Adaptation of Childhood Trauma Questionnaire (CTQ) To Turkish Culture: Validity and Reliability

Çocukluk Çağı Travma Ölçeğinin (ÇÇTÖ) Türk Kültürüne Uyarlanması: Geçerlilik ve Güvenirlik Çalışması

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Abstract

The aim of this study is adaptation of Childhood Trauma Questionnaire to Turkish culture. For the validity of the scale, it was translated into Turkish. To evaluate the construct validity of the scale, KMO Test and Barlett's Test were used. In the study, CFA was performed for construct validity. Item statistics, half-way test and Cronbach's Alpha Coefficients were used as reliability methods. In order to test the invariance of time, the scale was applied to the same sample at three weeks intervals. The value of KMO was found to be .964 and Barlett to be 10652.579 and p=.000 When the model for CTQ consisting of 25 items and five sub-factors were examined, it was seen that the x²/sd, CFI, IFI, RMSEA, RMR and SRMR fit indexes were at an acceptable level and that PNFI and PGFI values achieved good fit. A positive correlation was found between item scores and total scale scores, and this relationship was statistically significant (r=.51 to .87 and p=.000). Total item correlation values of all items were found to be above .30. The Cronbach Alpha of CTQ was .970 and the Cronbach Alpha of the sub-dimensions ranged from .930 to .957. A positive linear correlation was found between pre-test and post-test measurements which were conducted to determine the invariance of CTQ (r=.809; p=.000). It was found that CTQ was valid and highly reliable and did not show any change in time.

Keywords: Childhood Trauma, Scale Adaptation, Validity, Reliability

Öz

Bu araştırmanın amacı Çocukluk Çağı Travma Ölçeğini Türk kültürüne uyarlamaktır. Ölçek geçerliliği için ölçek maddeleri Türkçe'ye çevrilmiştir. Ölçeğin yapı geçerliliğini değerlendirmek üzere KMO ve Barlett's Testi yapılmıştır. Çalışmada yapı geçerliliği için Doğrulayıcı Faktör Analizi (DFA) yapılmıştır. Güvenirlik yöntemlerinden madde istatistikleri, testi yarılama ve Cronbach Alpha Katsayısı'ndan yararlanılmıştır. Zamana karşı değişmezliğini test etmek için üç hafta arayla aynı örnkeleme ölçek uygulanmıştır. KMO değerinin .964; Barlett değerinin 10652.579 ve p=0.000 olduğu tespit edilmiştir. 25 madde ve beş alt faktörden oluşan ÇÇTÖ'ye ilişkin model incelendiğinde X²/Sd, CFI, IFI, RMSEA, RMR ve SRMR uyum indekslerinin kabul edilebilir düzeyde olduğu ve PNFI ve PGFI değerlerinin iyi uyum değerlerini yakaladığı görülmüştür. Madde puanları ile toplam ölçek puanı arasında pozitif yönde ilişki saptanmış olup bu ilişki istatistiksel olarak da anlamlı bulunmuştur (r=0.51 ile 0.87 arasında olup p=0.000). Tüm maddelerin madde ölçek toplam korelasyon değerleri 0.30'un üstünde bulunmuştur. ÇÇTÖ'nün Cronbach Alpha değeri 0.970 ve alt boyutların Cronbach Alpha değeri 0.930 ile 0.957 arasında değişmektedir. ÇÇTÖ'nün zamana karşı değişmezliğini belirlemek amacıyla yapılan ön test – son test ölçümleri arasında pozitif yönlü doğrusal bir ilişki olduğu istatistiksel olarak da anlamlı bulunmuştur (r=0.809; p=0.000). Sonuç olarak ÇÇTÖ'nün geçerli ve oldukça güvenilir olduğu, zamansal olarak değişim göstermediği saptanmıştır.

Anahtar Kelimeler: Çocukluk Çağı, Travma, Ölçek Uyarlama, Geçerlilik, Güvenirlilik

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Introduction

Children can be exposed to trauma in many ways. When called trauma, it first associates with circumstances such as accidents, serious diseases, disasters and injuries. It is certain that such circumstances will adversely affect the emotional well-being of children (Nelson & Wampler, 2000). These traumatic experiences often cause tolerable stress, which can be overcome, and their effects gradually decrease over time (Shonkoff, 2010). However, when childhood traumas are mentioned, professionals working in the field of mental health and children refer to physical neglect and abuse, emotional neglect and abuse and sexual abuse which are very difficult to overcome and have profound effects (Cook et al., 2003; Dube et al., 2001; NCTSN 2010).

