- Social Capital Scale developed by Onxy and Bullen (2000) and adapted to Turkish by Ardahan (2012),
- Included in the OECD Better Life Index (2015) study; from the dimensions of home ownership, income, work life, social relations, education, satisfaction with the living environment, perceived democratic life, physical/mental health, life satisfaction, security, work-social life balance,
- Used in Eurostat Quality of Life Indicators (2015); living conditions, productivity, physical/mental health, education level, leisure time and social life, economic and physical security, governance and fundamental rights, satisfaction with the living environment, general life experience,
- The Quality of Life Model, included in the Quality of Life Research Unit (2015); physical condition, mental state, psychological state, physical ownership, social inclusion, social belonging, work/school life, leisure time activities, physical and intellectual development;
- Among the dimensions of the Volunteering Scale developed by Ardahan (2016),
- Factors included in the WHOQOL-100 and WHOQOLBREF scales developed by the World Health Organization.

Explanatory factor analysis (EFA) was applied to the data set, 14 items with variance values less than 0.5 and factoring in factors other than the expected factor were removed from total of 86 item lists, and EFA was reapplied to the remaining 72 items and the results of KMO (0.927) and Bartlett's sphericity tests (X^2 = 33792.063, SD = 2556, p = 0.000) are suitable for the applicability of EFA for factor analysis, that's why; EFA was applied. QoLS resulted with total of 72 items and 17 factors. Item-total correlation was applied on factors resulted from factor analysis. In order to evaluate the internal consistency of the scale, the Cronbach's Alpha coefficients of the sub-dimensions formed as a result of EFA were examined and the Pearson correlation coefficients were used to examine the relationship between items and factors, the results were questioned at the significance level of 0.01 and 0.05. Varimax rotation method was used in the study.

Factors obtained as a result of EFA was named as; "Family Relationship", "Perceived Income Level", "Physical Health", "Work/School Life", "Feeling Safe", "Social Pressure", "Time Allocation", "Neighborhood Relation", "Satisfaction with Living Environment", "Satisfaction with Social Environment", "Perceived Environmental Safety", "Finding The Home Sufficient", "Being Volunteer", "Spiritual Life", "Satisfaction with Education", "Having Tools/Equipments" and "Well-Being".

According to the results of the research, the Cronbach's Alpha coefficient of the QoLS was found as 0.957 and the variance explained by the scale as 72.832%. Confirmatory Factor Analysis was also applied to the data set, and statistically sufficient fit results were obtained in all fit indices.

Although QoLS is not a community scale, the Total Quality of Life Score (TQoLS) can be calculated for individuals and the total sample, using the Newton-Raphson method as mentioned by Erkuş (2014) in his study. Since the TQoLS will give a value that can be used

in many comparisons, an idea about that sample will give the opportunity to compare the TQoLS with the scores obtained from different samples made at different times. Operation steps in calculating TQoLS;

- **Operation Step-1:** Firstly, the average value (FOD) of each factor must found. FOD = $(\sum_{i=1}^{t} Mi)/t$ is used to find this, where t is the total number of items on that factor, and Mi is the value of the response to the item i. This process should be done for 17 factors in QoLS and for data entry for each person. For example, a data set of 4500 people should have FODs for each factor.
- **Process Step-2:** The FOD value found for each factor will be multiplied by the contribution to the rotated % of variance over 100 base point explained in Table-1, and TQoLS will be found. In new studies to be carried out using this scale, it is recommended to make validity and reliability, AVi and Xi values should be calculated according to the new EFA and included in the process. AVi values should be taken from the Rotated Variance % line as can be seen in Table-2. If EFA is not desired, values in the original scale can be used.
- Process Step-3: In determining the contribution of each factor to the TQoLS, the contribution to the rotated % of variance over 100 base point to the explained variance of the scale $\sum_{i=1}^{17}(AVi * 100)/72.832$ will be considered as a coefficient. For example; It will be found as (8.206 * 100) /72.832 = 11.267025 for F01, and (4.094 * 100) /72.832 = 5.621156 for F08.
- Operation Step-4: Here, the FOD_i calculated from the data entered by each person will be multiplied by the constant Xi and will contribute $\sum_{i=1}^{17} FODi * Xi$ to TYKS. For example, in a data set of 4500 people, there should be $TYKS_i$ for data belonging to each individual. The $TQoLS_i$ value can be between 100 and 500 for each individual data.

