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Research / Araştırma

Validation Study of the Turkish Version of the Craving Typology Questionnaire (CTQ) in Male Alcohol-Dependent Patients

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ABSTRACT

Validation study of the Turkish version of the Craving Typology Questionnaire (CTQ) in male alcohol-dependent patients

Objective: Alcohol craving is considered a core symptom of alcohol use disorder and a strong predictor of relapse in alcohol-dependent adults. The Craving Typology Questionnaire (CTQ) allows dimensional self-rating assessment of craving according to a three-pathway psychobiological model of craving (reward, relief, and obsessive craving). Aim of the present study was to evaluate psychometric properties of the Turkish version of the CTQ in a sample of inpatients and outpatients with alcohol use disorder (AUD).

Method: Participants included 157 inpatients and outpatients with AUD. Participants were evaluated with the CTQ and the Obsessive-Compulsive Drinking Scale (OCDS), which includes items to evaluate both total craving and its obsessive and compulsive components.

Results: The obsessive, relief, and reward craving components accounted for 27.91%, 8.17% and 7.23% of total variance, respectively. Items 7 and 8 were included in obsessive craving and item 10 was included in relief craving instead of reward craving. Obsessive craving had a Cronbach's α of 0.87, whereas the coefficients were 0.64 for relief craving and 0.42 for reward craving. Items were moderately correlated with their subscales. All types of craving were moderately correlated with OCDS and the obsessive dimension of OCDS, whereas they were mildly correlated with the compulsion dimension of OCDS.

Conclusion: Our findings confirm the Turkish version of the CPQ to be a reliable and valid instrument that measures three dimensions of craving among patients with AUD.

Keywords: Alcohol use disorder, CPQ, craving, factor analysis, reliability, validity

ÖZET

Erkek alkol bağımlısı hastalarda Aşerme Tipoloji Ölçeği'nin (CTQ) Türkçe versiyonunun geçerlilik çalışması

Amaç: Alkol aşermesi alkol kullanım bozukluğunun çekirdek belirtilerinden biri olarak görülmektedir ve alkol bağımlısı hastalarda kaymanın güçlü bir öngörücüsüdür. Aşerme Tipoloji Ölçeği (CTQ), aşermenin üç yönlü psikobiyolojik modeline göre (ödül, rahatlama ve obsesif aşerme) aşermenin boyutsal öz-derecelendirme değerlendirmesine izin verir. Çalışmanın amacı ayaktan ve yatarak tedavi gören alkol kullanım bozukluğu (AKB) hastalarından oluşan bir örneklemde CTQ'nun Türkçe versiyonunun psikometrik özelliklerini değerlendirmekti.

Yöntem: Katılımcılar ayaktan ve yatarak tedavi görmekte olan 157 alkol kullanım bozukluğu hastasından oluşmaktaydı. Katılımcılar CTQ ile hem total aşerme ve hem de onun obsesif ve kompulsif bileşenlerini değerlendiren maddeleri içeren Obsesif Kompulsif İçme Ölçeği (OKİÖ) ile değerlendirildi.

Bulgular: Obsesif, rahatlama ve ödül aşerme bileşenleri sırasıyla toplam varyansın %27.91, %8.17 ve %7.23'ünü oluşturmaktaydı. Ödül aşermesi yerine, madde 7 ve madde 8 obsesif aşermede ve madde 10 ise rahatlama aşermesinde bulunmaktaydı. Cronbach's α katsayısı obsesif aşerme için 0.87, rahatlama aşermesi için 0.64 ve ödül aşermesi için 0.42 idi. Maddeler kendi alt ölçekleri ile orta derecede ilişkiliydi. Aşermenin bütün tipleri OKİÖ ve OKİÖ'nin obsesif boyutu ile orta derecede ilişkiliyken OKİÖ'nün kompulsif boyutuyla hafif derecede ilişkiliydi.

Sonuç: Bu bulgular CTQ'nun Türkçe versiyonunun AKB hastaları arasında aşermenin üç boyutunu ölçen geçerli ve güvenilir bir araç olduğunu desteklemektedir.

