

# Adaptation and Psychometric Evaluation of the Turkish Version of the Coronavirus Anxiety Scale

Hayri KOÇ<sup>ID</sup>, Coşkun ARSLAN<sup>ID</sup>

Necmettin Erbakan University,  
Guidance and Psychological  
Counseling, Konya, Turkey

## Abstract

Coronavirus pandemic caused anxiety in public. Therefore, this anxiety should be identified quickly. This study investigates the psychometric properties of the Turkish version of Coronavirus Anxiety Inventory (CAS), which determines the anxiety associated with the COVID-19 crisis. The research sample consists of 904 participants from 56 provinces of Turkey. Participants' age ranged from 17 to 71. The exploratory and confirmatory factor analysis revealed a good unidimensional structure with a Turkish sample. The correlation between the CAS Turkish version and the Burnout Scale ( $0.39 p < 0.01$ ) is significant as the convergent validity. Also, correlation between the CAS Turkish version and the Brief Resilience Scale ( $-0.23 p < 0.01$ ) is significant as the discriminant validity. The internal consistency coefficient (Cronbach's Alpha) was found 0.81. As a result of the Item Discrimination analysis, it was seen that each of the 5 items was discrimination at the desired level. The item-total correlation values in the scale ranged from 0.73 to 0.79. Overall findings showed that the psychometric properties of the Turkish version of the Coronavirus Anxiety Scale were sufficient.

**Keywords:** COVID-19, anxiety, burnout, psychological resilience

## Öz

### Koronavirüs Anksiyete Ölçeği Türkçe Versiyonunun Uyarlanması ve Psikometrik Değerlendirilmesi

Koronavirüs pandemisi toplumda endişeye neden oldu. Bu nedenle bu kaygı hızla tespit edilmelidir. Bu çalışma COVID-19 krizi ile ilişkili anksiyeteyi belirleyen Koronavirüs Anksiyete Ölçeği'nin (KAÖ) Türkçe versiyonunun psikometrik özelliklerini incelemeyi amaçlamaktadır. Araştırma örneklemini Türkiye'nin 56 farklı ilinden 904 katılımcıdan oluşmaktadır. Katılımcıların yaşları 17-71 arasında değişmektedir. Açıklayıcı ve doğrulayıcı faktör analizi, Türk örneklemini ile iyi bir tek boyutlu yapı ortaya koymuştur. KAÖ Türkçe versiyonunun benzerlik geçerliliği için kullanılan Tükenmişlik Ölçeği ile ilişkisi ( $0.39 p < 0.01$ ) anlamlıdır. Ayrıca KAÖ Türkçe versiyonunun ayırtedici geçerliliği için kullanılan Kısa Psikolojik Sağlamlık Ölçeği ( $-0.23 p < 0.01$ ) arasındaki ilişkisi anlamlıdır. İç tutarlılık katsayısı (Cronbach's Alpha) 0.81 olarak bulunmuştur. Madde Ayırt edicilik analizi sonucunda beş maddenin her birinin istenilen düzeyde ayırt edici olduğu görülmüştür. Ölçekte madde-toplam korelasyon değerleri 0.73 ile 0.79 arasında değişmektedir. Genel bulgular, Koronavirüs Anksiyete Ölçeği'nin Türkçe versiyonunun psikometrik özelliklerinin yeterli olduğunu göstermiştir.

**Anahtar Kelimeler:** COVID-19, anksiyete, tükenmişlik, psikolojik sağlamlık

**Correspondence / Yazışma:**  
Hayri KOÇ, Necmettin Erbakan  
University, POBox 42090, Meram,  
Konya, Turkey

**Phone:** +90 332 323 82 20  
**E-mail:** hayri5067@gmail.com

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## BACKGROUND

Scientists have detected a novel coronavirus (COVID-19) that emerged as a pandemic in Wuhan, China, in December 2019. This infectious disease later spread all around the world and created a global crisis. The World Health Organization (WHO, 2020a) identified the COVID-19 pandemic as an “international public health emergency.” on January

