

Psychometric Evaluation of the Turkish Language Version of the Profile of Mood States (POMS)

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ÖZET:

Duygudurum Profili'nin (DP) Türkçe formunun psikometrik değerlendirilmesi

Amaç: Duygudurum Profili (DP) kısa süreli duygudurum değişikliklerini değerlendirmek için geliştirilmiş olup 65 sıfat ve 6 alt ölçekten oluşmuştur. Çalışmanın amacı DP'nin Türkçe Formunun çeviri yeterliğini değerlendirmek ve yöntemsel hataların üstesinden gelinmesindeki karar alma süreçlerini bildirmektir.

Yöntem: İngilizce Form Türkçeye uzman ekip yaklaşımı ile çevrildi. Geri çeviri, iki dilli öznelerin kullanımı ve eş zamanlı geçerlik için diğer ölçekler ile bağıntı gibi diğer tekniklere ilaveten yapı geçerliği için ağırlıklı olarak faktör analizi kullanıldı.

Bulgular: Elli sekiz maddelik Türkçe formun son hali uygun psikometrik özelliklere sahipti. Türk katılımcıların verilerine dayanan bulgularımız 6 faktörlü orijinal çözümü tekrarladı ("çökkünlük-keşifsizlik"-15, "gerginlik-sıkıntı"-9, "öfke-saldırganlık"-12, "şaşkınlik-şaşırmışlık"-7, "yorgunluk-durgunluk"-7 ve "dinçlik-aktiflik"-8). Uygun bir kalıba ulaşmak için hiçbir faktöre uymayan 7 maddeyi dışlamak gerekti. Bu sonuçları sağlama örneklemini üzerinde doğrulayıcı bir faktör analizi yürüterek ve karşılaştırılabilir bir kalıp ve yine karşılaştırılabilir faktör yükleri elde ederek sınıadık. Bu formun eş zamanlı geçerliği DP alt ölçek puanları ile anksiyete ve depresyon ölçek puanları arasındaki bağıntılar aracılığıyla kanıtlandı.

Sonuçlar: Çalışma geçerli psikometrik özellikler göstermesine karşın ölçeğin duyarlılığını değerlendirmek için çeşitli topluluklarda yapılmış daha ileri çalışmalara ihtiyaç vardır.

Anahtar sözcükler: psikometrik, türkçe, profil, duygudurum, geçerlik, güvenilirlik

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ABSTRACT:

Psychometric evaluation of the Turkish language version of the Profile of Mood States (POMS)

Aim: The POMS was developed to assess short-term mood changes and consisted of 65 adjectives and 6 subscales. The purpose of the study was to assess the translation adequacy of a Turkish version of the POMS, and to report the decision-making process of overcoming methodological faults.

Method: The English version was translated to Turkish by expert team approach. Factor analysis for construct validation was predominantly used for assessment, in addition to other techniques: back translation, use of bilingual subjects, and correlation with other instruments for concurrent validation.

Results: The final 58-item Turkish version has suitable psychometric properties. Our findings, based on data from Turkish participants, replicated the original 6-factor solution ("depression-dejection"-15, "tension-anxiety"-9, "anger-hostility"-12, "confusion-bewilderment"-7, "fatigue-inertia"-7, and "vigor-activity"-8). To achieve an acceptable fit, it was necessary to omit 7 items that did not fit any factor. We verified these results by conducting a confirmatory factor analysis on the validation sample and obtaining comparable fit and comparable factor loadings. The concurrent validity of this form was evidenced by the correlations between scores from the POMS subscales and scores from measures of anxiety and depression.

Conclusions: Although the study shows valid psychometric properties, further studies made in various populations are needed to assess the sensitivity of the scale.

Key words: psychometric, turkish, profile, mood, validity, reliability

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INTRODUCTION

Reliable and valid rating scales have greatly advanced research on mood disorders and offer potential means of improving routine clinical assessment. Formal rating scales generally accomplish a simple objective: by digitizing clinical phenomena on ordinal scales, scales allow tracking of symptom clusters over time (1). The aims of the rating scales can be listed as follows: 'screening

for presence of psychiatric disorders', 'classifying and diagnosing psychiatric disorders,' and 'measuring changes in psychopathology.' These scales, which provide the option to evaluate the mood and psychological changes, can be prepared in the form of clinician rated or self rated scales (2).

