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Sociotropic personality traits positively correlate with the severity of social anxiety

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Aim. To investigate sociotropic-autonomic personality characteristics and their clinical implications in social anxiety disorder (SAD).
Methods. The study included 68 consecutive patients who were either being followed up on an outpatient basis or presented for the first time to the psychiatric clinics of Bakirkoy Research and Training Hospital for Psychiatry, Neurology and Neurosurgery or Trakya University School of Medicine between May 2012 and May 2013, and were diagnosed primarily with generalised SAD according to *Diagnostic and Statistical Manual of Mental Disorders*, 4th edition (DSM-IV) diagnostic criteria. Beck Depression Inventory (BDI), Sociotropy-Autonomy Scale (SAS), Symptom Checklist-90-R (SCL-90-R), Liebowitz Social Anxiety Scale (LSAS) and a sociodemographic data collection form designed by the authors were used as primary assessment instruments.
Results. The mean age (standard deviation (SD)) of the sample group was 23.73 (8.85) years; 37 (54.4%) were female and 31 (45.6%) were male. LSAS mean (SD) total fear score was 63.51 (13.74), mean total avoidance score was 61.24 (14.26), BDI mean score was 16.99 (9.58), SAS mean sociotropy score was 71.06 (16.79), and mean autonomy score was 63.22 (16.04). A statistically significant positive correlation was found between SAS sociotropy scores and LSAS fear and avoidance total scores, BDI scores and all subscales of SCL-90-R ($p<0.01$). There were no statistically significant correlations between SAS autonomy scores and LSAS fear and avoidance total scores, BDI scores and all subscales of SCL-90-R ($p>0.05$).
Conclusion. Sociotropic personality characteristics in patients with SAD have been found to positively correlate with depression and social anxiety levels. Addressing this finding during treatment sessions and helping the patient increase flexibility in appraisal of social life events may have a positive impact on treatment outcome.

S Afr J Psychiatr 2015;22(2):54-56. DOI:10.7196/SAJP.550

Social anxiety disorder (SAD) is a common clinical condition, causing considerable disability.[1] SAD is characterised by a marked fear or anxiety about one or more social situations in which the individual is exposed to possible scrutiny by others.[2] The estimated rates for 1-year and lifetime prevalence for SAD are 4.5% and 3.6%, respectively.[3]

Sociotropy is a personality trait characterised by excessive investment in interpersonal relationships and often studied in the field of social psychology.[4] People with sociotropy tend to have a strong need for social acceptance, which causes them to be overly nurturant towards people with whom they do not have close relationships.[5] Sociotropy can be seen as the opposite of autonomy, as those with high levels of sociotropy are overly concerned with interpersonal relationships, whereas those with high levels of autonomy are mostly concerned with independence and do not prioritise social interactions and how they are evaluated by others.

Both of these personality dimensions may be associated with increased susceptibility for depression, first suggested in 1999.[6] Sociotropic individuals are excessively sensitive to situations such as weakening of social ties, termination of relationships and rejection, and therefore develop depression when relationships fail or when they feel rejected by others. On the other hand, autonomic individuals mainly develop depression when they are precluded from accomplishing their objectives or when they experience failure.[7] Unmet expectations are related to vulnerability to depression for both sociotropic and autonomic individuals.[8] These traits, when present at high levels of intensity, are important factors in prospectively predicting the development of depression.[8]

A relatively limited number of studies have addressed these concepts in anxiety disorders. It was found that sociotropy is correlated with depression and anxiety symptoms.[9,10] A study conducted on pre-service teachers revealed that sociotropy could predict future shyness.[11] In a study of 255 students sociotropy scores were positively correlated with rated trait anxiety in situations of social evaluation.[12] These studies indicate that there may be an association between sociotropy-autonomy traits and anxiety disorders.

Several studies have established the relationship between the concepts of sociotropy-autonomy, depression and anxiety. However, a literature search (PubMed) did not reveal any studies that investigated the influence of these two important concepts on SAD. Understanding this influence may be important, particularly in terms of psychotherapy practice, the therapeutic relationship with the patient and conceptualisation of SAD. In this context, the aim of the present study was to investigate sociotropic-autonomic personality characteristics and their clinical implications in SAD.