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30, 2020. Although COVID-19 show different symptoms in individuals, their general symptoms are fever, chills, cough, runny nose, sore throat, difficulty breathing, muscle pain, nausea, vomiting, and diarrhea (Wang, Wang, Chen, & Qin, 2020). Heart problems, and respiratory failure are observed in individuals with more severe disease and this may cause death (Holshue et al., 2020). The reason for the difference in mortality rates is related to the measures taken by countries to slow viral transmission since the virus starts to appear (Casale & Flett, 2020). The Ministry of Health declared the first case of the disease for the coronavirus in Turkey on March 10, 2020. In the after days, the number of people affected by the virus and passed away increased rapidly. In Turkey, a total of 13,014 people lost their lives because of coronavirus, while the daily new cases were announced that 29,132 on November 27, 2020.

COVID-19 interrupted every aspect of daily life. The thought of being affected by a potentially deadly disease created negative emotions in individuals (Polizzi, Lynn, & Perry 2020). Individuals are seeking more social support in difficult situations, but the spread of COVID-19 has limited the interaction of individuals. This discrepancy has been stated that can negatively affect people's self (Casale, & Flett, 2020). In previous studies, pandemic diseases have been reported to increase levels of fear, anxiety, depression, and stress (Balaratnasingam & Janca, 2006; Kim et al., 2019; Leung et al., 2003; Wu, Chan, & Ma, 2005). According to recent studies, it has been stated that coronavirus outbreak can cause individuals to experience fear, anxiety, depression, and stress (Ahorsu et al., 2020; Zandifar & Badrfam, 2020; Wang et al., 2020). Research conducted with large samples indicated that individuals were anxious about the coronavirus case (Angus Reid Institute, 2020; Aubrey, 2020; Gerhold, 2020; Wang, Di, Ye, & Wei, 2020). Negative emotions caused by coronavirus pandemic up to suicide have been reported in individuals. (Goyal et al., 2020). The negative psychological effect may continue in individuals even after the pandemic has been controlled (Onyeaka, Zahid, & Patel, 2020).

In society, the uncertainty of COVID-19 and the rise in death rates caused the anxiety level to increase (Banerjee, 2020). It has been reported that increased anxiety level weakens immunity against COVID-19 and increases the risk of virus infection (WHO, 2020b). General population studies show that the anxiety level caused by COVID-19 is as follows. 49% in Iran (Moghanibashi-Mansourieh,

2020), 64.5% in Saudi Arabia (Al Saleh et al., 2020), 19% in Spain (Ozamiz-Etxebarria, 2020), 21.6% in the United Kingdom (Shevlin et al., 2020), 20.0% in Ireland (Hyland et al., 2020), 52.1% in Taiwan (Wong, et al., 2020), 45.1% in Turkey (Özdin, et al., 2020). In a meta-analysis study, the rate of anxiety caused by COVID-19 in general populations is 31.9% (Salari et al., 2020). These studies show that COVID-19 increases the anxiety level of individuals.

The effect of COVID-19 on individuals' mental health should be quickly understood and appropriate interventions are required. In this context, the Coronavirus Anxiety Scale (CAS) was developed to determine the negative psychological effect of the outbreak in individuals (Lee, 2020). On the date of this study, there was an adapted Turkish scale to measure the Fear of COVID-19 (Haktanir, Seki, & Dilmaç, 2020; Kaya, Dünder, & Çakiroğlu, 2020; Satıcı, Gocet-Tekin, Deniz, & Satıcı, 2020) and another scale that measures Coronavirus Phobia (Arpaci, Karataş & Baloglu, 2020). In addition to these scales, the coronavirus anxiety scale is a short, useful and suitable measurement tool for Turkish society. CAS measures anxiety and dysfunctional thinking symptoms according to DSM-5 criteria. This scale includes various dimensions of coronavirus anxiety; specifically cognitive, behavioral, emotional, and physiological (Lee, 2020). In addition, the scale's rating is consistent with the American Psychiatric Association's psychiatric symptoms assessment system (American Psychiatric Association, 2013). CAS can help identify factors that sustain COVID-19 anxiety and develop interventions to combat them (Ransing et al., 2020). Therefore, this study determines the validity and reliability of the Turkish version of the Coronavirus Anxiety Scale (CAS).

