# Reliability and Validity of Subjective Well-Being Under Neuroleptics Scale-Short Form-Turkish Version

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**ÖZET:**

Antipsikotik tedavisi altındaki hastalar için öznel iyilik hali ölçeğinin Türkçe versiyonunun geçerlik ve güvenirliği

**Amaç:** Antipsikotik tedavisi altındaki hastaların öznel iyilik hali ölçeği, antipsikotik ilaç kullanan şizofreni hastalarının iyilik hallerini, onların psikotik belirtilerinden bağımsız olarak değerlendiren bir öz bildirim ölçeğidir. Bu çalışmada bu ölçeğin Türkçe versiyonunun geçerlik ve güvenirliğinin yapılması amaçlanmıştır.

**Yöntem:** Türkçe'ye çevirisi yapılan ve 103 şizofreni hastasına uygulanan ölçeğin güvenirlik analizi için Cronbach alfa katsayısı hesaplanmıştır. Kriter geçerliliği için eş zamanlı uygulanan referans ölçeklerle (Şizofreni Hastalarında İşlevsel İyileşme Ölçeği, Dünya Sağlık Örgütü Yaşam Kalitesi Ölçeği Kısa Formu) korelasyonlara bakılmıştır. Yapı geçerliliği için ise açıklayıcı ve doğrulayıcı faktör analizleri yapılmıştır.

**Bulgular:** Ölçeğin Türkçe versiyonunun yüksek güvenirlik katsayısına (0.881) sahip olduğu bulunmuştur. Toplam skor açısından çalışmada kullanılan diğer ölçeklerle korelasyonu orta-iyi derecededir. Buna karşın Türkçe versiyonun faktör analizi sonuçları ölçeğin orjinal alt boyutlarıyla uyumsuz bulunmuştur.

**Sonuçlar:** Bulgularımız, antipsipikotik ilaç kullanan şizofreni hastalarının öznel iyilik hallerinin değerlendirilmesinde bu ölçeğin Türkçe versiyonunun geçerli ve güvenilir bir araç olduğunu göstermektedir. Öte yandan ülkemizde yapılacak çalışmalarda ölçeğin sadece toplam skorunun kullanılması önerilir.

**Anahtar sözcükler:** Şizofreni, antipsikotik tedavisi altındaki hastaların öznel iyilik hali ölçeği, öznel iyilik hali

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**ABSTRACT:**

Reliability and validity of "subjective well-being under neuroleptics scale-short form", Turkish version

**Objective:** The Subjective Well-Being Under Neuroleptics Scale (SWNS) is a self-reported measure that evaluates the state of well-being of schizophrenis patients using antipsychotic drugs independently of psychotic symptoms. This study was intended to establish the validity and reliability of the Turkish version of the scale.

**Methods:** The Cronbach alpha coefficient was calculated for reliability analysis of the scale, which was translated into Turkish and applied to 103 schizophrenia patients. The criterion validity was examined by correlation with reference scales (Turkish Version of the Functional Remission of General Schizophrenia, The Short Form of the World Health Organization Quality of Life) concurrently in use . The construct validity of the scale was assured using both exploratory and confirmatory factor analyses.

**Findings:** The Turkish version of the scale was found to have a high reliability co-efficient (0.881). In terms of total scores, the correlation with other scales is medium-good. However, the results of the Turkish version factor analysis were incompatible with the sub-dimensions of the original scale.

**Conclusions:** Our findings show that the Turkish version of this scale is a valid and reliable tool in the evaluation of states of subjective well-being of schizophrenic patients using antipsychotic drugs. On the other hand, we recommend that studies to be conducted in Turkey use only the scale total score.

**Key words:** Schizophrenia, The SWNS, subjective well-being

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# INTRODUCTION

Measurement of schizophrenic patients' response to antipsychotic treatment used to focus on the change in positive and negative symptoms. In recent years, however, evaluating the "quality" of treatment has become increasingly important, in addition to its effectiveness in reducing symptoms. In that framework, inter-related concepts such as functionality, quality of life, patient' view of and attitude to treatment and subjective well-being have become increasingly important parameters in the evaluation of treatment effectiveness (1).