RESULTS

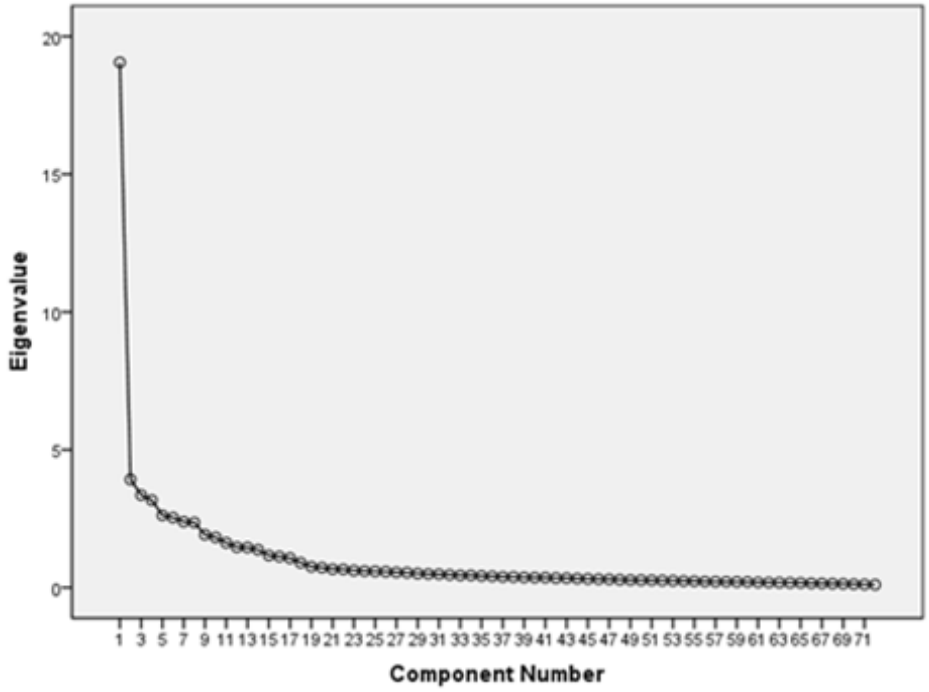
In this study, which planned to develop the Quality of Life Scale (QoLS) and to assess its validity and reliability for the Turkish population, EFA was applied to a total of 86 items list, and 14 items whose variance values were less than 0.5 and factored in factors other than the factor were removed and the remaining 72 items were reconstructed and EFA has been reapplied. Since the results of the Kaiser-Meyer-Olkin (KMO) and Bartlett sphericity tests are suitable for the applicability of EFA for factor analysis, a total of 72 items and 17 factors were obtained for the QoLS and the results are given in Table-2. As can be seen from the table, the KMO value for QoLS is above (0.60) as predicted by Kaiser (1974) and Bartlett's Test of Sphericity ($p < 0.05$), Chi-square = 33792.063, SD = 2556, p = 0.000 and Keiser -Meyer-Olkin sampling adequacy measure (0.927) was calculated. The Cronbach's Alpha coefficient of the YKÖ scale was 0.957 and the variance explained by the scale was found to be 72.832%.

Table 1: Calculating the contribution to the total quality of life score (TQoLS)

Factors Fi	Factor Average Value FOD_i	Percentage of Rotated Variance (AV_i)	Contribution to the Converted % of Variance over 100 base point (X_i)	Contribution to the $TQoLS_i$ $FOD_i * X_i$
F01	FOD_1	8.206	11.267025	FOD_1*11.267025
F02	FOD_2	6.064	8.326011	FOD_2*8.326011
F03	FOD_3	5.531	7.594189	FOD_3*7.594189
F04	FOD_4	5.290	7.263291	FOD_4*7.263291
F05	FOD_5	4.507	6.188214	FOD_5*6.188214
F06	FOD_6	4.388	6.024824	FOD_6*6.024824
F07	FOD_7	4.180	5.739236	FOD_7*5.739236
F08	FOD_8	4.094	5.621156	FOD_8*5.621156
F09	FOD_9	4.044	5.552504	FOD_9*5.552504
F10	FOD_{10}	3.997	5.487972	FOD_{10}*5.487972
F11	FOD_{11}	3.790	5.203757	FOD_{11}*5.203757
F12	FOD_{12}	3.632	4.986819	FOD_{12}*4.986819
F13	FOD_{13}	3.502	4.808326	FOD_{13}*4.808326
F14	FOD_{14}	3.446	4.731437	FOD_{14}*4.731437
F15	FOD_{15}	2.895	3.974901	FOD_{15}*3.974901
F17	FOD_{16}	2.746	3.770321	FOD_{16}*3.770321
F17	FOD_{17}	2.520	3.460018	FOD_{17}*3.460018
Total Quality of Life Score TQoLS		**72.832**= $\sum_{i=1}^{17} AVi$	**100** = $\sum_{i=1}^{17} (AVi * 100)/72.832$	$= \sum_{i=1}^{17} FODi * Xi$

