

# Alexithymia and Personality in Relation to Social Anxiety in Male Alcohol-Dependent Inpatients

## Yatarak Tedavi Gören Erkek Alkol Bağımlılarında Aleksitimi ve Kişiliğin Sosyal Anksiyete ile İlişkisi

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### ABSTRACT

**Objective:** The aim of this study was to investigate the determinants of social anxiety symptoms in alcohol dependent inpatients.

**Method:** Participants were 176 consecutively admitted male alcohol dependent inpatients. Patients were investigated with the Liebowitz Social Anxiety Scale (LSAS), Beck Depression Inventory (BDI), Beck Anxiety Inventory (BAI), Toronto Alexithymia Scale (TAS-20) and Temperament and Character Inventory (TCI).

**Results:** Subscales of LSAS (fear or anxiety and avoidance) were correlated with all the scales, particularly highly correlated with BDI, TAS-20 and "difficulty in identifying feelings" (DIF) and "difficulty in describing feelings" (DDF) subscales of TAS-20. Harm avoidance (HA) showed positive correlation with LSAS subscales, whereas self-directedness (SD) showed negative correlation with these subscales. TAS-20-DIF, HA and cooperativeness (C) subscales were determinants for fear or anxiety subscale of LSAS, whereas HA and TAS-20-DDF were determinants for the avoidance subscale of LSAS.

**Conclusion:** Fear and anxiety subscale and DIF are interrelated, whereas avoidance subscale and DDF are interrelated among male alcohol-dependent inpatients. Also HA seems to be an important predictor for both subscales. Gender specific aspects and long-term stability of these relationships need further inquiry. (Archives of Neuropsychiatry 2008; 45: 72-7)

**Key words:** Alcohol dependence, alexithymia, anxiety, character, depression, social anxiety, temperament

### ÖZET

**Amaç:** Bu çalışmanın amacı yatarak tedavi gören erkek alkol bağımlılarında sosyal anksiyete belirtilerinin belirleyicilerini değerlendirmektir.

**Yöntem:** Çalışmaya kliniğe ardışık yatırılan 176 erkek alkol bağımlısı alındı. Hastalar Liebowitz Sosyal Anksiyete Ölçeği (LSAÖ), Beck Depresyon Envanteri (BDE), Beck Anksiyete Envanteri (BAE), Toronto Aleksitimi Ölçeği (TAS-20) ve Mizaç ve Karakter Envanteri (MKE) ile değerlendirilmiştir.

**Bulgular:** LSAÖ alt ölçekleri (korku/anksiyete ve kaçınma), özellikle BDE, TAS-20 ve TAS-20'nin "duyguları tanımadada güçlük-F1" ve "duyguları tanımlamakta güçlük-F2" alt ölçekleriyle yüksek seviyede olmak üzere, tüm ölçek puanları ile korelasyon gösterdi. Zarardan kaçınma (ZK) LSAÖ alt ölçekleri ile doğrusal korelasyon gösterirken, kendi kendini yönetme (KY) bu alt ölçeklerle negatif korelasyon göstermiştir. TAS-20-F1, ZK ve işbirliği yapma (İY) boyutları LSAÖ alt ölçeği korku / anksiyete'nin belirleyicisi iken, ZK ve TAS-20-F2 LSAÖ'nin kaçınma alt ölçeği için belirleyicidir.

**Sonuç:** Yatarak tedavi gören erkek alkol bağımlılarında korku / anksiyete alt ölçeği ile "duyguları tanımadada güçlük" ilişkili iken, kaçınma alt ölçeği ile "duyguları tanımlamakta güçlük" ilişkiliydi. Ayrıca ZK, LSAÖ'nin her iki alt ölçeği için önemli belirleyici olarak görünmektedir. Bu ilişkilerin uzun süreli devamlılığı ve cinsiyetlere özel farklılıklar daha ileri araştırmalara gereksinim göstermektedir. (Nöropsikiyatri Arşivi 2008; 45: 72-7)

