

# Turkish Version of Cognitive Behavioural Avoidance Scale: Psychometric Properties and Psychopathological Correlates

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## Abstract

The present study examined the psychometric properties of the Turkish version of Cognitive Behavioural Avoidance Scale (CBAS-TR) in a sample of 330 Turkish university students. The CBAS assesses people's tendency toward several dimensions of avoidance. The reliability and validity analyses of the Turkish version of the scale indicated that the CBAS-TR had adequate psychometric properties and it is a reliable and valid measure that can be employed in Turkey. Internal consistency (Cronbach's  $\alpha=0.92$ ) and test-retest reliability ( $\alpha=0.87$ ,  $r=0.66$ ,  $ICC=0.86$ ) scores were satisfactory. Concurrent validity studies on CBAS-TR indicated significant correlations with depression, anxiety, tolerance to distress, psychological inflexibility, and suppression. Consistent with the original CBAS, factor analysis of CBAS-TR identified four components (i.e. Cognitive Social Avoidance, Behavioural Social Avoidance, Cognitive Nonsocial Avoidance, and Behavioural Nonsocial Avoidance) that accounted for 46.8% of the total variance. There was a divergence from the original form of CBAS, only for one item (i.e. item 28) which was loaded to a different factor (i.e. to "Behavioural Social Avoidance", and not to "Behavioural Nonsocial Avoidance") in the present study. Possible contributors to this finding were suggested. Lastly, avoidance tendencies and avoidance strategy types of participants with low and high levels of depression and anxiety were compared; group differences were discussed.

**Keywords:** Avoidance, depression, anxiety, coping, scale adaptation

## Öz

### Bilişsel-Davranışsal Kaçınma Ölçeğinin (BDKÖ) Türkçe Versiyonu: Psikometrik Özellikler ve Psikopatolojik Eşlenikleri

Bu çalışmada Bilişsel-Davranışsal Kaçınma Ölçeği Türkçe formunun (BDKÖ-TR) psikometrik özellikleri 330 üniversite öğrencisinden oluşan bir örnekleme incelenmiştir. BDKÖ kişilerin kaçınmanın çeşitli boyutlarına yakınlıklarını ölçmektedir. Ölçeğin Türkçe uyarlaması üzerinde gerçekleştirilen güvenirlik ve geçerlik çalışmaları BDKÖ-TR'nin psikometrik özellikler açısından uygunluğunu ve Türkiye'de kullanılabilirlik güvenirli ve geçerli bir ölçüm olduğunu göstermiştir. İç-tutarlılığı (Cronbach's  $\alpha=0,92$ ) ve test-tekrar test güvenirliği ( $\alpha=0,87$ ,  $r=0,66$ ,  $ICC=0,86$ ) tatmin edicidir. BDKÖ-TR'nin eşzamanlı geçerliğine ilişkin çalışmalar, depresyon, kaygı, sıkıntıya dayanma, psikolojik esneklik ve bastırma ile anlamlı düzeyde ilişkili olduğunu göstermiştir. BDKÖ'nün orijinaliyle uyumlu şekilde, açıklayıcı faktör analizi sonuçlarına göre BDKÖ-TR, toplam varyansın %46,8'ini açıklayan dört faktörden (Bilişsel Sosyal Kaçınma, Davranışsal Sosyal Kaçınma, Bilişsel Sosyal-olmayan Kaçınma, Davranışsal Sosyal-olmayan Kaçınma) oluşmaktadır. BDKÖ'nün orijinal formuyla güncel çalışma arasında yalnızca bir maddenin (Madde 28) yüklendiği faktör ("Davranışsal Sosyal-olmayan Kaçınma" yerine "Davranışsal Sosyal Kaçınma" yüklenme) açısından farklılaşma olmuştur. Bu bulguya katkı sağlamış olabilecek etkenler belirtilmiştir. Son olarak, depresyon ve kaygı seviyeleri düşük ve yüksek katılımcıların kaçınma yakınlıkları ve kaçınma stratejileri karşılaştırılmış, grup farklılıkları tartışılmıştır.