Scree Plot of QoLS has been indicated on Figure-1. Consequently, it can be said that factoring number of 17 factors is suitable. Factor Loadings, Common Variance Values, Cronbach's Alpha Values and Converted Eigen Values of QoLS are indicated on Table-2. Total of Cronbach's Alpha Value of QoLS is 0,957 on the Table-2. Obtained factors, items in factors, Cronbach's alpha value and converted eigen values (CEV) have resulted as; CEV = 5,908 and Cronbach's alpha value=0,923 for Factor-1 (F1), CEV=4,366 and Cronbach's alpha value=0,900 for Factor-2 (F2), CEV=3,982 and Cronbach's alpha value=0,911 for Factor-3 (F3), CEV=3,809 and Cronbach's alpha value=0,877 for Factor-4 (F4), CEV=3,245 and Cronbach's alpha value=0,889 for Factor-5 (F5), CEV=3,160 and Cronbach's alpha value=0,894 for Factor-6 (F6), CEV=3,010 and Cronbach's alpha value=0,879 for Factor-7 (F7), CEV=2,948 and Cronbach's alpha value=0,856 for Factor-8 (F8), CEV=2,911 and Cronbach's alpha value=0,839 for Factor-9 (F9), CEV=2,878 and Cronbach's alpha value=0,880 for Factor-10 (F10), CEV=2,729 and Cronbach's alpha value=0,927 for Factor-11 (F11), CEV=2,615 and Cronbach's alpha value=0,813 for Factor-12 (F12), CEV=2,521 and Cronbach's alpha value=0,877 for Factor-13 (F13), CEV=2,481 and Cronbach's alpha value=0,893 for Factor-14 (F14), CEV=2,085 and Cronbach's alpha value=0,760 for Factor-15 (F15), CEV=1,977 and Cronbach's alpha value=0,758 for Factor-16 (F16), CEV=1,814 and Cronbach's alpha value=0, 746 for Factor-17(F17).

Figure 1: Scree Plot



Correlation values of items and factors and 17 factors in QoLS are indicated on Table-3. Although, each item has correlation values with also other factors, the most correlation value of it appears the factor on which it factored. This means that factoring is correct.

Factors of QoLS obtained with EFA and items in each factor are indicated on Table-4.

Table 2: Factor loadings, common variance values

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.										.927									
Bartlett's Test of Sphericity						**Approx. Chi-Square**				33792.063									
						df				2556									
						Sig.				.000									
										Factor Loadings									
Items	F01	F02	F03	F04	F05	F06	F07	F08	F09	F10	F11	F12	F13	F14	F15	F16	F17	Variance	**X±SD**
AILE1	.825																	.749	3.96±1.11
AILE2	.801																	.780	4.07±0.99
AILE3	.775																	.708	3.84±1.03
AILE4	.771																	.693	3.99±0.96
AILE5	.748																	.682	3.87±1.09
AILE6	.692																	.621	3.77±1.07
AILE7	.648																	.606	4.12±0.98
AILE8	.601																	.606	4.10±1.01
GELIR1		.786																.774	3.03±1.29
GELIR2		.785																.764	3.12±1.30
GELIR3		.730																.632	3.59±1.29
GELIR4		.723																.671	2.82±1.33
GELIR5		.693																.675	3.83±1.18
GELIR6		.692																.655	3.88±1.13
FSAG1			.836															.791	4.35±0.90
FSAG2			.811															.782	4.40±0.87
FSAG3			.805															.754	4.28±0.93
FSAG4			.795															.792	4.32±0.94
FSAG5			.710															.677	4.54±0.78
ISOK1				.835														.795	3.62±1.09
ISOK2				.788														.772	3.54±1.15
ISOK3				.705														.628	3.39±1.20
ISOK4				.674														.704	3.65±1.12
ISOK5				.635														.653	3.28±1.23
ISOK6				.629														.597	3.07±1.29
KGHI1					.803													.759	3.26±1.28
KGHI2					.800													.784	3.10±1.27
KGHI3					.767													.758	3.46±1.21
KGHI4					.762													.729	3.38±1.27
TBAS1						.890												.817	3.23±1.56
TBAS2						.879												.809	3.21±1.44

TBAS3	.846											.752	3.03±1.32
TBAS4	.806											.711	3.18±1.29
ZAYR1		.833										.863	3.62±0.97
ZAYR2		.828										.859	3.54±0.98
ZAYR3		.718										.718	3.42±1.09
ZAYR4		.609										.680	3.55±1.05
KMSLK1			.848									.805	3.39±1.23
KMSLK2			.815									.750	3.02±1.30
KMSLK3			.793									.738	3.41±1.17
KMSLK4			.646									.593	3.48±1.18
YCEVR1				.854								.801	3.89±1.23
YCEVR2				.823								.727	3.82±1.18
YCEVR3				.751								.661	3.85±1.22
YCEVR4				.696								.601	3.43±1.21
SCVRE1					.749							.807	4.07±0.87
SCVRE2					.715							.776	4.03±0.93
SCVRE3					.690							.700	4.36±0.76
SCVRE4					.631							.707	3.77±0.98
GCVRE1						.871						.888	3.90±1.05
GCVRE2						.841						.846	3.86±1.09
GCVRE3						.825						.852	3.95±1.03
YASEV1							.787					.711	4.06±1.04
YASEV2							.753					.753	4.02±1.08
YASEV3							.734					.725	4.25±0.94
YASEV4							.562					.531	3.99±1.11
GONUL1								.836				.827	4.02±1.00
GONUL2								.824				.823	4.03±1.00
GONUL3								.814				.782	3.87±1.06
MANVI1									.840			.820	3.52±1.30
MANVI2									.839			.852	3.79±1.15
MANVI3									.834			.813	3.79±1.16
EGITM1										.788		.803	3.76±1.22
EGITM2										.774		.768	3.36±1.23
EGITM3										.535		.531	3.90±1.13
ARGR1											.686	.786	3.90±0.91
ARGR2											.639	.580	3.92±1.24
ARGR3											.597	.718	3.61±1.10
ARGR4											.500	.547	3.53±1.08
IYOLM1												.794	.771	3.57±1.04