The World Health Organization (WHO) considers child abuse as "behaviors that are intentionally or unknowingly performed by an adult and adversely affect the child's health, physical and psychosocial development" (WHO, 2014). Traumas in the family are examined under four main headings: neglect, physical, sexual and emotional neglect and abuse (Kırımsoy et al., 2013).

An average of three million couples per year inflict violence against each other in front of their young children (Straus & Gelles 1990). While 85% of childhood trauma cases consist of children under 6 years of age, half of the victims of child maltreatment are known to be younger than 7 years of age. 88% of child abuse and neglect deaths occur in children aged 7 and under (Buss et al., 2015; Osofsky, 2003).

Children who are exposed to childhood traumas may be diagnosed with behaviorial disorder, borderline personality disorder, major affective disorder, attention deficit, hyperactivity, phobic disorder, dissociative disorder, obsessive compulsive disorder, panic disorder, adjustment disorder, and multiple personality or acute dissociative disorder, later in their lives. There is a strong relationship between these diagnoses and exposure to childhood trauma (Terr, 1995). In addition, excessive fear, trait anxiety, sleep disorders, depressive symptoms, anger attacks and aggression, trust and relationship building problems, affect and emotion regulation problems can be seen in individuals exposed to childhood traumas (İçağasıoğlu-Çoban & Bulut 2016; Finkelhor & Browne 1985; Terr, 1995; Bellis & Zisk, 2014).

One of the most frequent forms of child abuse worldwide is child marriage (UNICEF, 2001). Early marriage is also a type of childhood abuse, it is associated with different physical, social, and mental outcomes than child sexual abuse alone (Soylu et al. 2014). Abused during childhood is associated with younger marriage and pregnancy under 18 (Fiscella et al. 1998).

The aim of this study is to adapt the Childhood Trauma Questionnaire to Turkish in order to protect individuals from the possible effects of childhood trauma and to determine childhood traumas with a reliable tool and also to test its reliability and validity, statistically.

1. Justification for The Research

The adaptation of the Childhood Trauma Questionnaire (CTQ) into Turkish is made as "Childhood Psychological Trauma Questionnaire" by Şar et. al; however, there were some methodological defiencies in validity and reliability analyzes in this adaptation study.

Şar et al. (2012) did not use Confirmatory Factor Analysis (CFA) from the basic analyzes that should be used in adaptation studies, but instead used Exploratory Factor Analysis (EFA). EFA performed did not correspond to the original structure of the CTQ developed by Bernstein et al. (2003). Therefore, it is statistically more convenient to use CFA instead of EFA. CFA is used to adapt measurement instruments developed in other cultures or to test the theoretical structure previously established (Sümer, 2000; Çapık, 2014; Seçer, 2015; Seçer, 2017).

According to the results of EFA conducted by Şar et al. (2012), items 1, 2, 6, and 15 were not in the places proposed in the original form of the scale and items 1, 2 and 6, which should be included in the sub-dimension of physical negligence in the original structure, were included in other sub-dimensions. Items 1 and 6 were in the physical abuse sub-dimension wheres item 2 has been included in the sub-dimension of emotional neglect. In the original structure of the scale, while the 15th item was in the sub-dimension of physical abuse, in the study of Şar et al. (2012), it was in sexual abuse sub-dimension. In other words, four of the five items that should be included in the physical negligence sub-dimension were included in other sub-dimensions. Şar et al. (2012) stated that it would be appropriate to change the expressions related to items 1, 2, 6 and 15 in order to achieve compatibility with the original structure and changed the phrase of 'I couldn't find enough food' as "I used to be hungry because there was not enough food at home". However, they did not analyze whether these changes have any effect on the validity and reliability of the scale.

EFA made for testing the validity of the scale was not compatible with the original structure of the scale. CFA is statistically more appropriate than EFA for the structure produced by Bernstein et al. (2003), which consists of 25 items and 5 sub-

dimensions. In addition, as a result of the item-scale total correlation for the reliability analysis of Şar et al. (2012), item 4 of the scale (r=0.17) remained below 0.30 and remained outside the reliability limits.