**Anahtar Kelimeler:** Kaçınma, depresyon, kaygı, başa çıkma, ölçek uyarlama

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## INTRODUCTION

Avoidance means escaping or abstaining from, an action, a thing, a person or a group of people (Ottenbreit & Dobson, 2004). The form of avoidance varies (Hayes et al., 1996). Avoidance strategies, to reduce the frequency or the density of experiences that are not pleasant and desirable, can be covert (e.g., cognitive or experiential) or overt (e.g., behavioural). Avoidance behaviour does not only target minimising the chance of encountering unpleasant events, but it also helps to alter the subjective overwhelming consequences of the experience. The type of avoidance varies too (Hayes et al., 1996), avoidance behaviour can be expressed either in an active (e.g., overt escape behaviour) or a passive way (e.g., failure to act).

A great number of avoidance-based behaviour, such as avoiding ostentation and self-praise are favoured by religious institutions and society; however, detrimental effects of avoidant behaviours on psychological well-being, and the role of avoidance in the development and maintenance of psychological distress are critical (Cloninger, 1987; Hayes, Wilson, Gifford, Follette, & Strosahl, 1996; Kashdan, Barrios, Forsyth, & Steger, 2006; Machell, Goodman, & Kashdan, 2015). The relationship between avoidance and depression was pointed out by Ferster (1973) almost half-century ago, but studies are still limited and have not arrived at a consensus. In general, avoidance research address avoidance as a coping strategy, a problem-solving style, and a personality dimension (i. e. harm avoidance) (Ottenbreit & Dobson, 2004).

Majority of research from coping strategy perspective show positive relationship between avoidance and depression; furthermore, indicate an adverse effect of thought suppression on well-being (Blalock & Joiner, 2000; Beavers, Wenzlaff, Hayes, & Scott, 1999). Yet, measures used in these studies assess responses of individuals to a specific situation or a problem. While there is an ongoing debate in coping literature on whether coping is situational or a general style; studies using measures assessing trait-like avoidance can contribute.

Studies from problem-solving perspective demonstrate higher levels of depression is more common among avoidant individuals (D’Zurilla et al., 1998); moreover, avoidant problem-solving is associated with reproduction of stressful and unpleasant life events (Davila, 1993). However, the outcome of avoidance strategy can change for different problems and conditions.

Research from personality perspective, consistently found a positive relationship between harm avoidance (HA) and depression, and its severity (Hansenne et al., 1997; Richter, Eisemann, & Richter, 2000). Though, supporting the state-dependent nature of HA, Abrams et al. (2004) report decreased HA levels in depressed group after the treatment. Thus, variability of HA over time or its trait nature as a predictor of depression symptomatology is still open to discussion.

Ottenbreit and Dobson (2004) criticised the variability in definition of avoidance since it hampers comparison of research results. An integrative, multidimensional and valid measure of avoidance was needed. Until the development of CBAS, there was no other instrument which explicitly measures avoidance and distinguishes between the form of avoidance strategies as cognitive and behavioural while specifying the domain as social and nonsocial. As Ottenbreit, Dobson and Quigley (2010) illustrates, advantages of CBAS are (1) to detect avoidance in life conditions which are not necessarily stress-evoking, thus allows examining trait-like avoidance; (2) to assess cognitive types of avoidance strategies which were neglected by traditional measures; (3) to capture different dimensions of avoidance such as its domain (Ottenbreit, et al., 2010). Consequently, introducing Turkish version of CBAS (CBAS-TR) to Turkish literature could be beneficial for future research. Henceforward; this study aims (1) to examine psychometric properties of CBAS-TR in university student population; (2) to explore whether participants differ from each other on avoidance tendencies and avoidance strategy types according to their depression and anxiety.

## METHOD

### Participants

Participants were 330 students (262 females, 68 males) who were voluntarily recruited from Ankara Yildirim Beyazit University with ages between 17 and 46 ( $M=20.8$ ,  $SD=2.56$ ).

### Procedure

After obtaining permission from the developers CBAS, ethical approval was obtained from the University Ethical Board. In order to establish CBAS-TR, the 31 items of the scale were translated into Turkish by three researchers who were advanced users of Turkish and English. Afterwards, in a focus group, five researchers came together and decided on the initial form of CBAS-TR.

In a pilot study, this form was applied to ten master students and they were instructed to evaluate the comprehensibility of each item by rating between 1 (very easy to understand) and 5 (very difficult to understand). The mean scores for the difficulty of items ranged from 1 to 2.1. In a second focus group meeting, high scored items in the pilot study were reviewed and reconstructed, so the final form of CBAS-TR was developed.