## METHODS

### Participants and Procedure

The original version of the Coronavirus Anxiety Inventory (CAS) was translated into Turkish as suggested by Van Widenfelt et al. (2005).

The authors, who have command of both Turkish and English, performed the translation independently. Then, the authors reached a consensus. The scale then translated back into English by a bilingual linguist in Turkish and English. Later, researchers and linguist reviewed all

elements in Turkish and English, and semantic differences investigated.

Then, the personal information form and scales were shared with the participants using the online survey method. Participants were reached via social media (e.g. Facebook, Whatsapp, etc.). Also, participants were asked to share our study link with others. Re-participation in the survey was prevented by making the necessary changes to the study link created through Google Forms. It was stated that the personal information given to the participants would be kept confidential and that individual evaluation would not be conducted.

The research sample from 56 provinces of Turkey, 643 (71%) women, and 261 (29%) men, a total of 904 people. The ages of the participants are in the range of 17–71, and the mean age is 29.8 (SD=10.75). Of the participants stated that 100 (11.1%) people had a chronic disease, 804 (88.9%) people did not have a chronic disease. Of the participants 551 (61%) people were single, and 353 (39%) were married.

The graduation status of the participants is as follows. Thirteen participants (1.4%) primary school, 10 participants (1.1%) middle school, 65 participants (7.2%) high school, 42 participants (4.6%) associate degree, 644 participants (71.2%) bachelor's degree, 131 participants (14.5%) master's degree.

The procedure was in accordance with the Helsinki Declaration. Also, this study approved by the Necmettin Erbakan Scientific Research and Ethical Board (Meeting Date: 08.06.2020, Decision Number: 2020/46).

## Measures

In this study, Coronavirus Anxiety Scale (CAS), Burnout Inventory Short Version, and Brief Resilience Scale were administered.

**Coronavirus Anxiety Scale (CAS):** The scale was used to measure of participants' coronavirus anxiety. Developed by Lee (2020). The scale consists of 5 items (e.g., "I felt dizzy, lightheaded, or faint when I read or listened to news about the coronavirus." and "I had trouble falling or staying asleep because I was thinking about the coronavirus."). Individuals are asked to answer the frequency of events in the form of a 4-point Likert type in the last two weeks (0=None and 4=almost every day in the last two weeks). It

was found by the developer of the scale that the scale good fits ( $\chi^2/sd=0.54$ , CFI=1.00, RMSEA=0.00, SRMR=0.01) and has an acceptable internal consistency (Cronbach alpha=0.93).

**Burnout Inventory Short Version (BISV):** The scale was used to measure participants' burnout. Developed by Pines (2005). The scale consists of 10 items (e.g., "I am hopeless" and "I have difficulty sleeping") Individuals are asked to answer the scale as a 6-point Likert type (1=None and 6=Always). The Turkish adaptation of this scale was made by Tümkaya, Çam & Çavuşoğlu (2009). In the Turkish version of the scale, the authors found that the items explained 55.92% of the total variance and had acceptable internal consistency (Cronbach alpha=0.91).

**Brief Resilience Scale (BRS):** The scale was used to measure participants' resilience levels. Developed by Smith et al. (2008). The scale consists of 6 items (e.g., "I can recover myself quickly after hard times" and "It does not take long to recover myself after stressful situations"). Individuals are asked to answer the scale as 5-point Likert type (1=Not Available and 5=Completely Suitable). The Turkish adaptation of this scale was made by Doğan (2015). The author found that the Turkish version of the scale good fits ( $\chi^2/sd=1.83$ , CFI=0.99, RMSEA=0.05, SRMR=0.03) and has acceptable internal consistency (Cronbach alpha=0.83).

**The descriptive questionnaire:** The questionnaire was used to obtain descriptive information about the participants, including gender (female and male), age, chronic disease (no, yes), marital status (married and single), education level (primary school, middle school, high school, associate degree, bachelor's degree, master's degree), social isolation status (I completely apply social isolation; I go out in rare situations and apply social isolation; I do not need social isolation application.).