In conclusion, since a scale should be valid before it can be reliable (Alpar, 2011; Çokluk et al., 2012), the validity and reliability study of the Childhood Trauma Questionnaire should be reconstructed with the appropriate statistical methods and brought into literatüre with this current version.

2. Purpose and Significance of The Research

The purpose of this study is to conduct CFA of the CTQ developed by Bernstein et al. (2003) and to execute its reliability and validity. Although childhood traumas are common in all societies and usually last for many years, they are mostly hidden. Therefore, the statistical ratios and the realization rates differ greatly. It is estimated that only 15% of cases are reported (Yücel, 2016). Around 50% of cases worldwide are not reported (Polat, 2007). Determining and revealing the physical neglect and abuse, sexual abuse, emotional neglect and abuse is necessary to identify the victims, to make necessary interventions and to obtain realistic statistics on childhood traumas. Due to all these requirements, it is extremely important to bring in to the relevant literature a measurement tool in Turkish that will reliably determine childhood traumas.

3. Method

This section provides information on the scale of which validity and reliability studies are performed and preferred validity and reliability methods.

3.1. Participants

The universe of the study consists of children brides who were married at a young age before their 18s. The sample of the study consists of 300 adult women who were married before the age of 18 and are currently married (Average Age: 43, Min. Age: 23, Max. Age: 70). We were prefer The universe of the research is reached by using snowball sampling method. Snowball sample selection technique is a technique used in cases where information about the universe is lacking and it is difficult to reach individuals forming the universe (Karasar, 2016). After the outline of the study, the students who continue their education in Necmettin Erbakan University Department of Social Work were informed about the purpose and content of the study and were asked to report if they had acquaintances in their families or around with the criteria of being included in the study. In addition, they were asked to inform their friends in their dormitories or others and to reach as many people as possible. 15 days after informing, the contact information of the individuals who returned to participate in the study was taken, data were collected by face-to-face interviews with the women residing in Konya, and the data of the women residing outside Konya were collected via telephone or whatsapp video calling. All participants were informed about the purpose and importance of the study and their verbal consent was obtained. The data were collected between December 2017 and June 2018.

The inclusion criteria were to be married before the age of 18, to be 18 or older at the time of research, to be married, to be able to speak and understand Turkish, not to have a psychiatric disorder, and to agree to participate in the research.

3.2. Childhood Trauma Questionnaire

The original name of the scale is "Childhood Trauma Questionnaire (CTQ)". The scale, which was developed as 70 items by D. P. Bernstein in 1994, was reorganized in 1994, 1997, 1998 and finally in 2003 as a short form of 28 items (25 items form with 5 factors and 3 items for minimization). It is a 28-item self-report scale aimed at retrospectively screening childhood physical, sexual abuse and physical and emotional neglect (Bernstein, Ahluvalia, Pogge and Handelsman, 1997; Bernstein et al., 1994; Bernstein et al., 2003; Bernstein and Fink, 1998).

In calculating the CTQ scores, the scores obtained from the positive expressions (items 2, 5, 7, 13, 19, 26, 28) are reversed (for example 1 point is reversed to 5 points, 2 points to 4 points). The scale is 5-point Likert type. Responses are given on the scale ranging from 1 to 5. While 1 means "never true", 5 means "very often true". The total of the five sub-dimension points gives the CTQ total score. The sub scores are between 5 (no neglect and abuse history) and 25 (very serious neglect and abuse history), the total score is between 25-125. The scale has five sub-dimensions. These sub-dimensions are abuse (physical-emotional-sexual) and neglect (physical-emotional) dimensions (Berstein et al., 2003). The items for sub-dimensions are as follows: Physical Abuse sub-dimension 9, 11, 12, 15, 17th items; Emotional Abuse sub-dimension 3, 8, 14, 18, 25th items; Sexual Abuse sub-dimension 20, 21, 23, 24, 27th items; Physical Negligence sub-dimension 1, 2, 4, 6, 26th items and Emotional Neglect sub-dimension 5, 7, 13, 19, 28th items.