**Anahtar kelimeler:** Alkol bağımlılığı, aleksitimi, anksiyete, karakter, depresyon, sosyal anksiyete, mizaç

### Introduction

Social anxiety is characterized by the fear of negative evaluation by others. If it is severe enough to cause significant distress or functional impairment, then a clinical diagnosis of social anxiety disorder (social phobia) is appropriate. Social anxiety disorder is defined as excessive fear in social situations, in which one believes that she/he will do something embarrassing or have anxiety symptoms (e.g., blushing or sweating) that will be humiliating (1). Social anxiety is a

prevalent condition which can be disabling and usually runs a chronic course (2). Several studies on social anxiety disorder report high comorbidity of anxiety disorders, depression, alcohol dependence and personality disorders, most particularly avoidant personality disorder (3,4). Both clinical studies (5,6), and those conducted in the general population (7,8) have demonstrated that social anxiety disorder and alcohol use disorder frequently show comorbidity. Rates of social anxiety disorder were 9.8% (9) and 11.4% (10) in previous studies conducted among Turkish alcohol dependent inpatients.

It has been reported that comorbid anxiety disorders lead to worse outcomes in the treatment of alcohol dependents (11). Some studies suggested that alcohol dependent patients with social anxiety symptoms might have more difficulty attending or benefiting from traditional alcohol treatment-related activities (e.g., group-based treatments) (12, 13). Crum and Pratt (14) found social anxiety disorder as a risk factor for later episodes of alcohol abuse or dependence. Although the prevalence of social anxiety symptoms, which usually precedes alcohol dependence are found to be high among alcohol dependents, the use of medication for these symptoms are still relatively low (15). Treatment seeking patients with alcohol use disorders should therefore be examined for social anxiety symptoms which should be treated urgently (3).

There are studies indicating high rates of avoidant personality disorders in patients with anxiety disorders (16) as well as studies which found that social anxiety disorder was associated with high neuroticism and low extraversion (17). In another study focusing on temperament traits, patients with social anxiety disorder were characterized by enhanced anxiety proneness, irritability, detachment, indirect aggression, lower socialization and social desirability (18).

The Temperament and Character Inventory (TCI) is constructed to assess the normal and abnormal variations in seven basic dimensions of personality (19). The four temperament dimensions are assumed to be highly heritable and underlined by specific neurotransmission systems (20). Three character dimensions may be determined by genetic and biological factors, but since they are also more prone to environmental factors than temperament, they may be less stable over time (21). According to Cloninger and Svrakic (22), the presence and severity of personality disorders can reliably be assessed by the interview or questionnaire versions of the TCI. Consistent findings of the previous studies concerning TCI and Tridimensional Personality Questionnaire (TPQ), which is a previous form of TCI, indicate that patients with social anxiety disorder have significantly elevated levels of harm avoidance (HA) (23-27), decreased levels of self directedness (SD) and cooperativeness (C) (23,25,26), and decreased levels of persistence (P) and self-transcendence (ST) (26), compared to controls. The rate of alexithymia was 58% (28) among Turkish patients with social anxiety disorder, whereas this rate was 28.3% (29) and 58% (30) in previous studies. Fukunishi et al. (30) found that scores on the alexithymia constructs of "difficulty identifying feelings"-DIF and "difficulty describing feelings"-DDF significantly decreased after the treatment of patients with social anxiety disorder. In this study, the authors suggested that secondary alexithymia related to anxiety exists as a state reaction in patients with social anxiety disorder. In contrast, alexithymia was a prevalent personality trait in Turkish patients with social anxiety disorder, independent of depression and anxiety, suggesting that alexithymia could not be seen as a consequence of these conditions (28).

To our knowledge, this is the first study to evaluate characteristics of social anxiety symptoms in Turkish alcohol

dependents. The aim of the present study was to investigate the determinants of social anxiety symptoms in alcohol dependent inpatients. Initial evidence suggests that social anxiety may be related to different cultural norms across countries (31). Thus, although instruments used in the present study are known to be culturally stable and Turkish versions are validated, alcohol abuse and personality dimensions that predict social anxiety symptoms may differ in different cultures.

## Method

### Subjects

The study was conducted in the Bakirkoy State Hospital for Psychiatric and Neurological Diseases, Alcohol and Drug Research, Treatment and Training Center (AMATEM) in Istanbul between December 2005 and July 2006. AMATEM is a specialized center for substance use disorders, with 100 inpatient beds, and accepts patients from all over Turkey. The Ethical Committee of the hospital approved the study. Written informed consent of the patients was obtained after the study protocol was thoroughly explained.