## Data Analysis

Exploratory and confirmatory factor analysis performed to determine the construct validity of the scale. EFA (Exploratory Factor Analysis) performed with half of the dataset, and CFA (Confirmatory Factor Analysis) performed using the other half.

In EFA used principal components analysis and varimax rotation method. Model fit of the item-factor structure tested by CFA. As reported by Kline (2015)  $\chi^2/df < 3$ , CFI > 0.90, SRMR < 0.10, RMSEA < 0.08 considered

acceptable fit. Item-total correlation coefficients, item discrimination, and internal consistency investigated. Besides, the correlations between coronavirus anxiety, burnout, and resilience examined to establish the convergent and discriminant validity of the scale.

COVID-19 has caused dramatic changes in the daily lives of individuals. Thinking that these changes will continue for a long time can lead to negative emotions in the general population. One of these emotions is burnout. The literature shows that burnout studies related to COVID-19 are conducted on healthcare workers. However, researchers emphasized that general population studies should also consider stress, anxiety, and burnout caused by COVID-19 together (Yildirim, & Solmaz, 2020). Also, resilience is the ability of individuals to overcome difficult situations and adapt to new situations (Tugade & Fredrickson, 2004). Therefore, the burnout scale was chosen for convergent validity, and the resilience scale was chosen for discriminant validity.

## RESULTS

### Exploratory Factor Analysis

To determine the factor structure of the CAS, EFA first performed. KMO and Barlett tests conducted to test the suitability of the data collected from the study group for factor analysis.

As a result of the exploratory factor analysis conducted for the coronavirus anxiety scale, the KMO. 81 and Barlett test  $\chi^2$  values found to be 1359.78 ( $p < 0.001$ ). The fact that KMO is higher than 0.60, and Barlett test is meaningful shows that the data are suitable for factor analysis (Büyüköztürk, 2020). The CAS reveals a unidimensional structure as in its original form. Accordingly, as a result of the EFA, a single factor structure that explains 56.51% of the total variance obtained. The factor loads of the scale items and the explained variance are given in Table 1.

### Confirmatory Factor Analysis

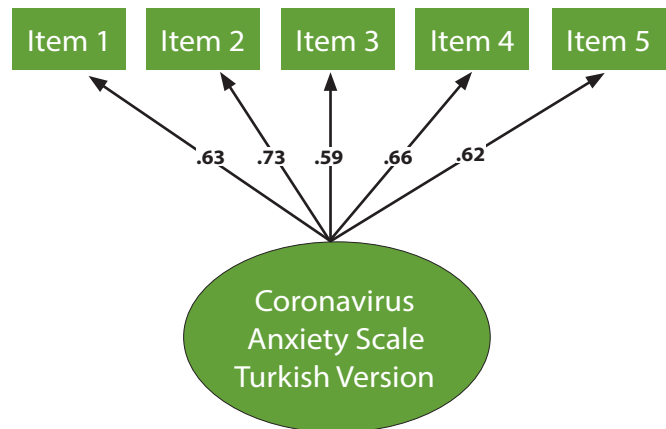
The model fit of the item-factor structure analyzed by confirmatory factor analysis (CFA). To determine whether the coronavirus anxiety structure is measured equally between demographic groups, many multiple groups CFAs have been applied. To test the equivalence between the groups, the factor loads of the items in the scale compared between

the groups, and the multiple group CFA results obtained compared with the structural model.  $\Delta$ CFI difference tests used to compare models in measurement equivalence, and it is recommended that the CFI value be <0.01 smaller among the compared models (Cheung, & Rensvold, 2002).

CFA conducted to test whether the five items identified were compatible in a single coronavirus anxiety construct. CFA findings ( $\chi^2/df=0.99$ ; CFI=1.00; SRMR=0.006; RMSEA=0.00) show that the single factor model fits perfectly (Figure 1).

**Table 1:** Factor Loading of Coronavirus Anxiety Scale

Item	One factor
Eat (Item 1)	0.76
Sleep (Item 2)	0.75
Dizzy (Item 3)	0.75
Stomach (Item 4)	0.75
Froze (Item 5)	0.75
Explained variance total, 56.51%.	