IYOLM2																	.565	.599	3.39±1.12
IYOLM3																	.553	.649	4.02±0.94
Cronbach's Alpha	0.923	0.900	0.911	0.877	0.889	0.894	0.879	0.856	0.838	0.880	0.927	0.813	0.877	0.893	0.760	0.758	0.746	Cronbach's Alpha Value of Whole Scale	
Rotated Eigenvalues	5.908	4.366	3.982	3.809	3.245	3.160	3.010	2.948	2.911	2.878	2.729	2.615	2.521	2.481	2.085	1.977	1.814		
Rotated % of Variance	8.206	6.064	5.531	5.29	4.507	4.388	4.18	4.094	4.044	3.997	3.79	3.632	3.502	3.446	2.895	2.746	2.52		
Rotated Cumulative%	8.206	14.269	19.8	25.091	29.597	33.986	38.166	42.264	46.304	50.301	54.091	57.723	61.225	64.671	67.566	70.312	72.832		0.957

Table 3: Correlation values of ıtems

Items	Factor Loadings and Correlation Values																
	F01	**F02**	**F03**	**F04**	**F05**	**F06**	**F07**	**F08**	**F09**	**F10**	**F11**	**F12**	**F13**	**F14**	**F15**	**F16**	**F17**
AILE1	**.852****	.318**	.273**	.279**	.262**	.103**	.377**	.311**	.170**	.391**	.184**	.294**	.253**	.230**	.271**	.373**	.314**
AILE2	**.873****	.367**	.380**	.348**	.295**	.178**	.420**	.308**	.204**	.479**	.227**	.370**	.302**	.244**	.366**	.434**	.381**
AILE3	**.829****	.346**	.279**	.322**	.295**	.131**	.424**	.300**	.170**	.440**	.204**	.327**	.281**	.242**	.291**	.416**	.370**
AILE4	**.814****	.323**	.309**	.281**	.296**	.103**	.380**	.284**	.192**	.437**	.248**	.320**	.249**	.236**	.256**	.377**	.323**
AILE5	**.808****	.396**	.311**	.287**	.234**	.163**	.389**	.270**	.192**	.402**	.236**	.332**	.264**	.246**	.308**	.356**	.381**
AILE6	**.763****	.374**	.315**	.262**	.217**	.126**	.424**	.266**	.186**	.378**	.217**	.361**	.203**	.202**	.260**	.373**	.341**
AILE7	**.761****	.339**	.364**	.320**	.284**	.202**	.387**	.297**	.204**	.500**	.270**	.327**	.321**	.203**	.288**	.365**	.364**
AILE8	**.749****	.404**	.360**	.372**	.441**	.126**	.436**	.306**	.206**	.472**	.229**	.334**	.348**	.277**	.310**	.416**	.390**
GELIR1	.352**	**.865****	.264**	.404**	.390**	.059	.318**	.214**	.248**	.273**	.222**	.293**	.183**	.332**	.374**	.422**	.376**
GELIR2	.367**	**.861****	.273**	.385**	.383**	.059	.319**	.213**	.258**	.305**	.220**	.327**	.171**	.317**	.375**	.404**	.358**
GELIR3	.332**	**.777****	.256**	.287**	.325**	.061	.291**	.186**	.141**	.260**	.133**	.271**	.149**	.258**	.274**	.355**	.287**
GELIR4	.322**	**.805****	.202**	.359**	.426**	.049	.284**	.242**	.183**	.217**	.154**	.209**	.159**	.323**	.339**	.359**	.346**
GELIR5	.422**	**.800****	.320**	.393**	.411**	.069	.316**	.278**	.227**	.330**	.246**	.344**	.244**	.321**	.329**	.447**	.329**
GELIR6	.396**	**.790****	.361**	.379**	.371**	.154**	.348**	.250**	.206**	.322**	.255**	.348**	.233**	.306**	.379**	.427**	.352**
FSAG1	.325**	.248**	**.871****	.262**	.267**	.163**	.222**	.169**	.184**	.330**	.271**	.220**	.284**	.251**	.261**	.269**	.331**
FSAG2	.346**	.288**	**.882****	.275**	.242**	.198**	.246**	.187**	.213**	.376**	.328**	.324**	.311**	.247**	.311**	.338**	.355**
FSAG3	.312**	.290**	**.861****	.264**	.204**	.182**	.209**	.159**	.212**	.305**	.278**	.288**	.204**	.267**	.290**	.364**	.321**
FSAG4	.375**	.297**	**.888****	.327**	.299**	.195**	.274**	.191**	.263**	.419**	.316**	.307**	.309**	.290**	.347**	.370**	.397**
FSAG5	.368**	.340**	**.792****	.254**	.225**	.214**	.221**	.168**	.251**	.359**	.275**	.325**	.290**	.283**	.307**	.319**	.302**
ISOK1	.309**	.300**	.284**	**.834****	.320**	.159**	.236**	.230**	.186**	.369**	.191**	.200**	.180**	.242**	.332**	.309**	.285**
ISOK2	.390**	.348**	.280**	**.814****	.335**	.156**	.304**	.237**	.162**	.424**	.199**	.219**	.202**	.289**	.341**	.316**	.310**