Anahtar kelimeler: Alkol kullanım bozukluğu, CTQ, aşerme, faktör analizi, güvenirlik, geçerlik

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INTRODUCTION

A simple definition for "alcohol craving" may be "a strong desire to consume alcohol". Cravings represent subjectively experienced motivational states that are associated with ongoing alcohol use among individuals with alcohol use disorder (AUD) (1). Craving, the urge to use alcohol, is present in 54% to 72% of subjects with AUD (2,3). Although many patients with AUD consistently experience craving, researchers have not yet developed a common, valid definition of the phenomenon (4). A recent study reviewing 18 models from the past 60 years suggested that no single model completely explains craving (5). Nevertheless, craving has been linked both to poorer outcomes following treatment and greater attrition during treatment (6-9). Alcohol craving is generally considered a core symptom of AUD and a strong predictor of relapse in patients with AUD (9-12). Consistent with these observations, craving was the main factor related with relaps among Turkish inpatients with AUD during 12 months after inpatient treatment (13).

Alcohol craving can be elicited by exposure to alcohol and alcohol-associated stimuli in abstinent alcoholics (14,15). Internal cues include emotional states (e.g., anxiety) or symptoms of acute alcohol withdrawal. External cues include exposure to alcohol-related environments or objects (e.g., bottles of alcoholic beverages or advertisements) (16).

Several questionnaires are available to quantify craving in adults (17). Turkish versions of the Penn Alcohol Craving Scale (PACS) (18,19) and the Obsessive-Compulsive Drinking Scale (OCDS) (6,20,21) were validated for Turkish inpatients with AUD.

Since craving is almost certainly a multi-faceted construct, Verheul et al. (22) suggested a three-pathway psychobiological model for craving. The first pathway is referred to as reward craving, namely, the desire for the rewarding, stimulating, and/or enhancing effects of alcohol. This type of craving is more common in early-onset male alcoholics and can be associated with novelty/sensation seeking, impulsivity, anger, and traits typically observed in Cluster B Personality Disorders. It might result from either dopaminergic/opioidergic dysregulation or a personality style characterized by reward/sensation seeking, or a combination of both. The term 'reward drinking' is generally associated with positive reinforcement, which can be defined as the presentation of a reinforcing stimulus immediately following a performance. According to this definition, the stimulus may be represented by a positive emotion following alcohol drinking (reward drinking). This pathway has an important genetic load (16). The second pathway, relief craving, or desire for the reduction of tension or arousal, might result from either γ-aminobutyric acid (GABA)-ergic/glutamatergic dysregulation or a personality style characterized by stress reactivity, or a combination of both. In general, the term 'relief drinking' is associated with negative reinforcement, by which we mean the termination of an aversive stimulus immediately following a performance. According to this definition, the stimulus may be represented by a negative emotion (e.g., stress or anxiety) that is terminated by drinking alcohol (relief drinking) (16,23). This pathway is usually observed in late-onset alcoholics, mostly females, and is associated with traits typically observed in Cluster C Personality Disorders. The influence of external factors is stronger than the genetic influence (16). The third pathway, obsessive craving, can be defined as lack of control over intrusive thoughts about drinking resulting in impaired functioning. This type of craving may result either from a serotonin deficiency or a personality style characterized by low constraint or disinhibition, or a combination of both. These three craving types usually overlap in alcoholics, although the predominance of one dimension can usually be observed in treatment-seeking alcoholics (16). Martinotti et al. (16) developed an instrument called Craving Typologies Questionnaire (CTQ) and tested the hypothesis that this questionnaire is able to differentiate craving into reward, relief, and obsessive craving and rate the intensity of each craving type. In our validation study, CTQ was shown to be a reliable and valid questionnaire to distinguish a normative sample from pathological individuals.

These three types of craving may become relevant when considering pharmacological treatment; for example, studies suggested that naltrexone is more efficacious for reward craving, acamprosate more for relief craving (22), and serotonin reuptake inhibitors may be more efficacious for obsessive craving (16). Thus, in the predominance of one dimension, the clinician may decide to use the respective pharmacotherapy. The purpose of this study was to translate the CTQ and to validate the Turkish version, assessing its reliability, internal consistency, and factor structure.

METHODS

The study was conducted in Bakirkoy Research and Training Hospital for Psychiatry, Neurology and Neurosurgery, Alcohol and Drug Research, Treatment and Training Center (AMATEM) in Istanbul between September 2014 and April 2015. AMATEM is a specialized center for substance use disorders with 84 inpatient beds (36 for AUD) that accepts patients from all over Turkey. The Ethics Committee of the hospital approved the study. Patients' written informed consent was obtained after the study protocol had been thoroughly explained to them.