At its simplest, the term "subjective well-being" represents a response to the question "How does a patient using antipsychotics feel?" (2). The answer to this question is of great importance for patients with illnesses such as schizophrenia, for which treatment is frequently abandoned due to drug side-effects. Patients and doctors evaluate the efficacy and side-effects of treatment from different perspectives. Clinicians concentrate on a decrease in symptoms for the efficacy of a drug, while patients are more concerned with how they feel while using a drug. In particular, they may abandon antipsychotic drug use because of various side-effects before the drug produces any benefit. Uncomfortable side effects may prejudice patients against a treatment, in spite of its success in reducing symptoms. The weakness of this relationship between symptom severity and subjective well-being has been shown in previous studies (3-5).

The evaluation of patients' quality of life is an important issue in all areas of medicine. This evaluation involves a number of difficulties, despite having entered psychiatric research and clinical practice in recent years. In particular, it is difficult to evaluate quality of life independently of disease symptoms, especially when dealing with diseases such as schizophrenia requiring the use of antipsychotic drugs. Subjective well-being is an important component of patients' quality of life (6). It has frequently been reported in the literature that subjective well-being is a good indicator in evaluating the quality of life of schizophrenic patients using antipsychotic drugs (7-9).

The Subjective Well-Being Under Neuroleptics Scale is a self-reported instrument used in the comprehensive evaluation of the effectiveness and quality of drug treatment in schizophrenia and to measure patients' subjective well-being (10). One of the main characteristics of this scale is that it offers the possibility of evaluating patients' subjective thoughts and feelings independently of disease psychopathology. It is because of this perspective that it is widely used in studies evaluating patients' quality of life, responses to antipsychotic treatment and drug side-effects (1,5,11,12). Some studies have reported that the score on the Subjective Well-Being Under Neuroleptics Scale is a good predictor of treatment response indicators, such as entering remission (9,13), drug compatibility (14), and quality of life (9,15). The original 38-item form of the scale was designed by Naber (1995) (10), who also developed a shortened, 20-item form (SWNS) (3).

Various psychometric tools evaluating both patients' attitudes to treatment and subjective responses have to date been developed. However, there is still no scale in Turkey whose validity and reliability has been demonstrated in the field. Our study aimed to investigate the validity and reliability of the SWNS adapted into Turkish and used to examine how schizophrenic patients feel while under treatment, their views and attitudes regarding antipsychotic treatment, treatment compliance and quality of life.

# METHODS

## Participants

Our study population consisted of patients diagnosed with "schizophrenia" and treated at the Ondokuz Mayıs University Faculty of Medicine Department of Psychiatry Psychosis Unit in Turkey. This unit contains two specialist psychiatrists and one assistant psychiatrist. Patients are monitored with appointments at frequent intervals, at which psychometric tools such as the Positive and Negative Symptoms Scale (PANSS) (16) are routinely administered, in addition to clinical evaluations.

Inclusion criteria were: being in receipt of stabile antipsychotic treatment for at least one month, being in remission, being in the age range of 18-65 years and being diagnosedwith "schizophrenia" on the basis of the DSM-IV. Exclusion criteria were: failure to provide written consent, visual or hearing problems sufficiently severe to restrict communication and scale completion, any additional neurological disease and having undergone electroconvulsive treatment in the previous 6 months. One hundred and twelve patients meeting these criteria were

**Table 1: The sociodemographic, clinic and antipsychotic drug use characteristics of patients**

| | |
|---|---|
| Gender | 60.2% male |
| Marital Satatus | 56.3% single |
| Average Age | 35.1 ± 10.9 |
| Age of disease onset | 23.2 ± 7.4 |
| Average duration of disease | 11.8 ± 8.3 |
| Subtype of disease | Undifferentiated 58.3% |
| | Paranoid 30% |
| | Reziduel 6.8% |
| | Disorganized 4.9% |
| Antipsychotic Treatment Type | Monotherapy 73.8% |
| | Combined therapy 26.2% |
| Antipsychotic Drug Monotherapy | Olanzapine 25.1% |
| | Clozapine 13.3% |
| | Amisulpride 12.3% |
| | Aripiprazole 10.9% |
| | Risperidone 10.6% |
| | Other atypical antipsychotics 10.8% |
| | Typical antipsychotics 5.2% |
| | Depot preparation 11.8% |
| Anticholinergic drug use | 35% |
| Psychotropic drug use except of antipsychotic drugs | 24.3% |
| Drug use except of psychotropic drugs | 8% |

enrolled. Data for 9 patients who failed to complete the study scales, or who completed them incorrectly (marking more than one option) were excluded from the study. The remaining 103 patients completed the study. The characteristics of the patients are shown in Table 1.