ISOK3	.317**	.350**	.263**	**.767****	.338**	.070	.193**	.163**	.243**	.253**	.172**	.224**	.109**	.258**	.353**	.293**	.265**
ISOK4	.283**	.364**	.297**	**.810****	.358**	.190**	.315**	.189**	.231**	.376**	.187**	.200**	.238**	.245**	.501**	.342**	.367**
ISOK5	.284**	.397**	.219**	**.778****	.361**	.156**	.275**	.181**	.222**	.282**	.177**	.194**	.164**	.209**	.477**	.268**	.293**
ISOK6	.234**	.362**	.194**	**.741****	.485**	.070	.200**	.155**	.148**	.218**	.157**	.157**	.152**	.247**	.293**	.286**	.276**
KGHI1	.295**	.366**	.219**	.412**	**.867****	.083*	.286**	.220**	.124**	.255**	.119**	.156**	.161**	.322**	.261**	.341**	.349**
KGHI2	.293**	.426**	.214**	.385**	**.886****	.031	.297**	.221**	.138**	.229**	.130**	.128**	.213**	.367**	.265**	.336**	.323**
KGHI3	.329**	.449**	.287**	.413**	**.858****	.110**	.359**	.239**	.181**	.298**	.160**	.242**	.215**	.348**	.292**	.410**	.355**
KGHI4	.326**	.392**	.281**	.409**	**.851****	.091*	.269**	.179**	.161**	.251**	.107**	.116**	.219**	.312**	.229**	.319**	.320**
TBAS1	.135**	.053	.179**	.116**	.053	**.907****	.134**	.121**	.116**	.183**	.055	.163**	.149**	.095*	.144**	.121**	.142**
TBAS2	.153**	.085*	.184**	.131**	.093*	**.896****	.128**	.180**	.128**	.175**	.073	.174**	.190**	.116**	.176**	.164**	.155**
TBAS3	.165**	.080*	.178**	.163**	.084*	**.858****	.135**	.114**	.106**	.193**	.089*	.138**	.169**	.093*	.199**	.148**	.176**
TBAS4	.162**	.101**	.232**	.181**	.090*	**.825****	.159**	.065	.110**	.138**	.023	.205**	.132**	.129**	.174**	.162**	.125**
ZAYR1	.398**	.308**	.217**	.250**	.273**	.175**	**.908****	.233**	.163**	.510**	.181**	.295**	.340**	.226**	.203**	.414**	.393**
ZAYR2	.398**	.314**	.242**	.270**	.311**	.132**	**.906****	.218**	.176**	.530**	.194**	.262**	.332**	.254**	.246**	.425**	.424**
ZAYR3	.355**	.349**	.263**	.269**	.295**	.125**	**.825****	.207**	.217**	.404**	.225**	.322**	.296**	.241**	.311**	.466**	.457**
ZAYR4	.569**	.333**	.212**	.307**	.315**	.115**	**.799****	.277**	.190**	.439**	.198**	.316**	.320**	.237**	.270**	.447**	.398**
KMSLK1	.292**	.237**	.130**	.180**	.232**	.101**	.241**	**.880****	.162**	.320**	.306**	.268**	.245**	.208**	.183**	.314**	.256**
KMSLK2	.296**	.197**	.134**	.185**	.181**	.122**	.205**	**.857****	.183**	.302**	.306**	.289**	.210**	.210**	.196**	.284**	.258**
KMSLK3	.316**	.245**	.165**	.230**	.209**	.140**	.250**	**.839****	.145**	.284**	.319**	.257**	.255**	.203**	.268**	.308**	.260**
KMSLK4	.311**	.265**	.256**	.219**	.208**	.104**	.219**	**.766****	.221**	.276**	.437**	.326**	.187**	.258**	.202**	.285**	.257**
YCEVR1	.222**	.202**	.246**	.213**	.128**	.123**	.204**	.180**	**.882****	.294**	.273**	.225**	.195**	.117**	.258**	.289**	.245**
YCEVR2	.174**	.135**	.189**	.137**	.147**	.142**	.185**	.163**	**.823****	.213**	.234**	.207**	.182**	.099**	.189**	.250**	.191**
YCEVR3	.218**	.243**	.219**	.247**	.158**	.094*	.201**	.181**	**.815****	.283**	.301**	.244**	.148**	.119**	.277**	.294**	.217**
YCEVR4	.159**	.262**	.199**	.225**	.138**	.075	.127**	.173**	**.760****	.153**	.322**	.211**	.119**	.197**	.229**	.234**	.171**
SCVRE1	.489**	.338**	.345**	.352**	.287**	.175**	.496**	.326**	.258**	**.891****	.309**	.329**	.417**	.264**	.307**	.454**	.435**
SCVRE2	.467**	.283**	.340**	.375**	.277**	.175**	.484**	.299**	.250**	**.891****	.205**	.289**	.413**	.271**	.300**	.433**	.462**
SCVRE3	.416**	.232**	.388**	.257**	.161**	.190**	.369**	.271**	.237**	**.784****	.306**	.282**	.415**	.203**	.281**	.356**	.350**
SCVRE4	.481**	.327**	.364**	.381**	.284**	.148**	.514**	.318**	.247**	**.868****	.264**	.316**	.401**	.262**	.343**	.437**	.463**
GCVRE1	.239**	.219**	.315**	.214**	.116**	.056	.201**	.380**	.298**	.275**	**.951****	.355**	.205**	.240**	.250**	.233**	.258**
GCVRE2	.286**	.217**	.328**	.209**	.155**	.071	.233**	.355**	.334**	.303**	**.933****	.357**	.221**	.216**	.263**	.277**	.297**
GCVRE3	.260**	.262**	.313**	.216**	.144**	.066	.220**	.410**	.334**	.294**	**.918****	.397**	.192**	.297**	.242**	.274**	.278**
YASEV1	.299**	.249**	.267**	.177**	.134**	.127**	.279**	.263**	.182**	.284**	.330**	**.842****	.158**	.217**	.214**	.314**	.204**
YASEV2	.407**	.342**	.298**	.215**	.170**	.177**	.332**	.336**	.302**	.334**	.381**	**.891****	.192**	.245**	.250**	.397**	.300**
YASEV3	.360**	.349**	.314**	.262**	.173**	.200**	.292**	.279**	.210**	.295**	.305**	**.850****	.189**	.291**	.276**	.424**	.261**
YASEV4	.304**	.264**	.250**	.204**	.153**	.080*	.247**	.301**	.246**	.260**	.455**	**.514****	.177**	.222**	.202**	.279**	.214**