One hundred and fifty-seven consecutively referred patients with AUD (80 outpatients and 77 inpatients) without a history of any other substance abuse were considered for participation in the study. All participants met the DSM-IV diagnostic criteria for AUD. Exclusion criteria were illiteracy, mental retardation or cognitive impairment, and comorbid psychotic disorder.

The original CTQ was independently translated from English into Turkish by three experts in substance use disorders (CE, GU and MB). Consensus on a common draft was reached among these experts.

Measures

All patients were assessed by using a semi-structured sociodemographic form. The diagnosis of alcohol dependence in each participating patient was based on a clinical examination and a screening interview based on the substance dependence section of the Structured Clinical Interview for DSM-IV for Axis I Disorders (SCID-I) (24), Turkish version (25), conducted by a trained interviewer (CE).

The Craving Typology Questionnaire (CTQ): The factorial solution, obtained by principal component analysis method, suggested a model with 3 components that account for 57.13% of the total variance (16). The first component, referred to as "Relief Craving", encompasses items 18, 4, 3, 14 and 15, has an eigenvalue of 7.59, and accounts for 37.92% of the total variance. "Relief Craving" is associated with negative reinforcement, which is the termination of an aversive stimulus immediately following a performance. The second dimension, "Obsessive Craving", measures the presence of obsessive thoughts concerning alcohol. This dimension accounts for 13.64% of the total variance, has an eigenvalue of 2.73, and includes items 16, 20, 17, 12, 5, 6, 11 and 9. The last dimension, "Reward Craving", encompasses items 13, 2, 19, 7, 8, 1, and 10, has an eigenvalue of 1.11, and accounts for 5.57% of the total variance. It is generally associated with positive reinforcement, which can be defined as the presentation of a reinforcing stimulus immediately following a performance (16).

Obsessive-Compulsive Drinking Scale (OCDS): Several clinical, neurobiological, and neuropsychological data suggest that both obsessive thoughts about alcohol use and compulsive behavior towards drinking are part of craving. Modifying an interview-based questionnaire (Yale-Brown Obsessive Compulsive Drinking Scale: YBOCS-hd), Anton et al. (6) developed a self-administered questionnaire consisting of 14 items, the Obsessive-Compulsive Drinking Scale (OCDS), which include items to evaluate both total craving and its obsessive and compulsive components. Its ease of use (it can be completed in 5 minutes), reproducibility, validity, and analytic capacity make the OCDS a very effective and useful questionnaire during trials for the treatment of patients with alcohol problems, while also proving to be significantly related to the severity of alcoholism (6,26,27).

Statistical Analysis

The reliability of the CTQ was assessed using Cronbach's α, which evaluates the internal consistency of the questionnaire, based on the correlation between items. Pearson's linear correlation analyses were employed to verify the correlations between subscales. Also, Pearson's linear correlation analyses were conducted to verify the correlations between CTQ and OCDS (n=77). Principal component analysis was performed to detect the underlying dimensionality of the scale. As a rotation method, Varimax with Kaiser Normalization was used. The eigenvalue-greater-than-one criterion was used to determine the number of relevant factors.

RESULTS

Sociodemographic variables and variables related with alcohol use are shown in Table 1 (Table 1). Obsessive craving (eigenvalue 5.58, explaining 27.91% of variance), relief craving (eigenvalue 1.63, explaining 8.17% of variance) and reward craving (eigenvalue 1.45, explaining 7.23% of variance) (Table 2). In the first evaluation, a six-factor solution was found with eigenvalues greater than 1. When a fixed number of 3 factors was evaluated, items 7 and 8 were included in obsessive craving and item 10 was included in relief craving instead of reward craving. Other than these, all items were included in dimensions consistent with the original scale (Table 3). Correlations between items and subscales of CTQ: for each of the items, the item-subscale total correlation values were between 0.351 (Item 1 - reward) and 0.798 (Item 5 - obsessive) (Table 4).

The subscales and total scores of the CTQ were correlated significantly with each other and with OCDS ($p<0.001$) (Table 5). Obsessive craving was highly correlated with CTQ, whereas relief and reward cravings were moderately correlated with CTQ. CTQ and obsessive craving subscale were moderately correlated with OCDS and its subscales, whereas relief and reward cravings were mildly correlated with OCDS and its subscales. The internal consistency coefficient (Cronbach's α) was 0.87 for obsessive craving, 0.64 for relief craving, and 0.42 for reward craving (Table 5).