Written informed-consent was obtained from all participants. Consent for this research was obtained from the Ethics Committee of Ondokuz Mayis University, Samsun. The research was performed in accordance with the Helsinki declaration.

## Measurement Tools

Patients were administered the **"Subjective Well-being Under Neuroleptics Scale - short form; (SWNS)"**(3), the validity and reliability of which we investigated for the purpose of measuring patients' subjective well-being while under antipsychotic drug treatment. For criterion validity "The short form of the World Health Organization Quality of Life (WHOQOL-BR), a self-report scale for the subjective evaluation of patients' quality of life (17) and The "Turkish Version of the Functional Remission of General Schizophrenia (FROGS-TR) Scale" (18) was used to evaluate the functional improvement levels of

schizophrenic patients. Additionally, the PANSS (16) was used to evaluate the severity of clinical symptoms.

*SWNS:* Developed by Naber (3), this self-reported scale enquires into patients' subjective experiences over the previous 7 days. It consists of 20 items and patients are asked to select the appropriate option from "not at all, hardly at all, a little, somewhat, much, very much." These options are scored in a range of 1-6. The original form of the scale consists of 5 subscales of four items each: mental functioning, self-control, emotional regulation and physical functioning. The total score from the scale ranges from 20 (bad subjective experience) to 120 (perfect subjective experience). In scoring terms, 10 of the items are scored in reverse. These items are distributed equally among the five sub-scales. In other words, each subscale contains 2 items calculated in reverse. Items 1, 4, 6, 9, 10, 11, 12, 14, 16 and 17 are rated in reverse (from 6 to 1). The patient can complete the scale in approximately 10-15 min. The original version has been reported to have high internal consistency (Cronbach alpha 0.92) and good construct validity (3).

*WHOQOL-BRİEF(BR) TR:* While the original version of this test has 26 items, the Turkish version consists of 27 items. The test has been adapted to Turkish by Fidaner et al. (1999) and is 5 point likert type scale. It includes physical, psychological, social and environmental domains. The total score is not calculated and domain scores are obtained by multiplying by 4 the average of the items forming that domain. Domain scores range from 4 to 20. In the Turkish validity and reliability study, a very high level of internal consistency of the scale was found.

*FROGS-TR:* The original version of FROGS was developed by Llorca et al (2009). It examines the patients' improvements in functionality as independent from their symptoms and consists of 19 items with a 5 point Likert-type score (1, no improvement; 2, partial improvement; 3, good enough; 4, almost complete recovery; 5, perfect improvement). Applying the test takes 30 minutes using a semi-structured interview. Assessment, based on the information obtained from the patient as well as the patient's family, covers the last month. It has 4 subscales: social functioning, health care and treatment, daily living skills and occupational functioning. Both subscale scores and total score are calculated. Possible scores range between 19 and 95 points. While the coefficient of internal

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consistency of the original version was 0.90, that of the Turkish version was 0.89.

***PANSS:*** This scale was developed by Kay et al (1997) (16). It is a semi-structured interview scale which includes 30 items and a 7 point symptom severity measurement. Seven of 30 psychiatric parameters assessed by the PANSS are in the positive symptom sub-scale, 7 of them are in the negative symptom sub-scale and the remaining 16 are in the general psychopathology sub-scale. The reliability and validity study of the Turkish version was conducted by Kostakoğlu et al. (1999) (21).

## Translation Procedure

Before the study commenced the requisite permission was obtained from the developer of the scale, Dieter Naber, to investigate the reliability and validity of the Turkish version. The original English-language form was translated into Turkish by one of the authors, after which this Turkish-language form was translated back into English by another author with no knowledge of the original version. The form translated into Turkish and both the original English-language version and the retranslated version were then evaluated by a committee made of up five individuals with a good knowledge of both languages. An experimental Turkish-language form was established through agreement on the linguistic validity of the form. The comprehensibility of each item in this experimental form was then tested with a focus group made up of 3 psychiatrists, 1 psychologist, 2 relatives of patients and 2 schizophrenic patients in full remission. The SWNS-TR is shown in the appendix.