Two hundred consecutively admitted inpatients with alcohol use disorder, and without a history of any other substance use disorder, were considered as candidates for the study. A semi-structured, DSM-IV based interview was performed by the clinician and all participants fit the DSM-IV diagnostic criteria for alcohol dependence. Five patients were excluded due to illiteracy and three patients due to cognitive deficits. Although none of the patients refused to participate in the study, 16 patients were excluded since they left some parts of the scales unfilled, did not give the forms back or left the treatment program prematurely; i.e. before filling the forms. A total of 176 alcohol-dependent inpatients participated in the study. Interviews with the study group were conducted after the detoxification period, i.e. 4-6 weeks after the last day of alcohol use.

### Measures

All patients were assessed by using a semi-structured socio-demographic form. The diagnosis of substance dependence in each participating patient was based on the clinical examination and a screening interview based on the Structured Clinical Interview for DSM-IV (SCID-I) (32), Turkish version (33), conducted by a trained interviewer (CE).

Liebowitz Social Anxiety Scale (LSAS) contains 24 situations, selected on the basis of clinical experience, which are rated by the assessor on separate 4-point scales for fear/anxiety and avoidance (34). Self-rating Turkish version, which has been validated on Turkish population, was used in the present study (35). The scales range from no fear/anxiety (0) to severe fear/anxiety (3) and never avoids (0) to usually avoids (3). Patients were asked to provide ratings based on this scale. The Cronbach's alpha for the LSAS was 0.95.

Symptoms and severity of depression were evaluated by using the Beck Depression Inventory (BDI) (36), Turkish version (37), and the symptoms and severity of anxiety were evaluated

by the Beck Anxiety Inventory (BAI) (38), Turkish version (39). Both scales have been validated in Turkish populations. The Cronbach's alphas were 0.90 for BDI and 0.94 for BAI in the present study.

The prevalence of alexithymia was screened using the 20-item version of the Toronto Alexithymia Scale (TAS-20) (40, 41), Turkish version (42). The Turkish version of the TAS-20 has been validated in Turkish population. Each TAS-20 item was rated on a five-point (1-5) Likert scale, with total scores ranging from 20 to 100. Three dimensions of TAS-20 were: (1) difficulty in identifying feelings (DIF); (2) difficulty in describing feelings (DDF); (3) externally orientated thinking (EOT). The total scores of the TAS-20 were categorized according to the recommendations of Kose et al. (42); thus a score  $\geq 61$  indicated alexithymia and  $< 61$  no alexithymia. Cronbach's alpha was 0.76 in the present study.

To evaluate temperament and character traits, the Temperament and Character Inventory (TCI) (19), Turkish version (43) of a 240-item, forced-choice, self-report scale was used. Dimensions of temperament were: (1) harm avoidance (HA); (2) novelty seeking (NS); (3) reward dependence (RD), and (4) persistence (P). Dimensions of character were: (1) self-directedness (SD); (2) cooperativeness (C), and (3) self-transcendence (ST). The reliability and validity of the Turkish version of the TCI were supported by its psychometric properties and construct validity (43).

### Statistical Methods

The statistical package SPSS 11.5 for Windows was used for all the analyses. Frequency and percentages were used for sociodemographic variables. Categorical variables were compared by means of the chi-square statistics. One-way Anova was used to compare the groups on continuously distributed variables. Correlation analysis (Pearson, bivariate) between LSAS scores and other scale scores were performed. Predictors of fear or anxiety and avoidance subscale scores of LSAS were evaluated using two stepwise linear regression analyses. For all statistical analysis the level of significance was set at  $p = 0.05$ .

## Results

The mean age of the participants was 43.1 years (SD=8.3, range=23-70). 101 (57.4%) subjects were married, whereas 52 (29.6%) were divorced and 23 (13.1%) were single. Eighty-seven (49.4%) subjects were employed, whereas 57 (32.4%) subjects were unemployed and 32 (18.2%) were retired. Fifty-four (30.7%) had graduated from primary school, 84 (47.8%) from high school, and 38 (21.6%) were university graduates. Overall, they had 9.8 years of education (SD=4.0) on average.