GONUL1	.288**	.127**	.291**	.169**	.174**	.167**	.328**	.245**	.156**	.444**	.203**	.176**	**.904****	.154**	.224**	.279**	.312**
GONUL2	.330**	.192**	.308**	.200**	.212**	.190**	.350**	.243**	.190**	.464**	.192**	.207**	**.906****	.186**	.291**	.342**	.300**
GONUL3	.305**	.294**	.273**	.219**	.239**	.138**	.330**	.234**	.181**	.379**	.198**	.178**	**.880****	.208**	.275**	.335**	.291**
MANVI1	.240**	.330**	.269**	.286**	.375**	.084*	.257**	.200**	.142**	.259**	.195**	.226**	.168**	**.908****	.240**	.288**	.305**
MANVI2	.300**	.372**	.324**	.290**	.356**	.130**	.264**	.275**	.138**	.279**	.263**	.288**	.206**	**.918****	.252**	.317**	.272**
MANVI3	.258**	.332**	.256**	.281**	.327**	.125**	.241**	.244**	.164**	.261**	.279**	.280**	.186**	**.901****	.253**	.285**	.287**
EGITM1	.309**	.398**	.310**	.460**	.246**	.178**	.247**	.231**	.243**	.315**	.245**	.242**	.206**	.229**	**.872****	.312**	.350**
EGITM2	.313**	.400**	.226**	.428**	.286**	.148**	.266**	.202**	.226**	.284**	.223**	.243**	.222**	.236**	**.863****	.335**	.298**
EGITM3	.274**	.233**	.337**	.299**	.210**	.159**	.231**	.190**	.251**	.287**	.196**	.218**	.302**	.206**	**.726****	.243**	.310**
ARGR1	.390**	.465**	.384**	.316**	.329**	.182**	.441**	.281**	.347**	.416**	.284**	.419**	.334**	.252**	.340**	**.842****	.449**
ARGR2	.378**	.304**	.248**	.243**	.263**	.099**	.277**	.250**	.144**	.277**	.144**	.254**	.231**	.261**	.215**	**.716****	.277**
ARGR3	.350**	.432**	.329**	.318**	.297**	.144**	.480**	.217**	.293**	.404**	.227**	.403**	.313**	.229**	.357**	**.804****	.443**
ARGR4	.359**	.327**	.245**	.304**	.363**	.106**	.395**	.347**	.242**	.427**	.223**	.289**	.228**	.256**	.217**	**.720****	.314**
IYOLM1	.303**	.312**	.318**	.278**	.306**	.134**	.318**	.217**	.174**	.326**	.236**	.178**	.242**	.262**	.300**	.309**	**.837****
IYOLM2	.368**	.371**	.256**	.349**	.368**	.134**	.467**	.264**	.256**	.387**	.231**	.238**	.258**	.249**	.333**	.419**	**.816****
IYOLM3	.422**	.338**	.414**	.295**	.269**	.152**	.407**	.276**	.180**	.527**	.264**	.318**	.327**	.269**	.318**	.441**	**.795****