The instruments were administered to undergraduate and graduate students in classroom settings or via internet (i. e. Qualtrics online survey programme). Written or online approved informed consent was obtained from all participants. For retest step, randomly chosen thirty-four participants were informed at the first assessment to be contacted again soon, thus were instructed to write nicknames on their booklets. Four weeks after the initial data collection, they were asked to complete CBAS-TR for the second time to explore the test-retest reliability of CBAS-TR. The data was entered to and analysed by SPSS 20.

## Instruments

Demographic information form consists of questions for age, gender, education level, marital status, accommodation status and family characteristics, to use for the purposes of sample description and supplementary analyses.

The Cognitive-Behavioural Avoidance Scale (CBAS; Ottenbreit & Dobson, 2004) is a self-report measure that intends to assess multiple dimensions of trait-level avoidance. CBAS includes 31 items rated on a 1–5 Likert-type scale, and is comprised of four subscales of avoidance: Behavioural Social (BS), Cognitive Social (CS), Behavioural Nonsocial (BNS), and Cognitive Nonsocial (CNS) Avoidance. Subscales demonstrate adequate to strong coefficient alphas ( $\alpha=0.86, 0.78, 0.75, 0.80$ , respectively) and test-retest reliability ( $r=0.86, 0.58, 0.88, 0.94$ , respectively). A total avoidance score can also be calculated by summing item scores, which has excellent internal consistency ( $\alpha=0.91$ ) and test-retest reliability ( $r=0.92$ ).

The initial form of Beck Depression Inventory (BDI) was formed by Beck (1961) and the currently used version was developed by Beck, Rush, Shaw and Emery (1979). BDI measures cognitive, emotional, and motivational symptoms of depression. It is a 4-point Likert-type scale with 21 items scored from 0 to 3. Internal consistency of BDI proves a high reliability with Cronbach's alpha coefficients ranging from 0.73 to 0.92 with a mean of 0.85 (Beck, Steer,

& Garbin, 1988). BDI was adapted into Turkish by Hisli (1989). The reliability of Turkish version was 0.74 and the scores above 17 are accepted to indicate clinical depression.

The Acceptance and Action Questionnaire (AAQ)-II was designed by Bond and colleagues (2011) as a new and psychometrically sounder version of the original form of AAQ (Hayes et al., 2004). AAQ-II aims to assess psychological inflexibility, and is a commonly utilized measure of experiential avoidance. AAQ-II consists of 7 Likert-type items (0=Almost never true, 7=Always true). The Turkish version of the AAQ-II was composed by Meunier and colleagues (2014), the findings of their research provided evidence for high internal consistency ( $\alpha=0.88$ ) and good test-retest reliability ( $\alpha=0.78$ ).

The White Bear Suppression Inventory (WBSI) is a 5-point Likert-type self-report questionnaire with 15 items that aims to measure participants' tendency and effort to consciously suppress unwanted or disturbing thoughts and intrusions. The WBSI was developed by Wegner and Zanakos (1994) and has very good internal consistency with alphas ranging from 0.87 to 0.89. The test-retest correlation of WBSI was 0.92 for 1-week interval, and 0.69 for 3-month interval (Wegner & Zanakos, 1994). Psychometric analyses on the Turkish version of WBSI (Yücel Ağargün et al., 2004) showed that it has a high internal consistency ( $\alpha=.92$ ).

State-Trait Anxiety Inventory was developed by Spielberger, Gorsuch and Lushene (1970) in order to assess situational and continual anxiety levels of the participants by two 20-item self-report 4-point Likert-type scales. In this study, Trait Anxiety Inventory (TAI) form was used solely. Spielberger, Gorsuch and Lushene (1970) reported test-retest reliability between .73 to 0.86, and internal consistency between 0.83 and 0.92 for TAI. Öner and LeCompte (1985) translated and adapted STAI to Turkish by using both normal and psychiatric samples. Test-retest reliability of Turkish TAI varies between 0.71 and 0.86, and internal consistency changes between 0.83 and 0.87 for TAI.

Distress Tolerance Scale (DTS) is a 15-item self-report Likert-type scale which measures the capacity of participants to experience and withstand negative psychological states, briefly, their tolerance to distress. DTS was developed by Simons and Gaher (2005) and its Turkish version was proved to be valid and reliable by Sargin et al. (2012), Cronbach's alpha was 0.89.