Bernstein et al. (2003) thought that the number of items falling into sub-dimensions should be balanced when deciding on the short form of CTQ. For this reason, the number of items falling into each sub-dimension is five. The 3 items of 28 items-

CTQ, are related to minimization / rejection / denial. These items are 10th, 16th and 22th. These items do not need to be reversed. The 3 items tend to evaluate the participants' tendency to express their experiences at a minimum level or deny. In addition, these items indicate the potential under-reporting of abuse. The three items related to Minimization / Rejection are divided into two. The answer of "very often" is scored as "1" and other answers are scored as "0". The obtained scores are summed up and, if the total score is one (1) or more, this indicates that abuse is under-reported or mis-reported. The items related to minimization indicate unrealistic expressions and severe psychological defenses. Berstein et al. (2003), in their study of creating the short form of the scale, have taken out the items related to minimization, in order to ease the burden of respondents. Therefore, minimization items are not included in the validity and reliability study. The items of the scale related to minimization include Articles 10, 16 and 22. These items are respectively correspond to expressions: "There was nothing I wanted to change about my family"; "I had a perfect childhood" and "My family was the best family in the world".

3.3. Validity and Reliability

There are many methods to perform scale validity and reliability studies in the literature. Within the scope of the validity study of the CTQ, the Kendall Coefficient of Concordance (Wa) is preferred for scope validity and Confirmatory Factor Analysis (CFA) is preferred for construct validity. In the scope of the reliability study of the related scale, item-total correlation coefficient, split half test method and Cronbach Alpha reliability analyzes are preferred. The test-re-test method is preferred for time invariance and Pearson Correlation Coefficient is examined.

3.4. Language Validity

Since at least two independent translators are required to implement the language adaptation of the scale (Aksayan & Gözüm, 2002), the scale has been translated by three independent translators. The expressions in the translation are compared with the original English expressions by the researchers and the Turkish Language instructors and the translations which are considered to be the best match have been adopted.

The scope validity of the scale was presented to the opinion of 5 academicians at the doctoral level who have expertise in the subject or published in this field. The academicians were asked to evaluate the measurement level of each item in the scale between 1-10 points. After the changes in the expressions made according to the opinions of the academicians, the content validity study of the scale was performed by using the Kendall Coefficient of Concordance (WA) correlation test.

3.5. Construct Validity

After the validity of the language has been completed, the construct validity has started. CFA, which is preferred for construct validity, performs the analysis of the consistency between the data and the theoretical structure and is also used to adapt the measurement tools developed in other cultures (Çapık, 2014; Seçer, 2015; Seçer, 2017). For CFA, either a theoretical basis or a predetermined structure is required (Sümer, 2000). In this context, CFA is made in order to test the suitability of the structure developed by Bernstein et al. (2003). It is stated that 5 or 10 times the number of items in the scale will be appropriate in determining the sample for factor analysis (Büyüköztürk, 2002; Alpar, 2016). Within this scope, the number of 250 items, which is 10 times the number of items, has been exceeded and 340 participants have been reached.

In the literature, there is no common opinion on the fit indices to be used in the evaluation of the CFA results (Crowley and Fan, 1997; Munro, 2005; Şimşek, 2007). X²/Sd, CFI, RMSEA, RMR, SRMR, PNFI and PGFI values, which are not affected by sample size and parameter estimation, were examined within the scope of the study (Hu and Bentler 1999, Hooper et al. 2008). Table 1 shows the best fit values and normal values of the preferred fit indices. Various sources have been used to determine best fit values and acceptable values (Munro, 2005; Schreiber et al., 2006; Hoe, 2008; Hooper et al., 2008).

3.6. Internal Consistency

In order to determine the internal consistency of CTQ item, statistics, split half test method and Cronbach Alpha Coefficient are used among the reliability methods. Pearson Moments Correlation Corrected Formula (Point-bi-serial) was calculated for item-total correlation coefficient. Guttman Split-half and Spearman - Brown reliability coefficients were used for split half. Finally, Cronbach Alpha Reliability Analysis is performed for both scale and sub-dimensions.

3.7. Time Invariance

In order to determine the time invariance of the Childhood Trauma Questionnaire, it is paid attention to leave three weeks between pre-test and post-test measurements. The literature states that there should be at least two weeks in between (Baş, 2010). The implementation required for time invariance was carried out with 170 participants. 170 female university students aged between 18 and 25 years (Age: 20, Min.Year: 18, Max.Year: 25), who attend formal education at the university, participated in the study. After the participants are informed about the study and their verbal consent are obtained, they were included in the study and the data were collected using face-to-face interviews.