**Figure 1.** Single-factor CFA model.

Multi-group CFAs examined in terms of demographic variables of CAS Turkish version structure by gender (female and male), age (18–29 vs 30 and older), chronic disease (no, yes), and marital status (married and single).

First, structural equivalence tested on the free model, where no parameter value equalized for the gender variable. The fit indices obtained as a result of the analysis indicated that the scale had structural equivalence ( $\chi^2/df=0.65$ ; CFI=1.00; SRMR=0.006; RMSEA=0.00). This finding shows that the factorial structure of the CAS is



equivalent in terms of gender.  $\Delta CFI < 0.01$  indicates that factor loads of scale items are equivalent in terms of gender groups. Second, structural equivalence tested on the free model, where no parameter value was equalized for the age variable. The fit indices obtained as a result of the analysis indicated that the scale had a structural equivalence ( $\chi^2/df=1.94$ ; CFI=0.99; SRMR=0.012; RMSEA=0.03). This finding shows that the factorial structure of the CAS is equivalent in terms of age variable.  $\Delta CFI < 0.01$  indicates that factor loads of scale items are equivalent in terms of age groups. Afterward, structural equivalence tested on the free model in which no parameter value was equalized for the chronic disease variable. The fit indices obtained the analysis indicated that the scale had a structural equivalence ( $\chi^2/df=1.94$ ; CFI=0.99; SRMR=0.012; RMSEA=0.03). This finding shows that the factorial structure of the CAS is equivalent in terms of chronic disease variable.  $\Delta CFI < 0.01$  indicates that factor loads of scale items are equivalent in terms of chronic disease groups. Finally, structural equivalence tested on the free model in which no parameter value was equalized for the marital status. The fit indices obtained the analysis indicated that the scale had a structural equivalence ( $\chi^2/df=1.04$ ; CFI=1.00; SRMR=0.002; RMSEA=0.003). This finding shows that the factorial structure of the CAS is equivalent in terms of marital status variable.  $\Delta CFI < .01$  indicates that factor loads of scale items are equivalent in terms of marital status groups.

### Correlation and Variance Analysis

The correlations between coronavirus anxiety total scores and demographic variables (Age, Gender, Marital Status, Chronic Disease) examined and only has a significant relationship with the gender variable. Women appear to report higher coronavirus anxiety than men (see Table 2). The correlation between the CAS Turkish version and the

Burnout Scale (0.39  $p < 0.01$ ) is significant as the convergent validity. Also, correlation between the CAS Turkish version and the Brief Resilience Scale (-0.23  $p < 0.01$ ) is significant as the discriminant validity.

Variance analysis (ANOVA) showed that there some differences in CAS Turkish version scores according to educational status,  $F(5.898)=2.570$ ,  $p < .05$ . Scheffe, a post hoc analysis, used to find the direction of difference. Findings, showed that primary school graduates ( $M=4.38$ ;  $SD=5.36$ ) have significantly higher corona anxiety than bachelor's degree ( $M=1.97$ ;  $SD=2.96$ ) and master's degree ( $M=1.75$ ;  $SD=2.80$ ). Also, there is no difference ( $F(2.901)=1.610$   $p > .05$ ) in CAS Turkish version scores according to individual social isolation status (I completely apply social isolation; I go out in rare situations and apply social isolation; I do not need social isolation application.

### Internal Consistency, Item Discrimination and Item-Total Correlations

In this study, the internal consistency coefficient of the CAS Turkish version (Cronbach's Alpha) was found 0.81. The reliability coefficients of the measurements were stated to be sufficient when the reliability coefficients obtained at 0.70 and above. In addition, item discrimination and item total correlation values calculated to determine the Lower-upper group difference in the scale. The difference between 27% lower and upper groups ( $n_1=244$ ;  $n_2=244$ ), which are higher and lower than the scale items, examined with the t-test for independent groups. As a result of the analysis, it seen that each of the 5 items was discrimination at the desired level ( $p < 0.001$ ) according to the t-test results. The item-total correlation values of the 5 items in the scale ranged from 0.73 to 0.79 (see Table 3). It was stated that the items with an item-total correlation coefficient  $r \geq 0.40$  are good (Büyüköztürk, 2020).