The Ways of Coping Scale (WOCS) (Folkman & Lazarus, 1980) was originally created as a 68-item self-report measure in yes-no response format targeting to assess cognitive and behavioural strategies individuals use when they face a stressful situation. With the same objectives, a revised version (Folkman & Lazarus, 1985) was designed as a 4-point Likert-type ranging from 0 (does not apply/not used) to 3 (used a great deal) and had a total of 66 items. A widely used, valid and reliable Turkish version of WOCS which was adapted by Şahin and Durak (1995) is used in this study. The scale consists of 30 self-reported items on a 4-point Likert-type scale and has five subscales indicating different approaches to cope with stress: self-confident, optimistic, seeking social support helpless, and submitted approach. Cronbach's alpha values for the subscales were 0.92, 0.86, 0.94, 0.88, and 0.84, respectively. The overall Cronbach's alpha for the WOCS was 0.90. Şahin and Durak (1995) also reports a first order structure with two dimensions which will be considered in this study: Problem-focused/effective coping approaches (i.e. Self-confident, optimistic, seeking social support) and Emotion-focused/ineffective coping approaches (i.e. Submitted and helpless).

## RESULTS

For sociodemographic information of participants, check Table 1. Descriptive statistics and internal consistency indices can be seen in Table 2.

### Validity Studies

Prior to hypothesis testing, data was screened for outliers; assumptions of normality, linearity, and homoscedasticity were examined; no violation was observed (Tabachnick & Fidell, 2007). Item frequencies, means and standard deviations were examined prior to ensure adequate discriminability of items. Kaiser-Meyer-Olkin (KMO) Measure of Sampling Adequacy and Barlett's Test of Sphericity were run to assess the appropriateness of factor analysis. As KMO was 0.92 and Barlett's test of sphericity was significant (at  $p < 0.001$  level), further construct validity analysis was performed. To observe the factor structure of CBAS-TR, items were entered into principle components factor analysis with a varimax rotation. In the exploratory factor analysis an extraction of four was employed, as in the factor structure of the original study (Ottenbreit & Dobson, 2004). See Table 3, for factor loadings, eigenvalues, and explained variances. Factor loadings of CBAS-TR mostly fit the factor structure of CBAS, so the factors are named

**Table 1:** Sociodemographic information of participants

	Frequency (%)	Range	Mean (SD)
<b>Age</b>		17–46	20.8 (2.56)
<b>Gender</b>			
Female	262 (79.4%)		
Male	68 (20.6%)		
<b>MaritalStatus</b>			
Single	305 (92.4%)		
Married	24 (7.3%)		
Divorced	1 (0.3%)		
<b>EducationalStatus</b>			
Undergraduate Student	302 (91.5%)		
Graduate Student	28 (8.5%)		
<b>Accommodation (livingwith)</b>			
Individual	34 (10.3%)		
Partner/Spouse	19 (5.8%)		
Family	88 (26.7%)		
Friends	162 (49.1%)		
Other	27 (8.2%)		
<b>Parents(Mother-Father)</b>			
Alive	324 (98.2%)-308 (93.3%)		
Dead	6 (1.7%)-22 (6.7%)		
Siblings(No-Yes)	9 (2.7%)-321 (97.3%)		
<b>NumberofSiblings</b>		1–13	3.18 (1.63)

**Table 2:** Descriptive statistics for measures

Measure	Mean (SD)	Range	Cronbach's $\alpha$
CBAS-TR-Total	60.21 (16.94)	31–119	0.92
CBAS-BS	17.16 (5.93)	9–37	0.84
CBAS-CS	12.65 (4.64)	7–28	0.80
CBAS-BNS	12.16 (3.34)	5–25	0.65
CBAS-CNS	18.24 (6.64)	10–41	0.86
BDI	9.41 (9.11)	0–56	0.92
AAQ-II	21.58 (10.0)	7–49	0.92
WBSI	50.15 (11.49)	15–73	0.91
TAI	44.17 (10.71)	3–77	0.90
DTS	48.96 (11.38)	16–74	0.91
WOCS-Problem focused/effective	29.86 (7.14)	6–46	0.86
WOCS-Emotion focused/ineffective	15.6 (6.81)	2–39	0.84