3.8. Data Analysis

All analyzes of the data are performed by IBM SPSS Statistics 22 and IBM SPSS AMOS 25 Graphic programs. IBM SPSS AMOS 25 Graphic program is used for CFA and IBM SPSS Statistics 22 program is used for other analyzes.

3.9. Limitations

- The concept of childhood trauma in the research is limited by the scope of the measurement tool developed by Bernstein et al. (2003).
- The research is limited to 300 participants.
- The research is limited to January-June 2018.

4. Findings

4.1. Findings Regarding the Validity of Childhood Trauma Questionnaire

4.1.1. Language Validity

After the language adaptation of the scale, the scope validity of the scale was presented to the opinion of 5 academicians at the doctoral level who have expertise in the subject or published in this field. The academicians were asked to evaluate the measurement level of each item in the scale between 1-10 points.

After the changes in the expressions made according to the opinions of the academicians, the content validity study of the scale was performed by using the Kendall's W test. Based on the results of the academic opinions, Kendall's W test was applied and no statistically significant difference was found between the experts (Kendall's W = 0.30, p> 0.05, chi-square: 31.07).

4.1.2. CFA

KMO and Bartlett Test and CFA have been executed to evaluate the construct validity of the scale. KMO and Bartlett Test have been used to evaluate the construct validity of the scale and the KMO was found to be .964; Bartlett value 10652.579 and p = 0.000.

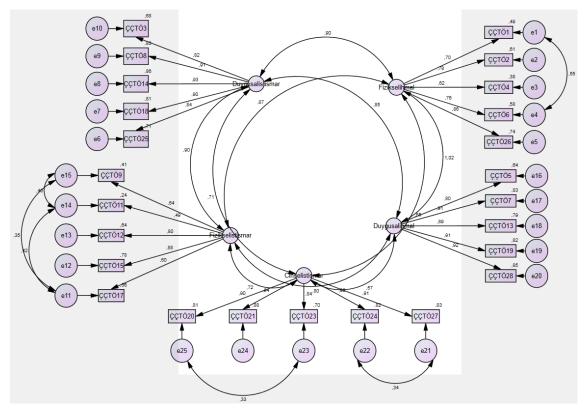


Figure 1. CFA Results of Childhood Trauma Questionnaire

The fit indices of the five-factor model of the Turkish Childhood Trauma Questionnaire were examined in CFA executed.

Table 1. Information on The CFA Results Related to Five Sub-Dimensional Model of Childhood Trauma

Questionnaire

Managema	Value	Cutt-off for Good And Acceptable Fit		
Measure		Acceptable Fit	Good Fit	
X2	1044.08	-	-	
df	259	-	-	
X²/df	4.03	<5	<2	
CFI	0.92	>0.90	>0.95	
IFI	0.92	>0.90	>0.95	
RMSEA	0.09	<0.10	<0.08	
RMR	0.09	<1.0	<0.5	
SRMR	0.06	0.05-0.10	0.00-0.05	
PNFI	0.77	>0.9	50	
PGFI	0.64	>0.9	50	

In the analysis of Figure 1, when the model of Childhood Trauma Questionnaire, consisting of 25 items and five sub-factors has been examined, it is seen that X2/Sd, CFI, IFI, RMSEA, RMR and SRMR fit indices are acceptable and PNFI and PGFI values have achieved good fit values. Covariance has been established between the items in high relation with the condition of being in the same sub-dimension (1-6; 9-11; 9-17; 11-17; 20-23 and 24-27). Furthermore, since each item of the Childhood Trauma Scale meets the requirement of Squared Multiple Correlations SMC> 0.20 (SMC values range from 0.24 to 0.86), the model was not rejected without removing any other item.

4.2. Findings Regarding the Reliability of Childhood Trauma Questionnaire

Item Statistics, Split Half Test and Cronbach Alpha Coefficient were used for the reliability of the Childhood Trauma Questionnaire. Finally, pre-test post-test was used to determine the time invariance.

4.2.1. Internal Consistency

Item and Total Score Correlation Coefficients of the items included in the scale were evaluated and the Correlation Reliability Coefficients were found between r=0.51 and 0.87 (Correlation reliability coefficients were above 0.50 and below 0.88).