Mood may be defined as pervasive and sustained tone of emotions. It is subjectively experienced and reported by a person and observed by others; examples include

depression, elation, or anger. Generally, mood appears to influence the way people perceive, interpret, plan, and execute strategic interpersonal behaviours and thereby influence the kind of social information (3). Mood lability and mixtures of moods are important clinical features that may contribute to diagnostic formulation and treatment response (4). Therefore it is absolutely necessary to determine these mood states for correct diagnosis and treatment.

The measurement of mood and many other psychological variables are typically conducted by using self-report assessment instruments. These types of measures are also considered to be the most efficient and the easiest measures to administer (5). The POMS is one of these scales. POMS was developed by McNair, Lorr, and Droppleman (1971) to assess transient distinct mood states rapidly and reliably (6). It can be used for assessing psychiatric patients and their responses to various therapeutic approaches. POMS has also been used to measure the effects of various experimental manipulations performed on normal subjects and other non-psychiatric populations.

Although a number of alternate language forms of the POMS exist, including Arabic (7), German (8), Chinese (9), Dutch (10), Spanish (11), French (12), Korean (13), Hebrew (14) and Japanese (15) group-specific evaluations are needed for additional alternate language versions.

POMS was also used in many different studies. Some examples are as follows: 1. Studies related with sleep, sleep deprivation, and dreams (16,17). 2. Affect and cognition in dreams (18). 3. Studies aimed to evaluate the short and long term effects of pharmacotherapy, psychotherapy, and other therapies (19-21). 4. Studies about the relationships between physiological and biological variables and mood changes (22-24). 5. Some studies about the mood changes after the various practices (25,26).

A number of shorter forms of the POMS have also been developed using various subsets of items from the original POMS. Typically, the subsets were derived either by dropping items that had low factor loadings or dropping items that would improve the internal consistency reliability of a subscale (8-10,12,13,27-31). In alternate language short forms, items that posed translation or comprehension problems were also dropped (8-10,12,13,27,29). The short versions we could locate had from 22 to 48 items. All but two of these shorter versions excluded the friendliness items (13,29).

Although a few mood scales were examined for reliability and validity in Turkey previously, there is no scale available that measures the short-term and situational mood changes. In the present study we assessed the reliability and validity of the Turkish version of the POMS. One way to overcome methodological errors and to ensure optimal translation is to combine several assessment techniques while performing the translation procedures (32,33). Due to the unique difficulty involved in translating a multi-dimensional, single-word item questionnaire, in the present paper we implemented a number of techniques. Furthermore, we used the expert team approach in the first few steps of translation and the committee approach in the advanced steps, following the initial procedure of pre-testing.

METHOD

The Participants

1. Twenty English teachers, aged 25-45, men and women native English speakers, who live in Turkey, mostly in Istanbul and possess very superior command of the Turkish language.
2. Three groups of students (Group 1: N=101, Group 2: N=124, Group 3: N=113) from the Yuzuncu Yil University School of Medicine aged 22.1 (± 2.2). The groups included approximately 60% males aged 23 (± 2.2) and 40% females aged 21.6 (± 2.1). The mean age and gender distribution of the groups were quite typical to the mean age and gender distribution of students at the Yuzuncu Yil University School of Medicine. All three groups were tested during first or second grade. All students were assessed for any psychiatric disorder by using the Structured Clinical Interview for DSM-IV Axis I Disorders, Clinician Version (SCID-I, CV) (34,35) and the Structured Clinical Interview for DSM-IV Axis II Personality Disorders (SCID-II) (36,37). The SCIDs were administered by a trained psychiatric clinician with minimum 2 years of experience in the relevant field. Mentally healthy students (no psychiatric diagnosis on Axis I or II) were accepted.
3. Two groups of patients who were seen at psychiatric outpatients clinics of the Yuzuncu Yil University School of Medicine. The group A (N=111), which included approximately 40% males aged 26.2 (± 7.5)

and 60% females aged 30 (± 9.9) years old, consisted of patients who had an anxiety disorder other than acute or post-traumatic stress disorder. The group D (N=109), which included approximately 35% males aged 28.2 (± 8.1) and 65% females aged 35.2 (± 9.2) years old, consisted of patients who met major depressive disorder criteria. Both groups were tested in one of the psychiatric outpatient clinics of the Yuzuncu Yil University School of Medicine. The diagnoses of patients were confirmed with the DSM-IV-TR criteria in conjunction with SCID-I interviews. Also, they were confirmed to have no psychiatric diagnosis on Axis II by means of SCID-II. The SCIDs here were administered by the same trained psychiatrist. The patients were not taking any psychotropic drugs before and during the evaluations, so the test results were not affected.