**Table 2:** Zero-order Correlation

Variable	CAS
Age	0.02
Gender	0.13**
Marital status	0.02
Chronic Disease	0.02
Number of People Living Together	0.04
Burnout	0.40**
Resilience	-0.23**

N, 904; CAS, corona anxiety scale gender (0- Male; 1- Female); Marital status, (0- Single; 1- Married); Chronic disease (0- No; 1- Yes);  $p < 0.01$ .

## DISCUSSION

CAS is a useful 5-item measurement tool developed during the COVID-19 pandemic. CAS items include anxiety symptoms such as dizziness, sleep disturbances, tonic immobility, appetite loss, and abdominal distress. These items are consistent with DSM-V (Lee, 2020). In this respect, it is thought that it has a more robust theoretical infrastructure than the Fear of COVID-19 Scale (Haktanir et al., 2020; Kaya et al., 2020; Satıcı et al., 2020), which has been adapted to Turkish. Also, fewer items than the

**Table 3:** Lower-upper item discrimination and item-total correlation

Item		<i>M</i>	<i>SD</i>	<i>t</i> (Lower %27- Upper %27)	Item-total correlation	<i>p</i>
Dizzy	Lower Group	0.00	0.00	-17.50	0.77	0.00**
	Upper Group	1.37	1.23			
Sleep	Lower Group	0.00	0.00	-23.58	0.79	0.00**
	Upper Group	1.64	1.09			
Froze	Lower Group	0.00	0.00	-13.89	0.76	0.00**
	Upper Group	0.93	1.05			
Eat	Lower Group	0.00	0.00	-16.15	0.74	0.00**
	Upper Group	0.98	0.95			
Stomach	Lower Group	0.00	0.00	-15.56	0.73	0.00**
	Upper Group	1.00	1.00			

p&lt;0.01.

Coronavirus Phobia (Arpaci et al., 2020) scale may provide convenience in reaching large populations. Therefore, this study adapted the CAS (Lee, 2020) into Turkish. First, the factor structure of the Turkish version was examined with exploratory factor analysis and confirmatory factor analysis. Second, the correlation of the scale with the burnout and resilience scales of the coronavirus anxiety scale for convergent and discriminant validity was at the center of the research. Finally, the internal consistency of the scale, lower-upper group discrimination, and item-total correlations were examined. The study showed that the Turkish version of the CAS was a valid and reliable tool for individuals aged 17–71.

The results of the EFA and CFA obtained from this study yielded a unidimensional solution as in the original version. The results obtained were similar to the original version of CAS (Lee, 2020). In this study, both EFA and CFA supported a single-factor structure. The single-factor structure was also reported in the adaptation studies of CAS other languages such as Bangla (Ahmed et al., 2020), Cuban (Broche-Pérez et al., 2020), Korean (Choi et al., 2020), and Arabic (Alyami et al., 2020).

In this study, measurement invariance is supported at the level of configural and metric invariance. Therefore, it is possible to claim that individuals with different demographic characteristics (men and women; 18–29 vs-30 and older; there are chronic and no chronic diseases; single and married) have a similar conceptual understanding when answering the CAS. The findings obtained, support the measurement invariance on the gender and age variable,

similar to the original version of the CAS. Also, the Bangla version of CAS supports the measurement invariance results in this study. In addition to these, this study contains evidence of measurement invariance according to chronic disease and marital status.