Table 2. Item and Total Score Correlation Coefficients

ITEMS	r	р
Q 1	0.764	0.000*
Q 2	0.695	0.000*
Q 3	0.801	0.000*
Q 4	0.759	0.000*
Q 5	0.645	0.000*
Q 6	0.824	0.000*
Q 7	0.811	0.000*
Q 8	0.866	0.000*
Q 9	0.629	0.000*
Q 11	0.507	0.000*
Q 12	0.785	0.000*
Q 13	0.771	0.000*
Q 14	0.867	0.000*
Q 15	0.828	0.000*
Q 17	0.585	0.000*
Q 18	0.875	0.000*
Q 19	0.785	0.000*
Q 20	0.745	0.000*
Q 21	0.739	0.000*
Q 23	0.695	0.000*
Q 24	0.728	0.000*
Q 25	0.863	0.000*
Q 26	0.735	0.000*
Q 27	0.776	0.000*
Q 28	0.791	0.000*
~ <0 OE		

p<0.05

As a result of Pearson Moment Correlation analysis, a positive correlation was found between item scores and total scale score, and this relationship was statistically significant (p = 0.000).

Table 3. Information on the analysis of items constituting the Childhood Trauma Questionnaire

Items Corrected Item- Total Correlation		Cronbach's Alpha If Item Deleted			
Q 1	0.741	0.969			
Q 2	0.719	0.969			
Q 3	0.764	0.969			
Q 4	0.704	0.970			
Q 5	0.680	0.970			
Q 6	0.790	0.969			
Q 7	0.840	0.968			
Q 8	0.852	0.968			
Q 9	0.602	0.970			
Q 11	0.499	0.970			
Q 12	0.737	0.969			
Q 13	0.799	0.969			
Q 14	0.853	0.968			
Q 15	0.798	0.969			
Q 17	0.577	0.970			
Q 18	0.839	0.968			
Q 19	0.820	0.969			
Q 20	0.700	0.969			
Q 21	0.697	0.969			
Q 23	0.650	0.970			
Q 24	0.689	0.970			
Q 25	0.846	0.968			
Q 26	0.786	0.969			
Q 27	0.752	0.969			
Q 28	0.847	0.968			

As a result of item analysis of Childhood Trauma Questionnaire; the item-scale total correlation values of all items were found to be above 0.30. It is seen that these values ranged between 0.577 and 0.853. In addition, it is observed that the Alpha value of the scale does not change if any item is discarded.

The Guttman Split-Half coefficient of the Childhood Trauma Questionnaire was 0.840; Spearman-Brown coefficient was found to be 0.941. The Cronbach Alpha of the first half was 0.946; Cronbach Alpha of the second half was 0.947; and the correlation between the two halves is 0.888. The Cronbach Alpha of the Childhood Trauma Questionnaire was 0.970. Cornbach Alpha values were found to be .87 for Physical Neglect sub-dimension, .94 for Emotional Abuse sub-dimension, .83 for Physical Abuse sub-dimension, and .95 for Sexual Abuse sub-dimension.

4.2.2. Time Invariance

A positive linear relationship was found between pre-test and post-test measurements made in order to determine the time invariance of the Childhood Trauma Questionnaire (while the total score of one of the measurements increases, the other also increases), and this was statistically significant (r=0.809; p=0.000). Pre-test mean is 52.25, SS=17.93 and post-test mean is 51.27, SS=17.74 (n=170).

Discussion and Conclusion

The aim of this study is to adapt the Childhood Trauma Questionnaire to Turkish in order to protect individuals from the possible effects of childhood trauma and to determine childhood traumas with a reliable tool and also to test its reliability and validity, statistically. A step-by-step process has been followed to achieve this goal. First of all, the language adaptation of the scale was done. After this, the scope validity of the scale was presented to the opinion of 5 academicians at the doctoral level who have expertise in the subject or published in this field. It was evaluated by academicians whether each item was suitable for the purpose it wanted to measure, including their Turkish expressions, between 1 and 10 points. There was no statistically significant difference between academicians (Kendall's W = 0.296, p>0.05, chi-square: 31.066). This result shows that the opinions from the academicians are statistically compatible with the applicability of the scale

items (Rhodes et al., 2000; Güven & İşler, 2015). In other words, this finding shows the compatibility between independent observers.