Common exclusion criteria were as follows for all participants (clinical or non-clinical): (a) having a personality disorder; (b) presence of the psychoactive substance or alcohol abuse or dependence; (c) having a circadian rhythm sleep disorder; (d) presence of the drug(s) influencing mood and emotions; (e) presence of a condition that may influence the circadian rhythm like shift work or jet lag; (f) existence of a chronic medical illness; and (g) being out of the 18-50 age interval.

The data used for this study were collected between January 2006 and January 2008. All participants were informed about the aims of the study and their written consents were obtained. They were not compensated in any way for their participation. A totally voluntary contribution mechanism was used. To encourage honesty, objectivity, and precision in completing the questionnaires, the identity of the participants was kept confidential. To achieve objectivity, participants were asked to record their true feelings rather than how they thought they were "supposed" to feel. This study was approved by the Ethics Committee of the Faculty of Medicine, Yuzuncu Yil University of Van.

INSTRUMENTS

The Profile of Mood States (POMS)

POMS is a self-rating scale which consisted of 65 adjectives that were rated on a 5-point scale. The scale

begins with the instruction of: "Below is a list of words that describe feelings people have. Please read each one carefully, then fill in one space under the answer to the right which best describes how you have been feeling during the past week including today (or today, right now, and even the past three minutes). The numbers refer to the following descriptive phrases.

- 0=not at all
- 1=a little
- 2=moderately
- 3=quite a bit
- 4=extremely

POMS measures 6 identifiable mood or affective states: "tension-anxiety", "depression-dejection", "anger-hostility", "vigor-activity", "fatigue-inertia" and "confusion-bewilderment". To obtain a score for each mood factor, the sum of the responses is obtained for the adjectives defining the mood factor. A seventh score of Total Mood Disturbance is also calculated by subtracting the score on the one positively scored subscale, vigor-activity, from the sum of the other five subscales (see Appendix 1 for further information).

The Beck Anxiety Inventory (BAI)

In this 21-item scale (38), test takers are asked "How have been feeling during the past week, including today" on a four point scale ranging from "not at all" to "very much so." The psychometric properties of this scale are well established. It was adapted to Turkish by Ulusoy, Sahin, and Erkmen (1998) and has been widely used in Turkey (39). High values of reliability and validity have been found in the Turkish version.

The Beck Depression Inventory (BDI)

This scale consists of 21 self-descriptive items (40). Every item contains 4 sentences. Respondents are asked to check the sentences that are descriptive of "How you have been feeling during the past week including today". The score is the sum of the selected sentences (range 0-63). The scale was adapted to Turkish by Hisli (1989) and has been widely used by the researchers in psychiatry and psychology in Turkey (41). The Turkish version has yielded high values of reliability and validity.

Procedure

Three native English speakers translated the original English version of the POMS separately (expert team approach) to Turkish. All three possessed a very good command of the Turkish language and each one of them translated all 65 adjectives in the POMS choosing the most fitting adjective in Turkish. In cases of equivalence between at least two, the translation of that adjective was accepted. In cases where three different words were offered, a researcher with exceptional command of English and Turkish, as well as considerable knowledge and research experience in exercise psychology, served as a judge and made a final decision.

In the following stage, two additional bilingual persons translated the Turkish version back into English. The backtranslations were then compared to the original English version. The back translation procedure resulted in exactly the same items in English as the original version. All 65 items were equivalent in the original Turkish translation, thus two back translations were found valid. For this reason, the original Turkish translation remained unchanged.

Both versions, the English and the Turkish, were administered among the English teachers. They were randomly divided into two groups. One group filled in the Turkish version first, followed by the English one, while the other group received the English first, followed by the Turkish version.

The Turkish version was then administered to students from Group 1. We performed a confirmatory factor analysis on the data and were able to yield the same 6 factors (Depression-dejection, tension-anxiety, anger-hostility, confusion-bewilderment, fatigue-inertia, and vigor-activity subscales) as in the original English version.