## Data Analyses

For reliability analysis, the coefficient of internal consistency (Cronbach's alfa), which is calculated on the basis of the variance of each item, was used. Cronbach's alpha internal consistency coefficients were calculated as estimates of reliability. The Pearson correlation coefficient was calculated with co-administered of scales to test criterion validity. The construct validity of the SWNS was assured using both confirmatory and exploratory factor analyses. For confirmatory factor analysis, the "Lisrel 8.8" program (22) was used, and for all other analyses "SPSS for Windows 16.0" was used.

# RESULTS

## Reliability Analysis

The internal consistency among the items of the SWNS-TR scale using Cronbach's coefficient alpha was high ($\alpha$=0.881). This value is close to the internal consistency of the original version of the scale ($\alpha$= 0.92). Cronbach's alpha values obtained by removing each item from the scale are shown in Table 1. According to these results, the internal consistency values of the items varied between 0.868-0.889 in the Turkish version of the scale. Analysis of items of reliability values are given in Table 2.

| Table 2: Cronbach's Alfa Values obtained with removing each item of the SWNS-TR | |
| --- | --- |
| Item 1 | 0.871 |
| Item 2 | 0.878 |
| Item 3 | 0.879 |
| Item 4 | 0.870 |
| Item 5 | 0.889 |
| Item 6 | 0.873 |
| Item 7 | 0.886 |
| Item 8 | 0.873 |
| Item 9 | 0.869 |
| Item 10 | 0.873 |
| Item 11 | 0.868 |
| Item 12 | 0.873 |
| Item 13 | 0.869 |
| Item 14 | 0.877 |
| Item 15 | 0.883 |
| Item 16 | 0.873 |
| Item 17 | 0.870 |
| Item 18 | 0.881 |
| Item 19 | 0.880 |
| Item 20 | 0.872 |

## Validity Analyses

**Construct Validity:** The construct validity of the scale was assured using both confirmatory and exploratory factor analyses. Primarily, the Kaiser-Meyer Olkin test was used to determine whether the sample size was adequate for factor analysis. A result of 0.833 showed that a 103-patient sample had a suitability level of "very good" for factor analysis. The results of exploratory factor analyses produced five factors which had eigenvalues over 1 (as did the original version of the scale), accounting for 66.66% of the variance, which did not correspond with the original factor structure. This value satisfies the criteria of the American Psychiatry Association being over 40%. On

the other hand, when examining the items loaded into subdimensions, it was observed that there was a significantly different distribution compared to the original scale subdimensions and that items unrelated to each other were clustered together in the subdimensions (Table 3).

**Table 3: Distribution of factor loadings of the SWNS-TR according to Varimax Rotated results**

|  | Factor 1 | Factor 2 | Factor 3 | Factor 4 | Factor 5 |
|---|---|---|---|---|---|
| Item 1 | 0.811 | | | | |
| Item 2 | | 0.808 | | | |
| Item 3 | | | | 0.457 | |
| Item 4 | 0.795 | | | | |
| Item 5 | | | | | 0.770 |
| Item 6 | 0.633 | | | | |
| Item 7 | | | | 0.609 | |
| Item 8 | | 0.722 | | | |
| Item 9 | 0.835 | | | | |
| Item 10 | 0.762 | | | | |
| Item 11 | 0.807 | | | | |
| Item 12 | 0.697 | | | | |
| Item 13 | | 0.674 | | | |
| Item 14 | 0.572 | | | | |
| Item 15 | | | | 0.717 | |
| Item 16 | 0.711 | | | | |
| Item 17 | 0.810 | | | | |
| Item 18 | | | 0.788 | | |
| Item 19 | | | 0.753 | | |
| Item 20 | | 0.660 | | | |
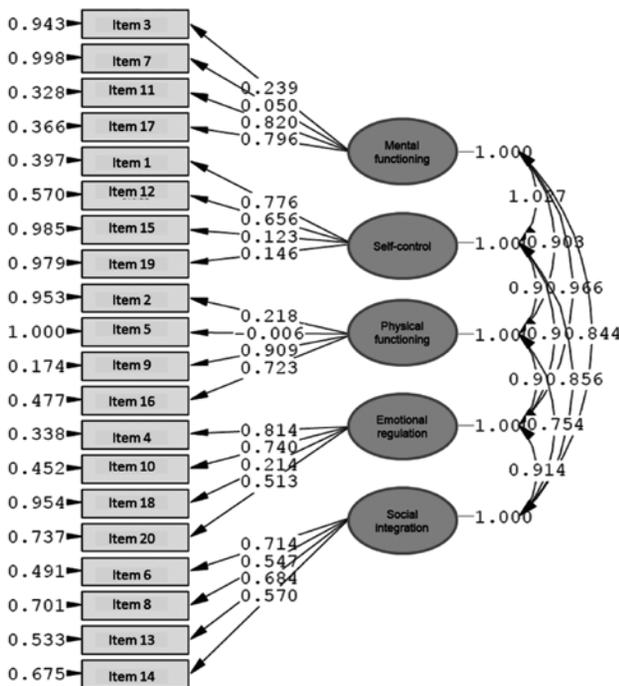