Table 4: Factor names and Items

F01 Family Relationship	Family1	I get support from my family in my material / emotional / spiritual problems.
	Family2	My family members support each other in achieving their goals.
	Family3	We can solve the problems that occur in my relationships with my family and relatives together.
	Family4	Members of my family know people in the life of family members.
	Family5	I can talk about everything clearly with my family members without hesitation.
	Family6	I can spend meaningful and fulfilling time with my family.
	Family7	My family respects my lifestyle (choice of friends and profession, political opinion, etc.).
	Family8	I feel safe with my relationship with my family.
F02 Perceived Income Level	Income1	My personal income is enough to live as I wish.
	Income2	Our family's income is enough to live the life we want as a family.
	Income3	I do not have / even if I have any debts, I can manage my debts.
	Income4	With my current savings, I feel safe in the future.
	Income5	I have social security / economic power to cover my health expenses.
	Income6	My personal / family income enables us to eat healthy and sufficiently.
F03 Physical Health	FSAG1	I can go uphill or upstairs.
	FSAG2	I can act quickly and fast whenever I want during the day.
	FSAG3	I can use tools / do jobs that require power and energy.
	FSAG4	I can do activities giving me enjoyment without difficulty in my free time.
	FSAG5	I can provide my physical needs without support from others.
F04 Work / School Life	ISOK1	I can collaborate with individuals at my job/school for common purposes.
	ISOK2	I can establish meaningful and fulfilling communication with individuals at my job/school.
	ISOK3	The work / education environment in my job/school (lighting, air conditioning, equipment, safety of work/school environment) is sufficient.
	ISOK4	I love my job / school.
	ISOK5	I am in the position I want to be in my job/school.
	ISOK6	I am not worried about the future of my job/school.
F05 Feeling Safe	KGHI1	I do not have any concerns that I will not stay in my current job/position in the future.
	KGHI2	I believe that my salary will increase in the future depending on economic conditions of country/workplace.
	KGHI3	I believe that I will receive my salary regularly in the future/my income will continue.

	KGHI4	As long as I achieve my qualification, I believe that I will rise as a position/title.
F06 Social Pressure	TBAS1	Relative pressure does not affect my lifestyle / preferences.
	TBAS2	The thought of what someone else would say does not affect my lifestyle/preferences.
	TBAS3	Family/Spousal pressure does not affect my lifestyle/preferences.
	TBAS4	Individuals in my social life do not affect my lifestyle/preferences.
F07 Time Allocation	ZAYR1	I can devote enough time for my close friends/ closest friends.
	ZAYR2	I can devote enough time to my social environment.
	ZAYR3	I can devote enough time for my hobbies
	ZAYR4	I can devote enough time for my family relationships (close/distant family members).
F08 Neighborhood Relation	KMSLK1	I can ask my neighbors for help whenever I need.
	KMSLK2	I find my neighborhood relationships sufficient/ satisfactory.
	KMSLK3	I have a certain level of social relationship / interaction with my neighbors.
	KMSLK4	My neighboors respect other people in same space.
F09 Satisfaction with Living Environment	YCEVR1	I live in the city I want geographically.
	YCEVR2	I live in the city I want in terms of climate conditions.
	YCEVR3	There are sufficient possibilities in the city where I live that I would be happy to do.
	YCEVR4	I live in the city I want in terms of infrastructure.
F10 Satisfaction with Social Environment	SCVRE1	People around me are very friendly/respectful to me.
	SCVRE2	I have close friends with whom I build meaningful and fulfilling relationships.
	SCVRE3	I am known as a reliable person in my social environment.
	SCVRE4	I have a social environment where I have meaningful and fulfilling shares.
F11 Perceived Environmental Safety	GCVRE1	The neighborhood/area I live in is known as a safe place.
	GCVRE2	I feel safe walking through my neighborhood after dark.
	GCVRE3	The location of my home is safe.
F12 Finding The Home Sufficient	YASEV1	I find the size of the house I/We live in sufficient.
	YASEV2	I can do what I want in my/our house
	YASEV3	I/We have the most of necessary objects for me/us in my/our home.
	YASEV4	I/We am/are satisfied with location of my/our home.
F13 Being Volunteer	GONUL1	I have participated/participate in activities that require being a volunteer.
	GONUL2	I have undertaken/undertake social initiatives when necessary.
	GONUL3	I have donated/donated to charities.