A committee was then formed (committee approach) comprising a clinical psychologist and two methodologists, all possessing superior command of English and Turkish and who reached the final decision that both versions (English and Turkish) measure the same components and it means that the Turkish version is valid. Secondly, the committee omitted 7 items (friendly, clear-headed, considerate, sympathetic, helpful, good-natured, and trusting) as they did not fit any factor. The final Turkish version, then, included 58 items, distributed among the factors as follows: “depression-dejection”-15, “tension-anxiety”-9, “anger-hostility”-12, “confusion-

bewilderment”-7, “fatigue-inertia”-7, and “vigor-activity”-8. Group 2 and 3 took the final version of the POMS as well as the BAI and the BDI. The three questionnaires were administered in random order. Some students took the POMS first, followed by the BAI, followed by the BDI, while others took the BAI first, followed by the POMS and then the BDI, etc. Group A took the final version of the POMS, along with the BAI. Similarly, Group D took the final version of the POMS, along with the BDI.

Data Analysis

Because of the recommended procedure for evaluating reliability (and validity) is to have bilingual participants fill out the questionnaire in both languages and assess the correlation between the two, scores of the final version of the POMS were compared between the English and Turkish versions taken by the bilingual teachers, and the percent of equivalence was calculated.

For the validity, suitable procedure is to perform a factor analysis on the findings. For this, all participants (clinical or non-clinical) can be included in the analysis. If this analysis produces the same 6 factors as in the English version, it will mean that both versions measure the same components and the Turkish version is valid enough. So, Principal Axis (exploratory) Factor analysis (PAF), with varimax rotation, was conducted on the final version of the POMS in Group 2, in Group 3, in Group A, and in Group D. The inclusion criterion loading was 0.40.

Cronbach’s Alpha is a proper way to assess internal consistency that provides some indication of reliability. Thus, this technique was applied in all groups and provided separate alphas for each subscale.

Another way of validating the test is to administer another instrument together with the POMS, one that has already been used and established in Turkish, for example, a depression scale. If the correlation between the depression-dejection subscale of the POMS and the 2nd depression scale is high, this consequence will provide some indication of validity of the Turkish version of the POMS. It’s called external validation. For this purpose, a Pearson correlation was conducted between the “depression-dejection” factor of the POMS and the BDI in groups 2, 3, and D and between the “tension-anxiety” factor of the POMS and the BAI in groups 2, 3, and A.

Table 1: Exploratory Factor Analyses of the 58 Items of the POMS in four Turkish Groups (In Turkish)