**Figure 1: Confirmatory Factor Analysis of SWNS-TR**
Chi-Square= 597.68, df= 160, P-value=0.00000, RMSEA=0.164
(CFI)= 0.851, Standardized RMR= 0.132, (GFI)= 0.631

In order to investigate this discrepancy, a confirmatory factor analysis was conducted using the Lisrel 8.8 program. According to the results of this analysis, "confirmatory fit analysis index (CFI)" (approval of compliance between factor structures of the designed version and the original version) and the "goodness of fit analysis index (GFI)" (to what extent the designed version complied with the subscales in theory) the results, which should be 0.90, were found to be 0.851 and 0.631 respectively (Figure 1). Also " the error rate subscales according to model established" (RMSEA), which should be at least below 0.10 (more preferably below 0.07), was found to be higher (0.132). As a result, according to the confirmatory factor analysis, the proposed subdimensions in the original version of the scale are not approved in the designed Turkish version.

**Criterion Validity:** The criterion validity was examined by correlation with reference scales applied concurrently. There were correlations in the range of low-medium (r=0.35-0.49, p<0.01) and medium-good (r=0.50-0.61, p<0.01) between the WHOQOL-BR TR subscales and the SWNS-TR subscale scores, and medium-good (r=0.52-0.63, p<0.01) with the SWNS-TR total score. There was a correlation approaching the low-medium level between total the SWNS-TR and FROGS-TR scores (r=0.42, p<0.01). Correlations between subscales were relatively lower (r=0.25-0.41).

**Correlation between severity of disease symptoms and subjective well-being:** While the total SWNS-TR score exhibited no correlation with the PANNS positive symptoms subscale scores, there was weak correlation with the negative symptoms subscale, the general psychopathology subscale and the PANSS total score.

## DISCUSSION

Reliability of SWNS-TR: The internal consistency (0.881) of the Turkish version of SWNS we adapted is similar to the high level of the original (0.92) (3). It may therefore be said that the Turkish version of the scale is sufficiently reliable.

**Construct Validity of SWNS-TR:** Looking at adaptations of SWNS in various foreign languages, it can be seen that no factor analysis was performed in the Chinese and Spanish validity studies (23,24), while 7 subdimensions were described in the Greek version (4), and 3 subdimensions in the Korean (25). While some

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**Table 4: Correlations between the the SWNS-TR and other psychometric scales**