An initial assumption that sociotropic personality characteristics may positively correlate with levels of depression and severity of SAD was made by the authors. This assumption was based on two previous findings: (*i*) studies that correlated sociotropy with anxiety and shyness;[9-11] and (*ii*) increased avoidance and interpersonal problems in excessive sociotropy.[13]

Method

Sample

The study included a total of 68 consecutive patients attending outpatient clinics with a primary diagnosis of SAD according to *Diagnostic and Statistical Manual of Mental Disorders*, 4th edition (text revision) (DSM-IV-TR) diagnostic criteria.[2] The patients were either being followed up on an outpatient basis or presented for the first time to the psychiatric clinics of Bakirkoy Research and Training Hospital for Psychiatry, Neurology and Neurosurgery, Istanbul, Turkey or Trakya University School of Medicine, Edirne, Turkey between May 2012 and May 2013. Patients who were illiterate, had a diagnosis of a somatic disorder, or of a psychotic or bipolar disorder at the clinical interview based on the DSM-IV diagnostic criteria were excluded from the study. All subjects agreed to participate in the study and gave written informed consent. Approval to conduct the study was obtained from the ethics committee of both centres.

Procedure

Sociodemographic information, namely gender, age, occupation, and educational status of the SAD patients who participated in the study, was collected using a form developed by the authors. After the diagnosis of SAD had been confirmed according to DSM-IV diagnostic criteria, the following scales were completed by the investigators in a single session.

Beck Depression Inventory (BDI) rates somatic, emotional, cognitive and motivational symptoms seen in depression. It was developed by Beck in 1961.[14] The purpose of the inventory is to assess the degree of depressive symptoms. On this 21-item inventory each item includes four response choices; the highest score on each of the 21 items is 3, and the highest possible total for the whole test is 63. The level of depressive symptoms is thought to increase as the scores increase. An adaptation study for validity and reliability in the Turkish population has been successfully performed.[15]

Sociotropy-Autonomy Scale (SAS) assesses two personality traits, namely sociotropy (being dependent on other people) and autonomy (independence from others).[16] The 60-item scale uses a 5-point Likert-type rating. Sociotropy and autonomy dimensions are assessed as two subdimensions by 30 items each. A score between 0 and 150 can be obtained for each dimension, with the higher score showing the stronger dimension. Studies addressing the validity of the scale found that the sociotropy subscale could differentiate patients from healthy subjects and that it was closely related to depression.[17]

Symptom Checklist 90-R (SCL-90-R) is a self-report symptom inventory for psychiatric symptoms. It has 90 items and 9 symptom dimensions that contain psychiatric symptoms and complaints. The Turkish version of the scale was found to be reliable and valid.[18]

Liebowitz Social Anxiety Scale (LSAS) is a Likert-type self-rated scale with 24 questions that measures anxiety and avoidance of various social situations. It contains two subscales, the first for measuring the severity of anxiety and the second for measuring the severity avoidance experienced in different social settings. The score obtained from each subscale ranges from 0 to 72, and the total score of the scale between 0 and 144. Higher scores indicate more severe social anxiety and avoidance. The advised cut-off point is 25 for each subscale and 50 for total score. The scale was developed by Liebowitz in 1987.[19] The Turkish version of the scale was found to be reliable and valid.[20]

Statistical method

SPSS 18.0 for Windows software was used for statistical analyses. In addition to descriptive statistical methods (mean, standard deviation (SD), frequency), Pearson correlation analysis was used to investigate the clinical associations of autonomic and sociotropic characteristics in patients with a primary diagnosis of SAD. The results were considered statistically significant at $p<0.05$.

Results

The study included 68 consecutive patients diagnosed with generalised SAD. The mean age (SD) of the patients was 23.73 (8.85) years and the gender distribution was 37 (54.4%) females and 31 (45.6%) males. Most of the patients (86.8%) were single, 16 (23.5%) patients were high school graduates and 16 (23.5%) university graduates. Twenty-two patients (32.4%) were receiving antidepressant treatment. Forty-six patients (67.6%) presented for the first time and were not receiving any treatment at all.