Factors	Items	Factor Loadings in Four Groups			
		Group 2	Group 3	Group A	Group D
Depression-dejection (d-d)	Unhappy	0.70	0.66	0.74	0.69
	Sorry for things done	0.57	0.56	0.58	0.61
	Sad	0.65	0.61	0.68	0.57
	Blue	0.69	0.81	0.78	0.71
	Hopeless	0.75	0.71	0.66	0.77
	Unworthy	0.73	0.72	0.82	0.81
	Discouraged	0.83	0.76	0.78	0.86
	Lonely	0.77	0.60	0.67	0.61
	Miserable	0.73	0.73	0.80	0.76
	Gloomy	0.69	0.79	0.61	0.81
	Desperate	0.72	0.75	0.84	0.77
	Helpless	0.82	0.69	0.79	0.71
	Worthless	0.76	0.71	0.72	0.72
	Terrified	0.83	0.74	0.84	0.79
Guilty	0.84	0.83	0.80	0.80	
Tension-anxiety (t-a)	Tense	0.84	0.72	0.79	0.73
	Shaky	0.73	0.67	0.76	0.71
	On edge	0.83	0.68	0.61	0.61
	Panicky	0.66	0.61	0.70	0.62
	Relaxed	0.79	0.74	0.71	0.75
	Uneasy	0.69	0.63	0.81	0.71
	Restless	0.78	0.76	0.77	0.73
	Nervous	0.71	0.73	0.73	0.70
	Anxious	0.84	0.80	0.80	0.84
Anger-hostility (a-h)	Angry	0.68	0.74	0.63	0.62
	Peeved	0.76	0.71	0.71	0.73
	Grouchy	0.85	0.75	0.76	0.79
	Spiteful	0.79	0.71	0.81	0.75
	Annoyed	0.71	0.64	0.69	0.64
	Resentful	0.80	0.78	0.83	0.79
	Bitter	0.71	0.67	0.69	0.72
	Ready to fight	0.75	0.71	0.74	0.77
	Rebellious	0.65	0.59	0.62	0.60
	Deceived	0.63	0.64	0.80	0.76
	Furious	0.63	0.69	0.60	0.71
	Bad-tempered	0.77	0.72	0.70	0.73
Confusion-bewilderment (c-b)	Confused	0.73	0.61	0.68	0.62
	Unable to concentrate	0.79	0.85	0.80	0.81
	Muddled	0.59	0.58	0.58	0.53
	Bewildered	0.62	0.78	0.84	0.65
	Efficient	0.57	0.50	0.61	0.56
	Forgetful	0.73	0.65	0.63	0.62
	Uncertain about things	0.74	0.70	0.71	0.71
Fatigue-inertia (f-i)	Worn out	0.74	0.71	0.78	0.76
	Listless	0.53	0.57	0.50	0.53
	Fatigued	0.81	0.79	0.79	0.80
	Exhausted	0.84	0.80	0.81	0.81
	Sluggish	0.69	0.85	0.77	0.81
	Weary	0.69	0.62	0.63	0.66
	Bushed	0.61	0.64	0.70	0.69
Vigor-activity (v-a)	Lively	0.65	0.72	0.59	0.64
	Active	0.84	0.77	0.80	0.82
	Energetic	0.71	0.71	0.82	0.81
	Cheerful	0.66	0.61	0.69	0.61
	Alert	0.85	0.86	0.75	0.80
	Full of pep	0.79	0.77	0.71	0.74
	Carefree	0.70	0.73	0.74	0.72
	Vigorous	0.69	0.67	0.70	0.70

Table 2: Internal Consistency Scores (Cronbach's α) for the Factors

Factors	Bilinguals (Turkish) N=20	Bilinguals (English) N=20	Group 2 N=124	Group 3 N=113	Group A N=111	Group D N=109
d-d	0.85	0.86	0.88	0.86	0.87	0.91
t-a	0.86	0.88	0.87	0.85	0.90	0.91
a-h	0.90	0.87	0.81	0.83	0.89	0.89
c-b	0.84	0.88	0.83	0.81	0.90	0.81
f-i	0.81	0.82	0.88	0.83	0.84	0.91
v-a	0.81	0.88	0.91	0.83	0.82	0.87

RESULTS

Comparing the scores of the English and the Turkish version (the final version), taken by the bilingual teachers, provided the following results: Complete agreement or a one grade difference between the two languages was reported among over 90% of the participants on 46 items, between 80 to 89% on 10 items, and between 70 to 79% on 2 items.

Results of the factor analyses are presented in Table 1.

The variance accounted for in Group 2 (N=124) was 68.6%, in Group 3 (N=113) 67.9%, in Group A (N=111) 68.4%, and in Group D (N=109) 68.1%. All items in groups had a load of more than 0.4 on the factors.

Table 2 presents reliability values (Cronbach's α) of each factor on all groups.

The results of the Pearson correlation between the "depression-dejection" factor of the POMS and the score on the BDI was 0.78 ($p<0.001$) in Group 2 (N=124), 0.76 ($p<0.001$) in Group 3 (N=113), and 0.79 ($p<0.001$) in Group D (N=109). The correlation between the "tension-anxiety" factor of the POMS and the BAI was 0.73 ($p<0.001$) in Group 2 (N=124), 0.71 ($p<0.001$) in Group 3 (N=113), and 0.74 ($p<0.001$) in Group A (N=111).