The mean score of the fear or anxiety subscale of the LSAS was 24.1 (SD=11.7, range = 0-58), whereas the mean score of the avoidance subscale of the LSAS was 21.7 (SD=11.4, range = 0-51). The mean score of the fear or anxiety subscale ( $r=-0.17$ ,  $p=0.025$ ) and the mean score of the avoidance subscale ( $r=-0.22$ ,  $p=0.003$ ) were negatively correlated with the duration of education, whereas they were not correlated with age ( $r=0.04$ ,  $p=0.61$  and  $r=-0.08$ ,  $p=0.29$  respectively) and duration of alcohol use ( $r=0.07$ ,  $p=0.38$  and  $r=-0.02$ ,  $p=0.85$  respectively). Mean scores of fear or anxiety subscale ( $F=0.31$ ,  $p=0.73$ ) and avoidance subscale ( $F=0.19$ ,  $p=0.83$ ) did not differ according to marital status.

Fifty-three (30.1%) patients had alexithymia and 123 (69.9%) patients had no alexithymia according to the cut-off point suggested by Kose et al. (42) previously. There were no significant differences between alexithymic ( $43.0 \pm 9.5$ ,  $9.3 \pm 3.4$  and  $24.6 \pm 8.9$ ) and non-alexithymic patients ( $43.1 \pm 7.8$ ,  $10.0 \pm 4.2$  and  $24.3 \pm 8.7$  respectively) in terms of age, education, and duration of alcohol use ( $t=0.04$ ,  $p=0.97$ ;  $t=1.22$ ,  $p=0.23$ ; and  $t=0.22$ ,  $p=0.83$  respectively). Rate of being married, divorced and single were not significantly different in alexithymic group (60.4%,  $n=32$ ; 24.5%,  $n=13$ ; 15.1%,  $n=8$  respectively) than non-alexithymic group (56.1%,  $n=69$ ; 31.7%,  $n=39$ ; 12.2%,  $n=15$  respectively) ( $c_2=1.00$ ,  $df=2$ ,  $p=0.61$ ). The mean score of the fear or anxiety subscale ( $51.4 \pm 10.01$ ) and the mean score of the avoidance subscale ( $49.5 \pm 10.07$ ) were higher in alexithymic alcohol dependent patients than non-alexithymic alcohol dependent patients ( $46.7 \pm 12.01$  and  $44.1 \pm 11.3$  respectively) ( $t=-2.50$ ,  $p=0.014$ ; and  $t=-2.99$ ,  $p=0.003$  respectively).

**Table 1.** Correlations between dimensions of Temperament and Character Inventory, Beck Depression Inventory (BDI), Beck Anxiety Inventory (BAI) and Toronto Alexithymia Scale (TAS-20)

|                         | BAI      | BDI      | DIF      | DDF      | EOT     | TAS-20   |
|-------------------------|----------|----------|----------|----------|---------|----------|
| Novelty Seeking (NS)    | 0.07     | 0.12     | 0.14     | 0.08     | 0.13    | 0.16*    |
| Harm Avoidance (HA)     | 0.23**   | 0.43***  | 0.41***  | 0.40***  | 0.29*** | 0.49***  |
| Reward Dependency (RD)  | 0.08     | -0.07    | -0.01    | -0.04    | -0.11   | -0.06    |
| Persistence (P)         | -0.15*   | -0.29*** | -0.22**  | -0.12    | -0.26** | -0.27*** |
| Self-directedness (S)   | -0.31*** | -0.46*** | -0.39*** | -0.37*** | -0.24** | -0.45*** |
| Cooperativeness (C)     | -0.21**  | -0.26**  | -0.24**  | -0.20**  | -0.21** | -0.29*** |
| Self-transcendence (ST) | 0.16*    | 0.24**   | 0.21**   | 0.22**   | 0.06    | 0.22**   |
| BAI                     | -        | 0.57***  | 0.51***  | 0.39***  | 0.05    | 0.45**   |
| BDI                     | -        | -        | 0.48***  | 0.37***  | 0.21**  | 0.49***  |

Correlation is significant at the \*0.05 level, \*\* 0.01 level, \*\*\* 0.001 level (2-tailed).

DIF: Difficulty in identifying feelings, DDF: Difficulty in describing feelings and EOT: Externally orientated thinking

Correlations between dimensions of Temperament and Character Inventory, Beck Depression Inventory, Beck Anxiety Inventory, Toronto Alexithymia Scale were evaluated (Table 1). Correlations between subscales of LSAS and other scales were also evaluated. Subscales of LSAS were highly correlated with BDI, TAS-20 and DIF and DDF subscales of TAS-20, whereas they were moderately correlated with BAI and mildly correlated with EOT subscale of TAS-20. Among dimensions of TCI, harm avoidance (HA) showed positive correlation with LSAS subscales, whereas self-directedness (SD) showed negative correlation with these subscales (Table 2).