The scores for the various scales were as follows: LSAS mean (SD) total anxiety score was 63.51 (13.74), mean total avoidance score was 61.24 (14.26); BDI mean score was 16.99 (9.58), SAS mean sociotropy score was 71.0 (16.79) and the mean autonomy score was 63.22 (16.04). In the SCL-90-R scale assessment the mean scores

Table 1. Examination of the relationship between the SAS scale scores and LSAS, BDI, SCL90-R scale scores of the patients

	SAS Sociotropy (r)	SAS Autonomy (r)
LSAS		
Fear total score	0.435*	-0.032
Avoidance total score	0.445*	-0.029
BDI	0.549*	0.049
SCL90 -R		
Somatic symptoms	0.513*	0.124
Obsessive symptoms	0.575*	0.104
Interpersonal sensitivity	0.556*	-0.023
Depressive symptoms	0.618*	0.037
Anxiety symptoms	0.480*	0.042
Anger	0.575*	0.140
Phobia	0.525*	-0.094
Paranoid symptoms	0.529*	0.074
Psychotic symptoms	0.560*	0.014
Other	0.493*	0.074
General symptom index	0.619*	0.056

(r) = Pearson r
*$p<0.01$

of interpersonal sensitivity (2.15 (0.98)), obsessive symptoms (1.89 (0.93)), depressive symptoms (1.69 (0.92)) and anxiety symptoms (1.55 (0.94)) were the highest.

The SAS sociotropy and autonomy scores were then compared with the other scale scores (Table 1). There was a statistically significant positive correlation between SAS sociotropy scores and LSAS anxiety scores, LSAS avoidance scores, BDI scores and all subscales scores of the SCL-90-R ($p<0.01$). There were no statistically significant correlations between SAS autonomy scores and the other scale scores ($p>0.05$).

Discussion

In the current study the mean LSAS anxiety and avoidance scores were high and the mean BDI depressive symptom scores were low compared with the published cut-off points of these scales.[15,19] The most important finding in our study is the positive correlation found between sociotropic characteristics (as measured with SAS) and the severity of social anxiety (as measured with LSAS), depression (as measured with BDI), and general psychopathology (as measured with SCL-90-R) in SAD.

Since sociotropic characteristics have been associated with vulnerability to depression after social criticism, failure and rejection, it can be expected that these characteristics would be associated with an increase in depressive symptoms in SAD.[21] For instance, sociotropy has been associated with interpersonal sensitivity and symptoms suggesting anxious depression.[21] Sociotropy was associated with higher levels of avoidance coping, and that high avoidance coping intensified the association between sociotropy and depressive and anxious symptoms in a university student sample.[22]

Additionally, we have found that sociotropic characteristics may also be associated with general psychopathology, social anxiety and avoidance levels in SAD. There are no articles in the literature directly addressing these associations or correlations in SAD. Yet studies show that sociotropic characteristics can increase the symptoms of anxiety and that sociotropic characteristics can predict shyness. In a study of 70 females and 42 males sociotropy was moderately associated with future depression and anxiety levels.[9] In another study with a longitudinal, prospective design and a sample of 78 undergraduates sociotropy correlated with anxiety symptoms.[10] Recently, it was found that sociotropy was a significant predictor of shyness in 410 pre-service teachers.[11]

Dysfunctional interpersonal styles related to excessive sociotropy might also explain our finding that SAS sociotropy scores and LSAS scores are correlated. A recent study suggests that interpersonal sensitivity is correlated with sociotropy.[13] It has been suggested that a sociotropic person may demonstrate reactions that are not helpful in resolving interpersonal conflicts and may even exacerbate conflict, reducing opportunities for positive social interactions.[23] In addition, sociotropic individuals may ignore, postpone or suppress the conflict.[24] It has been suggested that a high level of sociotropy is related to being submissive.[24] Moreover, sociotropy was found to be positively correlated with anxiety traits in situations of social evaluation.[12] From these results it can be postulated that determination of sociotropic personality traits in SAD might have implications for the extent of dysfunctional strategies used by patients in interpersonal relations which may lead to increased avoidance, anxiety and general psychopathology levels.

Our study showed that the SAS sociotropy and autonomy scores in SAD patients were moderate overall. It must be kept in mind that undiagnosed personality disorders, other psychiatric comorbidities and treatment with antidepressants might have affected our results. The cross-sectional nature of the study and the absence of a control group are the major limitations of the study. However, this study addresses a topic that has been ignored or studied to a lesser extent, and may prospectively provide a contribution to the literature.

Conclusion

It was found that sociotropic personality characteristics in patients with SAD are positively correlated with the symptoms of this disorder compared with autonomic characteristics. Addressing the sociotropic personality characteristic more specifically during therapy sessions and helping the patient gain flexibility in appraisal of social life events may have a positive impact on treatment outcome.

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