DISCUSSION

Our findings, based on data from Turkish participants, replicated the original 6-factor solution proposed by McNair et al. (1971) (6). To achieve an acceptable fit, it was necessary to omit some items that did not fit any factor. We verified these results by conducting a confirmatory factor analysis on the validation sample and obtaining comparable fit and comparable factor loadings. The concurrent validity of this form was

evidenced by the correlations between scores from the POMS subscales (depression-dejection, tension-anxiety) and scores from measures of anxiety (BAI) and depression (BDI). The results of the present study suggest that the 58-item Turkish version of the POMS has a stable structure in assessing discrete dimensions of mood. Following a process of methodological and conceptual assessment, factor analysis was conducted on four different Turkish speaking groups. Two of these groups were clinical. The results consistently indicated the following 6 dimensions: "depression-dejection"-15, "tension-anxiety"-9, "anger-hostility"-12, "confusion-bewilderment"-7, "fatigue-inertia"-7, and "vigor-activity"-8. In addition, internal consistency, assessed in all groups, yielded satisfactory results. The final stage of the process included measuring concurrent validation by comparing results of specific factors to other scales measuring equivalent constructs. Results of those comparisons were highly suitable as well.

Both the original and the various shorter versions of the POMS are generally considered to be reliable and valid, with very good to excellent internal consistency reliability and/or support for concurrent or discriminant validity (27,42-44). Yet, a search combining test evaluation terms (e.g., reliability, psychometric, construct validity) with the POMS yielded only 14-factor analytic studies subsequent to the initial factor analyses conducted in 1971 by McNair and colleagues (7-11,42,45-51).

Overall, our findings were consistent with five of these 14 studies that supported the original 6-factor structure identified in 1971 (8,42,45,46). Three of these five studies were short versions of the POMS, including a German language version (8), an English language version (42), and an Arabic language version (7). The remaining two studies were English language versions of the original

65-item POMS (45,46)

Boyle (1987) investigated further the factorial structure of the POMS in an Australian college sample of 289 undergraduate students (45). Responses for all 65 items were inter-correlated and subjected to an iterative principal factoring procedure together with rotation to oblique simple structure. He found high correlations among the 6 POMS subscales. Results indicated that the basic subscale structure of the profile is reliable. Gibson (1997) examined the reliability and validity of the POMS questionnaire when administered to 479 community-dwelling older adults (46). Factor analysis replicated the original factor structure identified in young-adult samples, suggesting that older adults adopt the same underlying constructs of mood when responding to the POMS. There was strong support for concurrent validity, and this instrument was able to discriminate between healthy adults and patients with known mood disturbance. Excellent internal consistency of POMS subscales and very good retest reliability were noted.

Our findings were similar to those of Boyle and Gibson (45,46). However, the committee omitted 7 items (friendly, clear-headed, considerate, sympathetic, helpful, good-natured, and trusting) that did not fit any factor in the present study. This was demonstrated also in the original study of McNair et al (1971). On the contrary, muddled and efficient items were problematic in the studies of these investigators. But all groups had a load of more than 0.40 on mentioned items in our study. The adjectives and phrases on the POMS were constructed from a word list published in 1944 (52), and terms like muddled, for example, might have become archaic over time (53). Current Turkish equivalents might be more understandable of these adjectives.

Our findings also point out that translating psychological assessment devices from one language to the other is not just a matter of finding the right words. It should involve, in addition to literal translation, a process of revision, modification, and amendment of the content of those devices to fit the receiving culture.

Besides, including not only the healthy adults (45,46) but also the clinical participants (psychiatric outpatients)

was an important advantage in the present study. Because of the POMS is a very sensitive scale (assessing mood "last week including today"), stability of scores on two different dates should not be expected too much. So, test-retest does not seem to be an appropriate method to assess reliability in the present study. In contrast to Gibson (1997), test-retest reliability was not examined (46).

Based on findings from this study, researchers can use the Turkish POMS with confidence to assess mood in Turkish-speaking clinical and research populations. The long form not only demonstrated evidence of acceptable reliability and validity, but it is also less burdensome for respondents. The benefit of having a Turkish language version of a widely used measure like the POMS is that it allows comparing mood states across different cultural groups. A disadvantage, however, is that the POMS may omit mood states and symptoms that are specific to Turks. One limitation of this study is that the sample was particularly young or middle-aged adults. It is possible that a different factor structure would be obtained from older adults. However, age differences in the factor structure of the POMS have not been prominent in the mentioned study (46). A combined qualitative and quantitative research design is also needed to provide an insider perspective on the multi-dimensional nature of the POMS. For example, a Q sort of the POMS items would provide respondents' perceptions of which items reflect which mood states. Open-ended interview questions that explore mood states and symptoms that are salient to Turks and perhaps missing from the POMS, would also contribute to more complete mood assessments in this population.