KMO and Bartlett Tests were used to evaluate whether the CTQ is suitable for factor analysis. As a result of the analysis, KMO was determined as 0.964 and Bartlett Test was p <0.05 (p = 0.000). In the literature, it is stated that KMO test results are excellent at 0.90 and above and if the Chi-square test statistic obtained as a result of Bartlett's Test is p <0.05 significant, it can be said that the data used in the research have normal distribution characteristics (Burns and Grove, 2001; Büyüköztürk, 2011; Koçak et al., 2014). Accordingly, it is concluded that the data obtained from the scale is perfectly compatible for factor analysis.

When the model for Childhood Trauma Questionnaire, which is made by IBM SPSS AMOS 25 Graphic program and consists of 25 items and five sub-factors, is examined, it is seen that the X²/Sd, CFI, RMSEA, RMR, SRMR, PNFI and PGFI fit indices are acceptable. Covariance has been established between the items in high relation with the condition of being in the same sub-dimension. Thus, the Child Trauma Questionnaire developed by Bernstein et al. (2003) and its sub-dimensions have been found to achieve good compliance values. Since all items met the requirement of SMC>0.20 (Hooper et al., 2008), no items were discarded and further analyzes continued with 25 items.

The item-total score correlation coefficients of the items in the scale were evaluated and the Correlation Reliability Ccoefficients were found to be between r = 0.51 to 0.87 (p = 0.000). It is required that the item total correlations should not be negative, should be at least 0.30 and the correlation values between the items should be statistically significant (Karasar, 2016). Since the Item and Total Score Correlation Coefficients, of which validity analysis was made with 25 items, were greater than 0.30, and it was positive and statistically significant, the analysis was continued with 25 items.

In the next step, split half test reliability analysis of Childhood Trauma Questionnaire was performed. The Correlation Coefficient between the two halves was found to be r=0.888. Besides, the Cronbach Alpha of the 25-item scale was found to be 0.970. Correlation of 0.60 and above is considered to be a high degree (Öner, 1997; Tavşancıl, 2005). Accordingly, it can be said that the correlation between the two halves is positive and high. In addition, since Cronbach's Alpha values are above 0.7, it can be said that the reliability of data is guite high (Büyüköztürk, 2017).

The Childhood Trauma Questionnaire was applied to the participants and the second application was made three weeks later, since the literature stated that there should be at least two weeks between them (Baş, 2010). A positive linear relationship was found between pre-test and post-test measurements made in order to determine the time invariance of the Childhood Trauma Questionnaire (while the total score of one of the measurements increases, the other also increases), and this was statistically significant (r = 0.809; p = 0.000). It was previously stated that the correlation coefficient was accepted to be high when it was 0.60 and above (Karasar, 2016). There was a very strong and statistically significant relationship between the two measurement scores. In other words, it was determined that Childhood Trauma Questionnaire was highly reliable and did not show any change in time.

It has been shown with scientific data that the 25-item, five sub-dimension Turkish version of the Child Trauma Questionnaire is an effective measurement tool which can be used safely to determine the childhood trauma of adult women aged between 18-70, especially the adult women married at child age (child brides).

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Ek 1. Türkçe uyarlaması yapılan "Çocukluk Çağı Travma Ölçeği"