Among the sample, 80 participants (50.96%) were outpatients and 77 (49.04%) were inpatients. Total CTQ, obsessive craving and reward craving scores did not differ between outpatients (66.01±14.13, 27.51±8.55, and 20.19±4.46 respectively) and inpatients (62.49±13.34, 27.07±7.71 and 18.87±4.71, respectively), whereas the relief craving score was higher in outpatients (18.31±4.29) than inpatients (16.56±4.15) (t=1.60, p=0.11; t=0.34, p=0.73; t=1.80, p=0.07; t=2.60, p=0.01, respectively) (not shown). This may suggest that outpatients might be experiencing more withdrawal symptoms, during which reward craving is the main type of craving, than inpatients, who are receiving medication for their withdrawal symptoms.

Table 1: Sociodemographic and clinical characteristics of the sample

	Mean±S.D.	Minimum-Maximum
Age	43.20±10.27	19.0-78.0
Duration of education	9.23± 3.71	1.0-20.0
Age at onset of regular alcohol use	10.0-55.0	25.45±8.28
	Subjects	**%**
Marital status		
Married	89	56.7
Single	35	22.3
Divorced	33	21.0
Employment status		
Unemployed	43	27.4
Part-time	59	37.6
Employed	29	18.5
Retired	26	16.6
Cloninger's Type		
Type I	75	47.8
Type II	82	52.2

Table 2: Factorial structure of the Craving Typology Questionnaire (CTQ)

	Component	Initial Eigenvalues	
		Total	**% of Variance**
	1	5.583	27.913
	2	1.633	8.165
	3	1.445	7.225
	4	1.252	6.261
	5	1.156	5.778
	6	1.001	5.006
Forced 3 factors	**Obsessive**	5.583	27.913
	Relief	1.633	8.165
	Reward	1.445	7.225

Table 3: Factorial analysis of the Craving Typology Questionnaire (CTQ) 20 items among Turkish patients with alcohol use disorder

Item	Component		
	Obsessive	Relief	Reward
17- Sometimes I can't get my mind off drinking	0.799		
16- I can hardly ever put off the thought of drinking	0.727		
5- I think about alcohol constantly	0.727		
11- If I can't drink I get anxious	0.714		
12- Because of the "thought" of alcohol I miss out on other important things	0.644		
8- I started drinking very early in life	0.599		
6- I stop thinking about alcohol only while I drink	0.597		
9- I drink because I need to and not because I like it	0.479		
20- I fight with all my strength to overcome the thought of drinking but it is stronger than my will	0.436		
7- Sometimes I drink to experience new emotions and feelings	0.413		
15- I often use alcohol as a tranquilizer or sleep-inducer		0.804	
14- I drink when I feel sad		0.606	
4- I drink to relieve tension and stress		0.541	
18- When I drink I calm myself down		0.514	
10- Sometimes I drink to feel more confident around other people		0.423	
3- Sometimes I drink to ease certain physical symptoms		0.404	
1- I drink because I like it			0.616
19- When I drink a lot I sometimes become aggressive and/or irritable			-0.536
13- Sometimes I take other drugs with alcohol			-0.453
2- I drink to get high and lose control			0.394

Extraction Method: Principal Component Analysis, Rotation Method: Varimax with Kaiser Normalization

Table 4: Correlations between items and subscales

Relief		Obsessive		Reward	
Item 18	0.635	**Item 16**	0.772	**Item 13**	0.470
Item 4	0.622	**Item 20**	0.599	**Item 2**	0.506
Item 3	0.612	**Item 17**	0.786	**Item 19**	0.504
Item 14	0.627	**Item 12**	0.730	**Item 7**	0.526
Item 15	0.716	**Item 5**	0.798	**Item 8**	0.482
		Item 6	0.698	**Item 1**	0.351
		Item 11	0.753	**Item 10**	0.446
		Item 9	0.632		

Table 5: Correlations of CTQ with OCDS

	Obsessive	Relief	Reward	CTQ
Obsessive (n=157)	1	0.526*	0.480*	0.912*
Relief (n=157)		1	0.312*	0.724*
Reward (n=157)			1	0.713**
Cronbach's α (n=157)	0.87	0.64	0.42	0.84
Obsessive (n=77)	0.591*	0.330**	0.369**	0.575*
Compulsive (n=77)	0.607*	0.257***	0.262***	0.523*
OCDS (n=77)	0.657**	0.318**	0.341**	0.599**