in line with the original work. Therefore, Factor1 named as Behavioural Social (BS, items: 1, 8, 14, 15, 17, 21, 23, 24, 28), Factor2 as Cognitive Nonsocial (CNS, items: 2, 4, 5, 7, 18, 19, 25, 27, 29, 31), Factor3 as Cognitive Social (CS, items: 10, 12, 16, 20, 22, 26, 30), and Factor 4 as Behavioural Nonsocial Coping (BNS, items: 3, 6, 9, 11, 13). As can be observed on Table 3; items 4, 5, 12, 27

and 29 were loaded on more than one factor, so the final decisions for these items were made according to original structure. There was only one divergence in factor loadings, and that is item 28, which was loaded under Factor 1 (BS) in our study with 0.59, although it was under Factor 4 (BNS) in the original study. This finding will be discussed later.

**Table 3:** Factor loadings of CBAS-TR for four-factor structure using PCA with varimax rotation, corrected item-total correlation, communalities

Items	Factor 1 (BS)	Factor 2 (CNS)	Factor 3 (CS)	Factor 4 (BNS)	Item-Total Correlation	Common Factor Variance
CBAS-TR21	<b>0.73</b>				0.60	0.64
CBAS-TR17	<b>0.69</b>				0.59	0.61
CBAS-TR1	<b>0.66</b>				0.39	0.46
CBAS-TR14	<b>0.61</b>				0.48	0.57
CBAS-TR24	<b>0.60</b>				0.51	0.46
CBAS-TR28	<b>0.59</b>				0.49	0.43
CBAS-TR8	<b>0.56</b>				0.39	0.43
CBAS-TR23	<b>0.44</b>				0.44	0.32
CBAS-TR6	<b>0.44</b>				0.46	0.34
CBAS-TR25		<b>0.75</b>			0.44	0.65
CBAS-TR18		<b>0.72</b>			0.55	0.59
CBAS-TR19		<b>0.67</b>			0.44	0.54
*CBAS-TR4		<b>0.56</b>		0.44	0.63	0.59
CBAS-TR31		<b>0.54</b>			0.64	0.54
*CBAS-TR27		<b>0.54</b>	0.42		0.61	0.52
*CBAS-TR5		<b>0.48</b>		0.40	0.48	0.43
*CBAS-TR12		<b>0.48</b>	<b>0.48</b>		0.64	0.53
CBAS-TR2		<b>0.47</b>			0.53	0.39
*CBAS-TR29		<b>0.41</b>	0.40		0.61	0.48
CBAS-TR7		<b>0.34</b>			0.33	0.19
CBAS-TR22			<b>0.66</b>		0.53	0.52
CBAS-TR20			<b>0.64</b>		0.52	0.48
CBAS-TR16			<b>0.63</b>		0.56	0.52
CBAS-TR30			<b>0.59</b>		0.49	0.47
*CBAS-TR15	<b>0.48</b>		0.52		0.65	0.57
CBAS-TR26			<b>0.51</b>		0.44	0.38
CBAS-TR10			<b>0.43</b>		0.21	0.25
CBAS-TR3				<b>0.57</b>	0.28	0.42
CBAS-TR9				<b>0.56</b>	0.47	0.47
CBAS-TR11				<b>0.51</b>	0.47	0.41
CBAS-TR13	0.38			<b>0.47</b>	0.53	0.41
Eigenvalue	9.53	2.16	1.43	1.42		
% Variance	13.54	13.26	11.88	8.14		

Note. Values smaller than 0.34 were suppressed. \*Cross-loaded items



**Table 4:** Correlations of factor 1, factor 2, factor 3, factor 4 and CBAS-TR-Total with other measures

Measures	CBAS-TR-Total	Factor 1 (BS)	Factor 2 (CNS)	Factor 3 (CS)	Factor 4 (BNS)
BDI	0.58*	0.46*	0.53*	0.51*	0.36*
AAQ-II	0.62*	0.52*	0.50*	0.58*	0.44*
TAI	0.39*	0.30*	0.28*	0.35*	0.38*
WBSI	0.34*	0.31*	0.24*	0.30*	0.31*
DTS	-0.40*	-0.29*	-0.32*	-0.39*	-0.35*
WOCS-Problem focused/effective	-0.50*	-0.45*	-0.43*	-0.44*	-0.30*
WOCS-Emotion focused/ineffective	0.61*	0.50*	0.51*	0.51*	0.51*

\* $p < 0.001$

In Table 4, the correlations of CBAS-TR with other measures (BDI, AAQ-II, TAI, WBSI, DTS, WOCS) can be seen.