	2. III O T. T. OOTO							
A = = ¥	Çocukluk Çağı Travma Ölçeği (ÇÇTÖ)	ا iد	ه ما ما م		.4	ساده به		
	Aşağıda yer alan ifadeler çocukluk ve ergenlik çağınızda meydana gelen bazı deneyimleriniz ile ilgilidir. İfadelere yanıt verirken							
	nissettiğinizi en iyi açıklayan sayıyı daire içine alın. "1" rakamı "asla doğru değil" anlamına gelme							
	doğru" anlamına gelmektedir. Bu soruların bazıları kişisel nitelikte olsa da, lütfen olabildiğince dürüst yanıtlamaya çalışın.							
Yanıtlarınız gizli tutulacaktır. İfadeleri "Ben büyürken" cümlesini tamamlayacak şekilde doldurunuz.			_	_		_		
4	Maddeler	1	2	3	4	5		
1	Yeterince yemek yoktu	1	2	3	4	5		
2	Bana bakan ve beni koruyan birinin var olduğunu biliyordum	1	2	3	4	5		
	3 Ailemdeki insanlar bana "aptal", "tambel" ya da "tipsiz" gibi şeyler derdi.		2	3	4	5		
4	Ebeveynlerim aileye bakamayacak kadar çok içer ya da sarhoş olurdu.	1	2	3	4	5		
5	Ailemde önemli ve özel biri olduğumu hissetmeme yardımcı olan biri vardı.	1	2	3	4	5		
	6 Kirli kıyafetler giymek zorunda kalırdım.		2	3	4	5		
7	Sevildiğimi hissediyordum.	1	2	3	4	5		
8	Ebeveynlerimin benim hiç doğmamış olmamı istediklerini düşünürdüm.	1	2	3	4	5		
9	Ailemden birisi bana öyle kötü vurmuştu ki doktora ya da hastaneye gitmem gerekmişti.	1	2	3	4	5		
10	Ailemle ilgili değiştirmek istediğim bir şey yoktu.	1	2	3	4	5		
11	Ailemdeki insanlar bana o kadar şiddetle vuruyorlardı ki vücudumda morartı ya da izler kalıyordu.	1	2	3	4	5		
12	Kemer, sopa, ip ya da başka sert bir cisimle cezalandırılıyordum.	1	2	3	4	5		
13	Ailemdeki insanlar birbirlerine ilgi gösterirlerdi.	1	2	3	4	5		
14	Ailemdeki insanlar bana kırıcı ya da aşağılayıcı sözler söylerlerdi.	1	2	3	4	5		
15	Fiziksel olarak istismar edildiğime inanıyorum.	1	2	3	4	5		
16	Mükemmel bir çocukluk geçirdim.	1	2	3	4	5		
17	Bana o kadar kötü vuruyorlar ya da dövüyorlardı ki öğretmen, komşu ya da bir doktorun bunu farkettiği oluyordu.	1	2	3	4	5		
18	Ailemden birisi benden nefret ederdi.	1	2	3	4	5		
19	Ailemdekiler kendilerini birbirlerine yakın hissederlerdi.	1	2	3	4	5		
20	Birisi bana cinsel amaçla dokunmaya çalıştı ya da kendisine dokundurtmaya çalıştı	1	2	3	4	5		
21	Kendisi ile cinsel bir şey yapmadığım takdirde bana zarar vermekle ya da hakkımda yalanlar söylemekle beni tehdit eden birisi vardı.	1	2	3	4	5		
22	Dünyanın en iyi ailesine sahiptim.	1	2	3	4	5		
23	Birisi beni cinsel şeyler yapmaya ya da cinsel şeyleri izlemeye zorladı.	1	2	3	4	5		
24	Birisi beni taciz etti (cinsel olarak benden yararlandı).	1	2	3	4	5		
25	Duygusal olarak istismar edildiğime inanıyorum.	1	2	3	4	5		
26	İhtiyacım olduğunda beni doktora götürecek birisi vardı.	1	2	3	4	5		
27	Cinsel olarak istismar edildiğime inanıyorum.	1	2	3	4	5		
28	Ailem bir güç ve destek kaynağıydı.	1	2	3	4	5		
	Fiziksel İstismar: 9, 11, 12, 15, 17							
Duygusal İstismar: 3, 8, 14, 18, 25								
Cinsel İstismar: 20, 21, 23, 24, 27								
Fiziksel İhmal: 1, 2, 4, 6, 26								
Duygusal İhmal: 5, 7, 13, 19, 28								
Duyyuda IIIIIa. 5, 1, 10, 10, 20								

Ters Maddeler: 2, 5, 7, 13, 19, 26, 28

Minimizasyon¹: 10, 16, 22

¹ Bu maddelerin ters çevrilmesine gerek yoktur. Belirtilen 3 madde katılımcıların deneyimlerini en az şekilde ifade etmesine veya inkâr etmesine yönelik eğilimlerini değerlendirmektedir. Ayrıca bu maddeler kötü muamelenin potansiyel eksik raporlanmasını belirtmektedir. Minimizasyon/Reddetme ile ilgili olan üç madde ikiye ayrılmaktadır. Maddelere verilen "çok sık"=1, diğer cevaplar=0 şeklinde puanlanmaktadır. Elde edilen puanlar toplanır ve toplamda puan bir (1) ya da daha fazla ise bu kötü muamelenin yanlış veya eksik şekilde beyan edildiğini gösterir.