CTQ: Craving Typology Questionnaire, OCDS: Obsessive-Compulsive Drinking Scale

Table 6: Comparing mean scores of cravings according to Cloninger's Typology

	Type I (n=75)		**Type II** (n=82)			
	Mean	S.D.	Mean	S.D.	t	p
Obsessive	25.40	8.13	29.02	7.77	-2.856	0.005
Relief	17.65	4.37	17.27	4.25	0.559	0.577
Reward	18.21	4.64	20.76	4.28	-3.575	<0.001
CTQ	61.27	14.24	67.05	12.89	-2.670	0.008

CTQ: Craving Typology Questionnaire

Among the sample, 75 individuals (47.77%) were considered as Type 1 alcoholics according to Cloninger's Typology, whereas 82 (52.23%) were considered as Type 2. Mean scores of obsessive and reward cravings were higher among those with Type 2 alcoholism, whereas there was no difference between the two groups according to relief craving (Table 6).

DISCUSSION

Martinotti et al. (16) proposed a valid and reliable psychometric instrument that is able to differentiate craving into different typologies, defined as relief, reward, and obsessive craving. The results of the present study demonstrate that the CTQ has been successfully translated into Turkish. While a Cronbach's analysis showed good reliability for the Turkish version of the scale (α=0.84), at the level of subscales, Cronbach's α was 0.87 for obsessive craving, 0.64 for relief craving and 0.42 for reward craving. A possible explanation for these findings could be that our study population was mostly made up of severely dependent patients, as demonstrated by the fact that more than half of the sample consisted of "Type II-like" alcoholics, who are expected to experience the highest levels of craving, particularly reward craving. In addition, regardless of the type of alcoholism, the treatment-seeking population in the present study came from a severely dependent population, whereas in addition to the clinical sample, normative data was also used in the original study.

Principal component analysis of the Turkish version of the CTQ items showed that there were six eigenvalues greater than 1. Evaluating the forced three-factor solution, we found that these three factors explained 43.30% of the variance. The first factor, represented by the compulsive component, explained 27.91% of the variance. The second factor taken into consideration, represented by the obsessive component, was able to explain another 8.17% of the variance, and the third factor was able to explain another 7.23% of the variance; thus the cumulative variance reached 43.30%. It seems easy to recognize that the first factor discriminated all the obsessive craving items, the second factor all the relief craving items, while the third one discriminated most of the reward craving items. Three items originally subsumed under the reward craving factor did not fit in this dimension; instead, items 7 and 8 were included in obsessive craving and item 10 was included in relief craving. When original scales are translated into different languages and used in different cultures, this may negatively affect internal consistency, validity, and reliability (28). After translating CTQ into Turkish, some of the statements might cause difficulties in understanding and interpretation of these items in the Turkish population. For example, item 10 "Sometimes I drink to feel more confident around other people" may be understood as meaning to calm anxiety in social situations, which is common among Turkish patients with AUD. Similarly, item 7 "Sometimes I drink to experience new emotions and feelings" seems to be very ambiguous for Turkish patients, and the concept of "early in life" may differ according to different cultures and even within cultures, such as in item 8 "I started drinking very early in life". Nevertheless, since the values for these items are acceptable when considered in the context of the original factors, we decided to use these items within their original factors. Indeed, internal consistency coefficients for obsessive and relief craving subscales were higher than 0.6, whereas the internal consistency coefficient for reward craving was 0.42. Although the coefficient for reward craving was lower than 0.50, the internal consistency coefficient of CTQ as a whole was 0.84. Also, for each of the items, the corrected item-subscale correlation values were higher than 0.35. Subscales were mildly (reward and relief) or moderately (obsessive and the other two subscales) correlated with each other. Relief and reward craving were moderately correlated with the total score, whereas obsessive craving was highly correlated with the total score.

According to the three-pathway model of craving, three etiological pathways are thought to exist based on the motivating factors underlying the desire to drink. The first of these, "reward" craving, involves

people who consume alcohol because of a desire for its positive effects (reward drinker). This is consistent with enhancement motives. The second pathway involves people who consume to relieve tension or arousal, labeled "relief" craving (relief drinker). This is consistent with coping motives. The third pathway, obsessive craving, involves those who are incapable of controlling intrusive thoughts about drinking, including the amount of time spent in an effort to resist alcohol-related thoughts (22). This finding is important because even deciding which treatment should be used for patients depends on this classification, i.e., the "relief drinker/craver" may respond to acamprosate whereas being a "reward drinker/craver" is mainly associated with a response to naltrexone (29).