### Reliability Studies

For reliability of CBAS-TR, internal consistency, split-half reliability, and test-retest reliability coefficients were examined. For the internal consistency of CBAS-TR, Cronbach's  $\alpha$  coefficient was 0.92, and corrected item-total correlations ranged from 0.21 to 0.65. Guttman split-half reliability was 0.90, with 0.<sup>84</sup> Cronbach's  $\alpha$  coefficient for the first part and 0.88 for the second part. The test-retest correlation coefficients with 4-week interval can be found in Table 5.

### Further Analysis

A further interest was to test whether participants who score high on depression, high on anxiety, and high on both differ on avoidance tendencies and avoidance strategy types. Participants were classified according to their scores on BDI and TAI (i.e. scores  $>M + SD$ =high), so four groups were created as: solely "high on depression" ( $N=28$ ), solely "high on anxiety" ( $N=71$ ), "high both on depression and anxiety" ( $N=57$ ), and "low symptom levels" group ( $N=167$ ).

**Table 5:** Test-retest correlation coefficients for CBAS-TR with 4-week interval measurement

Measure	$r$	Cronbach's $\alpha$	ICC
CBAS-TR-Total	0.66	0.87	0.86
CBAS-BS	0.68	0.83	0.83
CBAS-CS	0.51	0.70	0.68
CBAS-BNS	0.60	0.73	0.71
CBAS-CNS	0.60	0.69	0.69

As determined by one-way ANOVA, there was a statistically significant difference between groups on CBAS scores,  $F(3,309)=40.51$ ,  $p < 0.001$ . A Tukey *post-hoc* test revealed that "high both on depression and anxiety" group ( $77.44 \pm 17.13$ ), scored highest on CBAS, which was followed by "high on depression" group ( $67.67 \pm 15.68$ ), "high on anxiety" group ( $58.91 \pm 14.89$ ), and "low symptom levels" group ( $53.24 \pm 12.87$ ). All group differences were significant at  $p < 0.05$  level.

A series of one-way ANOVA indicated that there were statistically significant differences between groups on the subscales of CBAS, namely on BS ( $F(3,316)=25.1$ ,  $p < 0.001$ ); on BNS ( $F(3,316)=23.92$ ,  $p < 0.001$ ), on CS ( $F(3,317)=25.96$ ,  $p < 0.001$ ), and on CNS ( $F(3,314)=27.63$ ,  $p < 0.001$ ), see Table 6 for multiple group comparisons.

## DISCUSSION

Our primary goal was to examine the psychometric properties of CBAS-TR in a Turkish sample. Results provided satisfactory reliability and validity indices for CBAS-TR, supporting the cross-cultural utility of the scale. Internal consistency coefficients for CBAS-TR were highly acceptable. Similarly, assessment after a 4-week interval showed its reliability over time. Construct and concurrent validity studies were performed to evaluate the validity of CBAS-TR. As expected positive correlations were found between CBAS-TR and depression, anxiety, tolerance to distress, psychological inflexibility, and suppression. Also, in line with the accounts favouring avoidance as coping strategy, CBAS-TR scores were positively correlated with ineffective coping, while being negatively correlated with effective coping approaches.

**Table 6:** Differences of high on depression (i.e. depression), high on anxiety (i.e. anxiety), high on both depression and anxiety (i.e. comorbid), and low symptom levels (i.e. low symptoms) groups on avoidance strategies

			Avoidance Strategy (Mean Differences)			
			BS	CS	BNS	CNS
Groups	Comorbid	Depression	2.77	1.69	1.29	4.06*
		Anxiety	5.79**	3.85**	2.53**	6.61**
		Low Symptoms	6.83**	5.36**	3.77**	8.26**
	Depression	Anxiety	3.02	2.16	1.25	2.55
		Low Symptoms	4.06**	3.67**	2.49**	4.20**
	Anxiety	Low Symptoms	1.04	1.51	1.24*	1.64

Note: Mean differences represent subtractions of group means. For example, (mean of comorbid group on BS) minus (mean of depression group on BS) equals to 2.77 and it is not a statistically significant difference.  
\*p<0.05, \*\* p≤0.001