| | SWNS total | SWNS mental functioning | SWNS self-control | SWNS physical functioning | SWNS emotional regulation | SWNS social integration |
|---|---|---|---|---|---|---|
| SWNS- mental functioning | 0.86** | | 0.69** | 0.67** | 0.67** | 0.62 |
| SWNS- self-control | 0.82** | | | 0.62** | 0.69** | 0.65** |
| SWNS- physical functioning | 0.83** | | | | 0.68** | 0.60** |
| SWNS- emotional regulation | 0.87** | | | | | 0.69** |
| SWNS- social integration | 0.83** | | | | | |
| FROGS-TR-social functioning | 0.40** | 0.35* | 0.33** | 0.36** | 0.31** | 0.30** |
| FROGS-TR-health and treatment | -0.26** | 0.17 | 0.20* | 0.22* | 0.19* | 0.20* |
| FROGS-TR-ability of daily life | 0.42** | 0.38** | 0.32** | 0.34** | 0.34** | 0.35** |
| FROGS-TR-occupational functioning | 0.39** | 0.34** | 0.35** | 0.33** | 0.30** | 0.31** |
| FROGS-TR-total score | 0.42** | 0.36** | 0.35** | 0.37** | 0.33** | 0.34** |
| PANSS-positive | -0.18 | -0.15 | -0.01 | -0.07 | -0.13 | -0.26** |
| PANSS-negative | -0.22* | -0.18 | -0.12 | -0.20* | -0.18 | -0.21* |
| PANSS-general psychopathology | -0.39** | -0.27** | -0.24* | -031** | -0.35** | -0.33** |
| PANSS-total score | -0.34** | -0.25** | -0.17 | -0.24* | -0.28** | -0.34** |
| WHOQOL-BR TR-physical health | 0.59** | 0.46** | 0.47** | 0.52** | 0.51** | 0.55** |
| WHOQOL-BR TR-psychological health | 0.63** | 0.49** | 0.46** | 0.53** | 0.61** | 0.61** |
| WHOQOL-BR TR-social relationships | 0.60** | 0.43** | 0.44** | 0.51** | 0.54** | 0.55** |
| WHOQOL-BR TR-environment | 0.52** | 0.35** | 0.44** | 0.45** | 0.49** | 0.54** |

Notes: N = 103; SWNS: Subjective Well-Being under Neuroleptics Scale, Short Form, Turkish Version of the Scale, FROGS-TR: Turkish Version of the Functional Remission of General Schizophrenia Scale, PANSS: Positive and Negative Symptoms Scale, WHOQOL-BR TR: Short Form of the World Health Organization Quality of Life, Turkish version
The contrasts in bold had a statistical significance level of p<0.05, **Correlation is significant at the 0.01 level (2-tailed), *Correlation is significant at the 0.5 level (2-tailed).

previous studies making use of SWNS considered only the total scores (5,7,12,15), other also used subscales (1,11,26). In our study, factor analyis has shown that the subdimensions of the designed version of the scale for the purpose of establishing validity of the Turkish version are incompatible with the subscales of the original version. There can be several reasons for this situation. One of them is intercultural differences. Self-reported scales are particularly affected by cultural factors. One other reason can be cognitive weaknesses likely to be present in schizophrenic patients (27,28). These weaknesses may have led to difficulties related to both understanding the items of scale and assessing the choices. These difficulties, especially those related to the reverse items, show themselves in the formation of the first factor with the reverse scored items (10 items scored in reverse are included in the 1st factor) in the Turkish version's factor distribution. On the other hand, the high degree of correlation both between the subscales in the original study scale and between the subscores of the Turkish version calculated according to the original scale, raises questions about the reliability of the subscales of the original scale. Dieter Naber who developed the original scale also mentioned this problematic issue regarding the sub-dimensions of the scale in our personal communication with him. Finally, difficulties related to linguistic problems are the other possible cause of mismatch between the subdimensions of the original version and the designed Turkish version of scale. For these reasons, using subscales of the original version of the scale is not suitable for studies conducted in our country.

## Criterion Validity of SWNS-TR

**Association between Subjective Quality of Life and Subjective Well-Being:** Measurement of the subjective state of well-being has been reported to be a good marker in the evaluation of quality of life of schizophrenic patients using antipsychotic drugs (7-9). Two of these studies reported a high level of correlation between the WHOQOL-BR TR, a subjective quality of life scale, and SWNS scores (8). We also determined there was a correlation in the range of low-medium and medium-good between the Turkish-language versions of these two scales, considering their subscales, and a medium-good correlation considering the SWNS-T total score (0.52-0.63). The degree of this correlation is almost identical to that in the original study (0.60) (10). These results contribute to the validity of the Turkish version of the SWNS. On the other hand, contrary to expectation, the correlations of subscales evaluating

similar areas in these two scales were not significantly higher. This finding further corroborates the question mark regarding the subdimensions of the SWNS. Our results show that the SWNS-TR, which is more specific to these patients, can also be used in addition to the WHOQOL-BR in the subjective evaluation of the quality of life of schizophrenic patients using antipsychotic drugs.