Our findings must be understood in the light of several limitations. Firstly, all patients included in this study were male and the study group was restricted to a treatment population. Therefore, it is not possible to generalize the findings to female substance-dependent patients and non-treatment groups. A second limitation was that although subjects were not assessed during withdrawal, patients might still have some cognitive problems to evaluate themselves correctly at the time of the interview. Nevertheless, in conclusion, results obtained in this study suggest that the Turkish version of the CTQ is reliable and valid for alcohol-dependent inpatients.

Contribution Categories	Name of Author
Development of study idea	C.E., B.E.
Methodological design of the study	C.E., B.E.
Data acquisition and process	G.U., R.A.
Data analysis and interpretation	C.E., G.U., B.E.
Literature review	R.A., M.B., Y.C.
Manuscript writing	C.E., G.U., M.B., Y.C.
Manuscript review and revisation	C.E., G.U., R.A., M.B., Y.C.

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Aşerme Tipoloji Ölçeği

(Craving Typology Questionnaire-CTQ)

(Martinotti ve ark., 2013)

Aşağıdaki soru formu alkol kullanım sorunu olan insanların alkollü içeceklerle ilişkileri hakkında eğilimleri, düşünceleri ve duygularını tanımlamak için sıklıkla kullandıkları ifadeleri içermektedir.

Aşağıdaki her bir soru için sadece şu anda nasıl hissettiğinizi değil genellikle nasıl hissettiğinizi en iyi tanımlayan numarayı daire içine alınız (Her soru için tek bir numarayı daire içine alın).

1	2	3	4	5
kesinlikle yanlış	kısmen yanlış	ne doğru ne de yanlış	kısmen doğru	kesinlikle doğru

Her soruyu dikkatlice okuyun, fakat kısa sürede karar verin.

Lütfen, cevaptan tamamen emin olmasanız bile her bir soruyu cevaplayın.

Bu testte doğru ya da yanlış cevap yoktur – sadece duygularınızı tanımlamaya çalışın.

CİNSİYET E K

YAŞ _____

MESLEK _____ TARİH_____

1 kesinlikle yanlış	**2** kısmen yanlış	**3** ne doğru ne de yanlış	**4** kısmen doğru	**5** kesinlikle doğru

1	Hoşlandığım için içiyorum	1	2	3	4	5
2	Kafayı bulmak ve kontrolü kaybetmek için içiyorum	1	2	3	4	5
3	Bazen belirli fiziksel belirtileri geçirmek için içiyorum	1	2	3	4	5
4	Gerginlik ve stresin geçmesi için içiyorum	1	2	3	4	5
5	Devamlı alkol hakkında düşünüyorum	1	2	3	4	5
6	Sadece içerken alkol hakkında düşünmeyi bırakıyorum	1	2	3	4	5
7	Bazen yeni duygular ve hisler yaşamak için içiyorum	1	2	3	4	5
8	Hayatın çok erken döneminde içmeye başladım	1	2	3	4	5
9	Hoşlandığım için değil ihtiyacım olduğu için içiyorum	1	2	3	4	5
10	Bazen diğer insanlar arasında daha güvenli hissetmek için içiyorum	1	2	3	4	5
11	İçemezsem gergin oluyorum	1	2	3	4	5
12	Alkol “düşüncesi” nedeniyle başka önemli şeyleri kaçırıyorum	1	2	3	4	5
13	Bazen alkolle birlikte başka maddeler alıyorum	1	2	3	4	5
14	Üzgün olduğumda içiyorum	1	2	3	4	5
15	Alkolü genellikle sakinleştirici ya da uyku verici olarak kullanıyorum	1	2	3	4	5
16	İçme düşüncesini neredeyse hiç uzaklaştıramıyorum	1	2	3	4	5
17	Bazen aklımı içmekten alamıyorum	1	2	3	4	5
18	İçtiğimde kendimi sakinleştiriyorum	1	2	3	4	5
19	Çok içtiğimde bazen saldırgan ve/veya irritabl olurum	1	2	3	4	5
20	Bütün gücümle içme düşüncesiyle mücadele ediyorum ama irademden daha güçlü	1	2	3	4	5