TAS-20-DIF, HA and cooperativeness (C) subscales were determinants for fear or anxiety subscale of LSAS, whereas HA and TAS-20 - DDF were determinants for avoidance subscale of LSAS (Table 3).

### Conclusion

The main finding in this study was that, although the fear and anxiety dimension of social anxiety symptoms and "difficulty of identifying feelings" (DIF) were interrelated,

avoidance dimension was related with "difficulty in describing feelings" (DDF) among male alcohol-dependent inpatients after the detoxification period. Also HA seemed to be an important predictor for both subscales and C was another factor that predicted fear or anxiety subscale. As this was a cross-sectional study conducted on male patients, gender specific aspects and stability of these findings in longitudinal course need further inquiry.

Bach et al. (44) found a positive relationship between avoidant personality disorder and alexithymia. Since avoidant personality disorder is known to overlap particularly with generalized type social anxiety disorder, high rates of alexithymia can be expected among generalized type social anxiety disorder (28). Among Turkish university students, levels of social anxiety symptoms showed a positive relationship with alexithymia and authors suggested that this association could be due to the high anxiety level and physiological symptoms caused by social anxiety. As the socially anxious person attempts to avoid experiencing these sensations, he may try to suppress emotional experiences in general (45). The apparent finding in the present study, that is the relationship between the fear / anxiety dimension and the DIF and avoidance dimension with DDF, may be an artifact of conceptual and psychometric overlap with cognitive aspects of social anxiety, specifically the interoceptive focus and sensitivity often associated with social anxiety (29). Men whose high alexithymia score suggested reduced ability in verbal emotional expression were more frequently unmarried and had low levels of social contacts and acquaintances, suggesting that alexithymia could be viewed not only as a psychological phenomenon, but also partly as a socially determined one (46). Consistent with this, alexithymic patients had higher social anxiety scores in the present study. Recent studies have reported an association between alexithymia and primitive and immature ego defense styles, which implies a relatively primitive way of dealing with emotional problems (47). Alexithymia can be considered as a defense mechanism that social phobic patients develop against anxiety, in order to keep anxiety at a level that would not cause disability (28). Also, since social anxiety symptoms start as early as childhood, it may interfere with social interaction, as avoidance may cause alexithymic characteristics (28,46). Nevertheless, scores on the alexithymia constructs of DIF and DDF significantly decreased after the treatment of patients with social anxiety disorder in a previous study (30).

**Table 2.** Correlations between subscales of Liebowitz Social Anxiety Scale and other scales

| Liebowitz Social Anxiety Scale     | Fear or Anxiety | Avoidance |
|------------------------------------|-----------------|-----------|
| Beck Anxiety Inventory             | 0.22**          | 0.23**    |
| Beck Depression Inventory          | 0.27*           | 0.28*     |
| Toronto Alexithymia Scale (TAS-20) | 0.34*           | 0.37*     |
| Difficulty in identifying feelings | 0.31*           | 0.29*     |
| Difficulty in describing feelings  | 0.29*           | 0.32*     |
| Externally orientated thinking     | 0.15***         | 0.22**    |
| Temperament                        |                 |           |
| Novelty Seeking (NS)               | 0.01            | -0.07     |
| Harm Avoidance (HA)                | 0.31*           | 0.35*     |
| Reward Dependency (RD)             | 0.06            | -0.05     |
| Persistence (P)                    | -0.04           | -0.01     |
| Character                          |                 |           |
| Self-directedness (S)              | -0.26*          | -0.29*    |
| Cooperativeness (C)                | 0.03            | -0.04     |
| Self-transcendence (ST)            | 0.14            | 0.03      |

Correlation is significant at the \*0.001 level (2-tailed), \*\*0.01 level (2-tailed), \*\*\*0.05 level (2-tailed)