**Association between functional improvement and subjective well-being:** Our scan of the literature revealed no studies investigating the correlation between the SWNS and FROGS scores in schizophrenic patients. However, one previous study did show a medium-good correlation between degree of subjective well-being and functionality level (with Social Functioning Scale and Global Assessment of Functioning) (5). We also determined a correlation approaching a medium degree between the subjective well-being and functional improvement scale total scores. Correlations between subscales were relatively weaker. We think these findings contribute to the validity of the SWNS-TR.

Our results showed a weak correlation between subjective well-being and severity of disease symptoms. This is in agreement with previous studies (3-5). In agreement with our findings, two of these studies (3,4) determined that correlation of the subjective well-being scores with positive symptoms was weaker compared to other PANSS subscales, or non-existent, while the other (5) determined a weaker correlation with negative symptoms.

Our findings may be ascribed to the SWNS being capable of evaluating quality of life independently of symptom severity and that the scale supports this characteristic.

## Limitations

There are a number of limitations to this study; firstly, our sampling size was relatively low, albeit enough for factor analysis, secondly, the confusing effect of other psychotropic drugs (benzodiazepine, antidepressants or emotional state regulators) used by schizophrenia patients (24.3%) in addition to antipsychotic drugs was not excluded.

## CONCLUSION

The SWNS-TR is a reliable and valid tool for measuring subjective well-being of schizophrenic patients using antipsychotic drugs. In contrast, the subdimensions in the original version at least do not seem valid for the Turkish version. We therefore recommend that total scores only be used in future studies in Turkey. In addition to future studies involving larger numbers of schizophrenic patients, studies with patient groups with less cognitive impairment but using antipsychotic drugs (such as bipolar disorder patients) may provide more comprehensive information about the use of this scale and its subdimensions.

**Conflict of Interest:** No conflicts of interest were reported by any of the authors regarding this study.

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## Appendix: Antipsikotik Tedavisi Altındaki Kişiler İçin Öznel İyilik Hali Ölçeği (SWNS-TR)

**Lütfen dikkat:** Tüm ifadeler son 7 gün ile ilgilidir.
Lütfen uygun yanıtı işaretleyiniz.

| | | hiç | hemen hemen hiç | biraz | epeyce | çok | çok fazla |
|---|---|---|---|---|---|---|---|
| 1. | Kendimi güçsüz hissediyorum ve kontrol edemiyorum | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ |
| 2. | Bedenimden son derece memnunum | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ |
| 3. | Düşünmek bana kolay geliyor | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ |
| 4. | Hiç umudum yok, geleceğimi karanlık görüyorum | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ |
| 5. | Vücudum bana aitmiş gibi tanıdık geliyor,yabancı gelmiyor | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ |
| 6. | İnsanlara yaklaşma ve toplumsal ilişki kurma konusunda çok utangacım | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ |
| 7. | Hayal gücüm kuvvetli ve fikir yönünden zenginim | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ |
| 8. | Çevrem bana tanıdık ve dostça görünüyor | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ |
| 9. | Kendimi güçsüz ve tükenmiş hissediyorum | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ |
| 10. | Düşüncelerim ve hislerim köreldi, hiç bir şeyi umursamı-yorum | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ |
| 11. | Zor ve yavaş düşünüyorum | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ |
| 12. | Farklı durumlara doğru tepki veremiyorum. Küçük, önemsiz şeylere sinirleniyorum, ancak önemli şeyler beni neredeyse hiç etkilemiyor | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ |
| 13. | Çevremdeki insanlarla iletişim kurmak bana kolay geliyor | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ |
| 14. | Çevremi değişmiş, yabancı ve tehdit edici olarak algılıyorum | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ |
| 15. | Kendim ile başkalarının arasına sınır koymak bana kolay geliyor | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ |
| 16. | Bedenim benim için bir yüktür, külfettir | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ |
| 17. | Düşüncelerim daldan dala konuyor, düşüncelerimi kontrol edemiyorum. Net bir şekilde düşünmekte zorlanıyorum | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ |
| 18. | Çevremde olan şeyler beni ilgilendiriyor ve benim için önemli | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ |
| 19. | Duygularım ve davranışım içinde bulunduğum duruma uygun | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ |
| 20. | Kendime son derece güveniyorum, her şey yoluna girecek | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ |

**Düz puanlanan maddeler:** 2,3,5,7,8,13,15,18,19,20; **Ters puanlanan maddeler:** 1,4,6,9,10,11,12,14,16,17