# Summary Examination of the Childhood Trauma Questionnaire in Young-Adults: Preliminary Findings on Confirmatory Factor Analysis

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Worldwide, approximately three hundred million children aged 2-4 are continually exposed to violence or punishment by their parents or caregivers (World Health Organization [WHO], 2021). Child abuse and neglect can bring about physical, psychological, sexual and social harm to the child both in the short and long term (Oral et al., 2001; Taner & Gökler, 2004). Numerous studies have shown the importance of retrospectively evaluating child abuse and neglect experiences in terms of affecting the psychological health of the individual in the long term. The Childhood Trauma Questionnaire (CTQ) is widely used in the assessment of childhood traumatic experiences, but there are few studies relating to the psychometric properties of the CTQ. The present study examines the construct validity of the CTO with confirmatory factor analysis (CFA) in a non-clinical young-adult sample in Türkiye.

# Method

### **Participants**

The sample of the study consist of 302 women (M = 20.7, SD = 1.68) and 271 men (M = 21.4, SD = 1.66), a total of 573 individuals who continue their undergraduate education at state and private universities in Türkiye.

# **Instruments**

**Demographic Form:** Demographic information of the participants, such as gender and age, was obtained through this form.

The Childhood Trauma Questionnaire: The original version of the scale was developed by Bernstein et al. (1994). This first version consisted of 53 items as a combination to five subscales such as sexual, physical, emotional abuse and emotional and physical neglect. The questionnaire is a self-assessment tool developed

to assess retrospectively in childhood and adolescence abuse and negative experiences before the age of 20 (Bernstein et al., 2003). The short version of the scale includes 28 items (Bernstein et al., 2003). The Turkish standardization of the short version of the questionnaire was conducted by Şar, Öztürk, and İkikardeş (2012). In the adaptation study of the questionnaire, the Cronbach's alpha coefficient was .93 and the Guttman two-half reliability coefficient was .97. In their study, it was stated that the Cronbach's alpha coefficients obtained from the factor structures were also high (except for physical neglect, which cannot be calculated due to a single substance). In their study, Cronbach's alpha coefficients were found to be .89 for physical abuse, .87 for emotional abuse, .80 for sexual abuse and .88 for emotional neglect.

In the present study, Cronbach's alpha coefficients are .80 for physical abuse, .77 for emotional abuse, .86 for sexual abuse, .93 for emotional neglect and .57 physical neglect.

## Procedure

The research was carried out after receiving ethics committee approval at A... University. Participants were requited through the Students' Community social media accounts from their universities. The questionnaire was administered in person or online in groups or individually. In person administrations took place before the COVID 19 Pandemic between January and February 2020. The online questionnaire was collected during the pandemic between March and April 2020.

# Results

Our analyses confirmed the Turkish version of 28 items and the five-dimensional factorial structure (i.e., physical abuse, sexual abuse and emotional abuse, and

physical neglect and emotional neglect) in a non-clinical sample group. The goodness of fit index values obtained whereby CFA are within the generally accepted limits in the literature. This scale was compatible and valid ( $\chi 2$  [ 262, N = 573] = 947.47, p < .01,  $\chi 2/sd = 3.61$ , CFI = .91, SRMR = .05, RMSEA = .06).

We found a low level (.26) correlation between item 9 and item 11 in the physical abuse subscale. Our analysis also showed a moderate (-.47) negative correlation between item 20 and item 27 in the sexual abuse subscale and a moderate (.56) correlation between item 13 and item 19 in the emotional neglect subscale.

### Discussion

The present study found that there is a very high (.93) relationship between physical neglect and emotional neglect subscales, and high (.77) relationship between physical abuse and emotional abuse subscales. These findings are consistent with the prior studies on the psychometric properties of the CTQ in Slovakia (Petrikova et al., 2021) and in Nigeria (Aloba et al., 2020). Given strong relationship between physical neglect and emotional neglect subscales and between different age groups, we suggested that the subscales of neglect are like each other. Therefore, it may not be possible to homogeneously separate the items specific to those subscales.

Contrary to these findings, in the study, it is seen that our analysis showed a low level of relationship (.07) between the sexual abuse subscale and the physical neglect subscale. Moreover, we found a moderate relationship between emotional abuse subscale and sexual abuse subscale (.47), and between physical abuse subscale and sexual abuse subscale (.44). In a recent study, Aloba et al. (2020) found, a low level of relationship between the subscales of sexual abuse and physical neglect (.38) and a lower level of relationship between the subscales of emotional abuse and sexual abuse (.17). The authors also found a higher correlation between the subscales of physical abuse and sexual abuse (.74). Overall, our study and Aloba et al.'s study indicate that the items measuring sexual abuse and physical neglect are heterogeneous.

We identified a low level of relationship between the latent variables of emotional abuse and physical neglect (.21), sexual abuse and emotional neglect (.16), emotional abuse and emotional neglect (.30), and physical abuse and emotional neglect (.25). These findings support Aloba et al.'s (2020) study. Yet, they are not in line with Petrikova et al.'s (2021) study. This can be explained by the fact that the study, which showed different results, stated that the factor loads of all subscales varied between .64 and .98; in other words, it seems important

in terms of showing that the items have different meanings.

Prior studies conducted in Türkiye showed that the accessible correlation values for the subscales vary between .53 and .97 (Aydın, 2018; Aytaçalp & Durat, 2019; Şenkal, 2013; Tunç, 2020; Yiğit, 2013). In the present study that the items in the emotional abuse and physical neglect subscales did not have error covariance. As a result, we suggest that the items in the emotional abuse and physical neglect subscales exhibit relatively higher construct validity than that the subscales of physical abuse, sexual abuse, and emotional neglect.

The present study is the first study to examine the factorial structure of the CTQ in a non-clinical young-adult sample in Türkiye. We confirmed the five-sub-scales factorial structure of the CTQ. We suggest that it is necessary for practitioners to consider that the physical neglect subscale has a low internal consistency.