The correlations between the CAS and other scales (burnout, resilience) used in this study are as expected. Burnout is a loss of desire, energy, idealism, and purpose. Burnout causes stress, despair, helplessness (Pines & Aronson, 1988). Therefore, was expected a positive correlation between coronavirus anxiety and burnout. A positive correlation ( $r=0.40$ ) was found between coronavirus anxiety and burnout. This finding is higher than the relationship between burnout and death anxiety ( $r=0.17$ ; Malet et al., 1991), additionally similar to the relationship between burnout and general anxiety ( $r=0.45$ ; Zhou et al., 2016). Resilience is defined as self-recovery after stressful experiences (Smith et al., 2008). It has been stated that resilience can prevent the negative impact of traumatic events on the individual (Lee, Ahn, Jeong, Chae & Choi, 2014). Therefore, a negative relationship was expected between coronavirus anxiety and resilience. A negative correlation was found between coronavirus anxiety and resilience ( $r=-0.23$ ). This finding is similar to the relationship between an individual's current anxiety and resilience ( $r=-.27$ ; Burns, Anstey & Windsor, 2011).

The Cronbach alpha ( $\alpha=0.81$ ) value of this study is acceptable. Other versions of the value scale in this study are similar to Bangla ( $\alpha=0.87$ ; Ahmed et al., 2020), Cuban ( $\alpha=0.88$ ; Broche-Pérez et al., 2020) Mexico ( $\alpha=0.86$ ; Mora-Magaña et al., 2020), Korean ( $\alpha=0.85$ ; Choi et al., 2020).

The difference between 27% lower and upper groups, which are higher and lower than the scale items, shows that the scale is discriminative. Also, the item-total correlations of the scale are between .73 and .79, and these values are acceptable. The item total correlation is better than the CAS Bangla version (Ahmed et al., 2020).

CAS Turkish adaptation studies were not available in literature as far as we know at the time of this writing (May 2020). However, in the following days, different adaptation studies were seen in the literature. Other adaptation studies have used only CFA in scale adaptation (e.g. Akkuzu et al., 2020; Evren et al., 2020). In this study, the single factor structure supported by both EFA and CFA. Also, while measurement invariance not reported in other adaptation studies, measurement invariance reported in this study. When the study strength is considered, the Turkish version of the Coronavirus Anxiety Scale can be used for different genders, ages, chronic disease, marital status. However, this study has some limitations. First, as with most studies using self-evaluation, it is possible that some participants did not meticulously respond to the scales in this study. Second, data collected using an online survey method. Third, this study does not assess the symptomatology associated with generalized anxiety so CAS scores may not be specific to COVID-19.

Despite these limitations, this study provides a brief psychological health screening adapted in Turkish to determine the psychological effects of coronavirus. This scale can be used by experts who will contribute to the psychological well-being of Turkish society to identifying and alleviate anxiety caused by the coronavirus.

#### Appendix A: Turkish Version of Coronavirus Anxiety Scale Items and Scoring

##### Turkish version of coronavirus anxiety scale items

1. Koronavirüs ile ilgili haberleri okuduğumda ya da dinlediğimde başım döndü, sersemlemiş veya baygın hissettim.
2. Koronavirüs hakkında düşündüğüm için uykuya dalma veya uykuda kalma konusunda sorun yaşadım.
3. Koronavirüs hakkında düşündüğümde ya da bilgiye maruz kaldığımda felç olmuş veya donmuş gibi hissettim.
4. Koronavirüs hakkında düşündüğümde ya da bilgiye maruz kaldığımda yemek yemeye ilgimi kaybettim.
5. Koronavirüs hakkında düşündüğümde ya da bilgiye maruz kaldığımda mide bulantısı hissettim veya mide problemleri yaşadım.

## Scoring of the Coronavirus Anxiety Scale

Coronavirus Anxiety Scale is five items. Individuals mark according to their experience in the last two weeks (0 - Nothing, 1- Rare, less than a day or two, 2- A few days, 3- More than seven days, 4 - Almost every day in the past two weeks). The scale is unidimensional. The minimum score that can be obtained from the scale is 0; the maximum score is 20. There are no reverse-scored items in the Coronavirus Anxiety Scale.

**Ethics Committee Approval:** The study was approved by the Scientific Research Ethics Committee of Necmettin Erbakan (date and number of approval: 08.06.2020/2020/46).

**Informed Consent:** Informed consent was obtained from all individual participants included in the study.

**Peer-review:** Externally peer-reviewed.

**Conflict of Interest:** The authors declare no conflict of interest.

**Financial Disclosure:** No financial disclosure was received.

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