Finally, as we chose to perform the initial pretesting of the Turkish version on homogeneous groups we used students only. Although our study shows valid psychometric properties, further testing of the Turkish version is recommended on various populations such as different age groups, or psychiatric inpatients. In addition, further studies are needed to assess the sensitivity of the subcomponents in the Turkish version to diverse manipulations in psychiatry, in anxiety and mood disorders and in other fields.

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Appendix 1. Duygudurumları Profili (DP)

İsim:

Cinsiyet:

Yaş:

Tarih:

Aşağıda insanların sahip oldukları duygu ya da hisleri tanımlayan 58 kelimelelik bir liste yer almaktadır. Lütfen bunların her birini dikkatle okuyunuz. Daha sonra, bu günde dâhil olmak üzere geçtiğimiz hafta içinde sizin bu duyguları ne derecede hissediyor olduğunuzu tanımlayan en uygun yanıtı işaretleyiniz.

Her bir numara şu anlama gelmektedir:											
0=Asla											
1=Çok az											
2=Orta derecede											
3=Oldukça fazla											
4=Aşırı											
2.Gergin	0	1	2	3	4	32.Cesaretsiz	0	1	2	3	4
3.Öfkeli	0	1	2	3	4	33.Gücenmiş	0	1	2	3	4
4.Yıpranmış	0	1	2	3	4	34.Sinirli	0	1	2	3	4
5.Mutsuz	0	1	2	3	4	35.Yalnız	0	1	2	3	4
7.Hayat dolu	0	1	2	3	4	36.Zavallı	0	1	2	3	4
8.Şaşkın	0	1	2	3	4	37.Sersem	0	1	2	3	4
9.Yaptıklarına üzgün	0	1	2	3	4	38.Neşe saçan	0	1	2	3	4
10.Keyifsiz	0	1	2	3	4	39.Acı duyan	0	1	2	3	4
11.Olanlara kaygısız	0	1	2	3	4	40.Tükenmiş	0	1	2	3	4
12.Hırçın	0	1	2	3	4	41.Sıkıntılı	0	1	2	3	4
14.Mahzun	0	1	2	3	4	42.Kavgacı	0	1	2	3	4
15.Aktif	0	1	2	3	4	44.Kasvetli	0	1	2	3	4
16.Sabırsız	0	1	2	3	4	45.Çaresiz	0	1	2	3	4
17.Suratu asık	0	1	2	3	4	46.Tembel	0	1	2	3	4
18.Hüzünlü	0	1	2	3	4	47.İsyankar	0	1	2	3	4
19.Çalışkan	0	1	2	3	4	48.Yardımsız	0	1	2	3	4
20.Panik yapan	0	1	2	3	4	49.Bezgin	0	1	2	3	4
21.Umutsuz	0	1	2	3	4	50.Şaşırılmış	0	1	2	3	4
22.Rahat	0	1	2	3	4	51.Tetikte	0	1	2	3	4
23.Bir şeye değmeyen	0	1	2	3	4	52.Aldatılmış	0	1	2	3	4
24.Kinci	0	1	2	3	4	53.Kızgın	0	1	2	3	4
26.Huzursuz	0	1	2	3	4	54.Becerikli	0	1	2	3	4
27.Hareketsiz duramayan	0	1	2	3	4	56.Enerji dolu	0	1	2	3	4
28.Konsantre olamama	0	1	2	3	4	57.Aksi huylu	0	1	2	3	4
29.Yorgun	0	1	2	3	4	58.Değersiz	0	1	2	3	4
31.Usanmış	0	1	2	3	4	59.Unutkan	0	1	2	3	4
						60.Dikkatsiz	0	1	2	3	4
						61.Çok korkmuş	0	1	2	3	4
						62.Suçlu	0	1	2	3	4
						63.Dinç	0	1	2	3	4
						64.Herşeyle ilgili şüpheli	0	1	2	3	4
						65.Ne yapacağımı bilemeyen	0	1	2	3	4

Önemli not: Ölçeğin burada 58 maddelik, 6 faktörlü çözümü sunulmuş olup hiçbir faktöre uymayan 7 madde [(1) Arkadaşça, (6) İyimser, (13) Nazik, (25) Sempatik, (30) Yardımsever, (43) Yumuşak huylu ve (55) Tevekkül eden] dışlanmıştır.