F14 Spiritual Life	MANVI1	My beliefs don't marginalize me in the society I'm in.
	MANVI2	I can access physical places/documents to practice/live my beliefs
	MANVI3	I can freely fulfill my beliefs.
F15 Satisfaction with Education	EGITM1	I have received / am receiving the necessary training to do the job I want.
	EGITM2	I find the education I have received / received sufficient.
	EGITM3	Apart from the education I have received / received, I spend extra time and effort to improve myself.
F16 Having Tools/Equipment	ARGR1	I have the tools and equipment that I need in daily life.
	ARGR2	There is at least one transportation vehicle that I or my family members use.
	ARGR3	I have necessary equipment for my hobbies
	ARGR4	I can borrow necessary or missing materials I need from someone else
F17 Well-Being	IYOLM1	I can control my stress and anxiety
	IYOLM2	I have been feeling mentally good on these days
	IYOLM3	I can express myself comfortably in in all conditions.

Confirmatory Factor Analysis results of QoLS of are indicated on Table-5. X^2 / Degree of Freedom has been calculated as 2,43 and this value means perfects fit according to Sümer (2000) and Schreiber et al. Furthermore, scores of absolute fit indices have normal fit on GFI, AGFI, perfect fit on RMSEA, SRMR and good fit on RMR according to Çokluk et al. (2010) and Marsh et al. (2006). Incremental fit indices have perfect fit on CFI, NFI, NNFI, IFI, good fit on PGFI according to Sümer (2000). Through these findings, it is possible to say that the model is acceptable.

Table 5: CFA fit ındex's values (different factors)

X^2/ degree of freedom	= 5706.02 / 2348 = 2.43 (Perfect Fit)		
GFI	= 0.81 (Normal Fit)	CFI	= 0.97 (Perfect Fit)
AGFI	= 0.78 (Normal Fit)	NFI	= 0.96 (Perfect Fit)
RMSEA	= 0,047 (Perfect Fit)	NNFI	= 0.97 (Perfect Fit)
RMR	= 0.062 (Good Fit)	PGFI	= 0.72 (Good Fit)
SRMR	= 0,050 (Perfect Fit)	IFI	= 0.97 (Perfect Fit)

DISCUSSION

The purpose of this study is to develop the Quality of Life Scale (QoLS) and to make its validity and reliability for the Turkish population. In this study, EFA was applied to the question list consisting of 86 items, and 14 items whose variance values were less than 0.5 and factored in factors other than the required factor were removed, and EFA was re-applied to the remaining 72 items. The results of KMO and Bartlett sphericity tests were calculated as Chi-square = 33792.063, SD = 2556, p = 0.000 and Keiser-Meyer-Olkin sampling adequacy measure (0.927). The Cronbach's Alpha coefficient of the QoLS was 0.957 and the variance

explained by the scale was found to be 72.832%. The fact that the KMO sampling adequacy value is 0.957 and is above (0.60) as predicted by Kaiser (1974) and Bartlett's Test of Sphericity ($p < 0.05$) indicates that the data are suitable for factor extraction.

CFA was applied to the same data group and X2 / Degree of Freedom was calculated as 2.43, and this value was determined by Sümer (2000) and Schreiber et al. (2006) shows that it is a perfect fit. In addition, the absolute fit index scores Çokluk et al. (2010) and Marsh et al. (2006), while normal fit in GFI, normal fit in AGFI, perfect fit in RMSEA, good fit in RMR and perfect fit in SRMR, the incremental fit indices show that Sümer (2000), it has excellent fit scores in CFI, NFI, NNFI, IFI and good fit in PGFI. With these findings, it is possible to say that the model is acceptable.

One of removed 14 items is from Satisfaction with Living Environment, one from Work/ School Life, two from Physical Health, one from Family Relationship, two from being well, four from Perceived Freedom, three from Feeling Safe. The reasons of removing these items are that their variance values are less than 0.5 and/or they factored in factors other than the required factor.

During development of QoLS, the scales developed by Liu (1976), Zenhner (1977), Campbell et al. (1977), Boyer and Savageau (1981), Evans (1994), Gregory et al. (2009), Ardahan (2012), OECD Better Life Index (2015), Eurostat Quality of Life Indicators (2015), The Quality of Life Model, Quality of Life Research Unit (2015), Ardahan (2016) and WHOQoL-100 and WHOQoLBREF developed by World Health Organization were benefited. Items of total 17 factors and factors in QoLS conform to these studies. If a factor exists in these scales, it absolutely exists in also QoLS. Factors Social Pressure, Work/School Life, Being Volunteer, Satisfaction with Existing Education and Having Tools exist in only this scale; do not exist in other scales. This means that new scale involves other all scales. Another difference of this scale from other scales is that it gives TQoLS for each individual and sample as a whole.

This scale is not a total scale. QoL consists of 17 factors for scale and each factor can also be used independently. In addition, as mentioned in the method section, TQoLS can be found for each individual and total sample.

Considering these findings and results it is possible to say that QoLS is a reliable example for the Turkish population in its current form.

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