**Table 3.** Stepwise Linear regression models when LSAS - Fear or Anxiety and Avoidance scores are taken as dependent variable

|                 |  | B      | S.E.  | Beta  | t     | p      |
|-----------------|--|--------|-------|-------|-------|--------|
| Fear or Anxiety | Constant                                 | 19.743 | 6.579 |       | 3.001 | 0.003  |
|                 | Difficulty in identifying feelings (DIF) | 0.464  | 0.144 | 0.249 | 3.215 | 0.002  |
|                 | Harm Avoidance (HA)                      | 0.479  | 0.150 | 0.249 | 3.189 | 0.002  |
|                 | Cooperativeness (C)                      | 0.353  | 0.169 | 0.154 | 2.093 | 0.038  |
| Avoidance       | Constant                                 | 27.236 | 3.341 |       | 8.151 | <0.001 |
|                 | Harm Avoidance (HA)                      | 0.486  | 0.142 | 0.260 | 3.419 | 0.001  |
|                 | Difficulty in describing feelings (DDF)  | 0.648  | 0.224 | 0.220 | 2.895 | 0.004  |

Variables entered in first step: Age, duration of education, duration of alcohol use, subscales of TCI, Beck Anxiety Inventory, Beck Depression Inventory, subscales of TAS-20  
 Fear or Anxiety: F=10.81, df=3, 172, p<0.001, Adjusted R<sup>2</sup> =0.14; Avoidance: F=16.62, df=2, 173, p<0.001, Adjusted R<sup>2</sup> =0.15

Findings of the present study were consistent with previous studies concerning social anxiety disorder, which found significantly elevated levels of HA (23-27), and decreased levels of SD and C (23,25,26). High levels of HA define individuals who tend to be "cautious, careful, fearful, tense, apprehensive, nervous, timid, doubtful, discouraged, insecure, passive, negativistic, or pessimistic even in situations that do not worry other people" (48). Decreased levels of SD and C are correlated with personality disorders in general (49). Personality disorders, particularly avoidant personality disorder, is common in patients with social anxiety disorder (16). The presence of avoidant personality disorders in the social anxiety disordered subjects was associated with significantly higher HA, particularly on the shyness with strangers subscale (26). In the present study, LSAS subscales showed a positive correlation with HA and a negative correlation with SD, which suggests that avoidant personality disorder might well be represented in the alcohol dependent group. Nevertheless, Marteinsdottir et al. (26) suggested that the observed deviations in TCI dimensions in their study were primarily related to the social anxiety disorder itself and not to the presence of concurrent personality disorders.

Consistent with the findings of the present study, Pelissolo et al. (23) suggested that higher HA and lower SD scores in patients with social anxiety were independent of their depressive symptomatology. Studies also showed that, after treatment, reduced social anxiety symptoms was correlated with decrease in HA (27,50) and increase in SD (50), implying state dependent changes following treatments. Among patients with social anxiety disorder, greater fear of negative evaluation and higher scores of HA were associated with greater anxiety at the 6 month follow-up, and HA remained a significant predictor at 24 months (51).

Mörtberg et al. (50) suggested that patients with social anxiety disorder show a temperamental vulnerability for developing anxiety and character traits associated with personality disorders. In this study, the authors found that high HA at baseline was related to poor treatment outcome in all types of treatments, and suggested that high HA at baseline might suggest a need for extensive treatment in order to achieve remission of social phobia. Overall, elevated HA is not specific to social phobia and can be present in other anxiety disorders (50) and in depressive states (48). Nevertheless, in the present study HA predicted both fear/anxiety and avoidance, independent of the severity of anxiety and depression.

The main limitations of the present study were that patients included in this study were all male, and the study group was restricted to a treatment population. Therefore, it is not possible to generalize the findings to female alcohol dependent patients and to non-treatment groups. Female patients may have a different profile in terms of temperament and character profile (52), alexithymia (53), social anxiety (54), and relationships between these profiles may also differ according to the gender. Male patients with social anxiety disorder seek treatment more than female patients, whereas social anxiety disorder seems to be more prevalent among female patients (54).

Evaluation of patients seeking alcoholism treatment for coexisting social anxiety is important for improving treatment outcome (55,56). These patients with alcohol dependency may benefit from both treatment of social anxiety symptoms and specific psychotherapeutic techniques improving affect differentiation (57). Assertiveness training methods and/or psychodrama techniques, applied in individual or group psychotherapy, may be helpful in this particular group of patients with restricted verbalization. Also, since personality evaluation by the Cloninger's model confirms the presence of personality pathology as a predictor of non-response to anxiety treatment, the relationship between personality dimensions and anxiety disorders may affect the treatment of choice (58).

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