The factor structure of CBAS-TR was examined through principle components factor analysis, and the results supported a four-factor structure consistent with the original study (Ottenbreit & Dobson, 2004). The Turkish measure produced same subscales as described for CBAS in terms of the multidimensional structure of avoidance: cognitive versus behavioural and social versus non-social. Although the factor structure is parallel with the original study; there is one item loaded to a different factor. Item-28 (Rather than getting out and doing things, I just sit at home and watch TV.) is loaded under the factor *behavioural social avoidance*, rather than *behavioural non-social avoidance* as it is in the original study. This finding can be explained with demographic characteristics of our population, with changes in media and TV broadcasting, and with the perception of Turkish people towards *watching TV*. A recent study by The Nielsen Company (2015), a global information and measurement company, demonstrated that TV-viewers are more likely to *tweet* about their experience and impressions while watching TV. From this point, even done alone, watching TV can be seen as a social activity for the dominant users of social media, such as younger adults in our population. Moreover, watching TV may not be particularly thought as a non-social activity for Turkish people, since watching TV was reported as the most frequently done (59.4%) activity by family members together, according to a study of Ministry of Family and Social Policies of Turkey (2014). In this regard, we suggest Item-28 to be listed under *Behavioural Social Avoidance* subscale of CBAS-TR, therefore the scoring should be calculated accordingly.

Another aim of this study was to investigate the differences between depressed, anxious and comorbid participants' avoidance tendencies and avoidance strategy types.

Predictably, participants who scored high on both depression and anxiety reported highest use of avoidance; which can be explained by symptom intensity and severity proposed by the nature of comorbidity itself. However, the difference on avoidance tendencies between depressed and anxious participants requires a closer look. Avoidance is mostly associated with anxiety since it reduces the distress provoked by danger. Our results showed that depressed participants report higher avoidance tendencies compared to anxious participants. One explanation is, items of CBAS-TR may have been found related to self by depressed participants in a "lack of energy and interest" manner; while being unrelated to self by anxious participants due to the vagueness of the avoidance subject. Thus, anxious participants may have not found avoidance assessed by CBAS-TR as a match of what they avoid from. In fact, this finding is in line with CBAS-TR's initial goal, so it extensively measures avoidance in depression but can be less sensitive to a specific anxiety.

CBAS-TR appears to be a promising measure for depression research field and a helpful instrument for researchers and clinicians who want to differentiate between avoidance strategies in their work. CBAS-TR allows to assess various dimensions of avoidance, so, a researcher can investigate which and to what extent strategies contribute to depression severity or to another life problem. CBAS-TR measures avoidance strategies in everyday life situations. Thus, it can be used by clinicians as well, for illustrating a client's avoidance tendencies quickly, in order to address them within the treatment plan, and further to evaluate the intervention by a post-measurement.

As a limitation, university student population with limited age range and demographic characteristics prevent the generalisation of the results. Thus, research on a more

representative population is needed. Furthermore, to be able conclude on the sensitivity of CBAS-TR to psychopathologies and to understand where the differences stem from and how to interpret them, studies with clinical populations are necessary. Nonetheless, this study presents satisfactory test-retest and internal consistency coefficients, and also good construct and concurrent validity information for CBAS-TR in university student population, which later can be utilised in Turkish culture in order to examine avoidance from multi-dimensions.

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**CBAS-TR (Bilişsel Davranışsal Kaçınma Ölçeği, BDKÖ, Türkçe Formu)**

Yönerge: İnsanlar hayatlarında karşılaştıkları çeşitli durumlar ve sorunlarla başa çıkmada birbirlerinden farklı stratejiler kullanır. Aşağıda insanların bazı durumlarla ve sorunlarla başa çıkmada kullanabilecekleri stratejilerin bir kısmı bulunmaktadır. Aşağıdaki maddelerin bir kısmı iş veya okulda karşılaşılabilecek olaylarla başa çıkmaya ilgilidir. Eğer halihazırda çalışmıyorsanız veya okula devam etmiyorsanız, bu maddeleri günlük sorumluluklarınız ve etkinliklerinizi göz önünde bulundurarak yanıtlayınız. Lütfen her yargı cümlesini dikkatlice okuyarak, her bir yargı cümlesinin sizin için, genel olarak, ne derece uygun olduğunu takip eden puanlama sistemine göre her bir maddenin sağ tarafında yer alan kutucukta ilgili rakamı işaretleyerek belirtiniz:

	Hiç Uygun Değil	Az Ölçüde Uygun	Orta Derecede Uygun	Büyük Ölçüde Uygun	Tamamen Uygun
1. Sosyal etkinliklere katılmaktan kaçınıyorum.	1	2	3	4	5
2. Geleceğimle ilgili belirsizliklerde oturup gerçekten ne istediğimi düşünmekte başarısızım.	1	2	3	4	5
3. İşte/okulda bir şeyleri başarmak isterim, ama sınırlılıklarımı kabul etmem gerekir.	1	2	3	4	5
4. Kendim için koyduğum başarı hedeflerini gerçekleştirme için gerekli olan şeyleri yapmak konusunda başarısızım.	1	2	3	4	5
5. Hayal kırıklığından kaçınmak için işi /okulu çok ciddiye almamaya çalışırım.	1	2	3	4	5
6. Yeni etkinlikler denemek yerine, bildiğim şeyleri yapmayı sürdürme eğilimindeyimdir.	1	2	3	4	5
7. Eğitimimi/kariyerimi ilerletmem için önüme çıkan fırsatları geri çevirmeyi tercih ederim.	1	2	3	4	5
8. İnsanlar sosyal aktivitelere davet için arıyorlardı diye telefonları açmam.	1	2	3	4	5
9. Beni çok fazla zorlayan aktiviteleri bırakırım.	1	2	3	4	5
10. Kişisel ilişkilerimdeki sorunlar hakkında düşünmemeye çalışırım.	1	2	3	4	5
11. Gerçekten zorlayıcı görevleri tamamlayamayacağım diye kendi kendime düşünürüm.	1	2	3	4	5
12. Kişisel ilişkilerim hakkında kararlar almam gerektiğini bilsem de, her şeyi olduğu gibi bırakır hiçbir şey yapmam.	1	2	3	4	5
13. Başarısızlık olasılığı barındıran yeni aktiviteleri denemekten kaçınıyorum.	1	2	3	4	5
14. Tanımadığım çok insan olacağını bildiğim davetlere katılmam.	1	2	3	4	5
15. Sosyal hayatımdaki problemleri düşünmektense kendime yalnız olmayı tercih ettiğimi söylerim.	1	2	3	4	5
16. Bir arkadaşlıkta ortaya çıkan gerilimi tartışmak/ele almak konusunda başarısızım.	1	2	3	4	5
17. Kendimi sıklıkla sosyal ortamları terk etmek ister halde bulurum.	1	2	3	4	5
18. İş/okul performansımı arttıracak yollar hakkında düşünmeye çalışmam.	1	2	3	4	5
19. Geleceğim ve hayatımda ne yapacağım konusunda düşünmemeye çalışırım.	1	2	3	4	5
20. İlişkilerimdeki gerginliğin geçeceğini umarak sadece beklerim.	1	2	3	4	5
21. Sosyal etkinliklerden uzaklaşmak için bahane uydurma eğilimindeyimdir.	1	2	3	4	5
22. İlişkilerimdeki sorunları düzeltmek için yapabileceğim bir şey yok.	1	2	3	4	5
23. Karşı cinsle sosyalleşme fırsatlarını geri çeviririm.	1	2	3	4	5
24. Sosyal toplantı veya etkinliklerde kendi kendime kalma eğilimindeyimdir.	1	2	3	4	5
25. Geleceğim hakkında kararlar almaktan kaçınıyorum	1	2	3	4	5
26. İlişkilerimde karışıklık yaşadığımda nedenlerini anlamaya çalışmam.	1	2	3	4	5
27. Okul/iş hakkında bazı önemli kararlar vermem gerektiğini bilsem de, konuyla ilgilenmeye bir türlü başlamam.	1	2	3	4	5
28. Dışarı çıkıp bir şeyler yapmak yerine, sadece evde oturur ve TV izlerim.	1	2	3	4	5
29. İş/okul performansım hakkında düşünmeye başladığımda, kendi dikkatimi dağıtırım.	1	2	3	4	5
30. Ailemdeki sorunları nasıl çözeceğim diye düşünmekle uğraşmam, çünkü bu bir işe yaramaz.	1	2	3	4	5
31. Kendimi gerçekten önemli görevler ve ödevlerden kaçınırken bulurum.	1	2	3	4	5