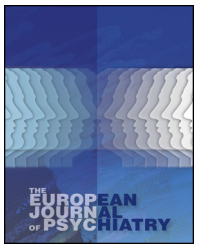
Eur. J. Psychiat. 2017;xxx(xx):xxx–xxx

THE EUROPEAN JOURNAL OF PSYCHIATRY

www.elsevier.es/ejpsy



ORIGINAL ARTICLE

Cognitive distortions in patients with social anxiety disorder: Comparison of a clinical group and healthy controls

E. Kuru[a,*], Y. Safak[b], İ. Özdemir[c], R.G. Tulacı[d], K. Özdel[b], N.G. Özkula[e], S. Örsel[b]

[a] *Private Practice, Psychiatrist, Ankara, Turkey*
[b] *Dışkapı Yıldırım Beyazıt Teaching and Research Hospital, Psychiatry Clinic, Ankara, Turkey*
[c] *Doç. Dr. Mustafa Kalemli Tavşanlı State Hospital, Psychiatry Clinic, Kütahya, Turkey*
[d] *Uşak State Hospital, Psychiatry Clinic, Uşak, Turkey*
[e] *Baskent University Hospital, Psychiatry Clinic, Ankara, Turkey*

Received 31 May 2017; accepted 16 August 2017

KEYWORDS
Anxiety;
Cognitive behavioral therapy;
Cognitive distortion;
Social phobia

Abstract
Background and objective: Based on the cognitive model of social anxiety disorder (SAD), individuals who are anxious in social environments have some dysfunctional thoughts and beliefs regarding themselves and ways of others to judge their behaviors. A fundamental component of cognitive behavioral therapy is about noticing and changing cognitive distortions. The aims of our study were to analyze the differences in cognitive distortions between patients with SAD and a healthy control group, and examine the relationship between cognitive distortions and levels of anxiety and depression in patients with SAD.
Methods: One hundred two individuals from two samples, non-clinical and clinical with SAD, were included. Patients were evaluated using a socio-demographic data form, the Liebowitz Social Anxiety Scale, Cognitive Distortions Scale (CDS), State-Trait Anxiety Inventory, and Beck Depression Inventory after a diagnostic interview.
Results: There were significant differences between the patient and control group in terms of total CDS; most cognitive distortions were significantly higher in the patient group compared with the controls. The correlations between social anxiety, state and trait anxiety levels, depressive symptoms, and cognitive distortions were analyzed and significant correlations were found between the scales with a range of 0.316–0.676.
Conclusions: Patients with SAD had more cognitive distortions compared with the healthy controls. The comorbid depressive symptoms in SAD had effects on 'mental filter,

* Corresponding author.
E-mail address: erkankuru83@gmail.com (E. Kuru).

http://dx.doi.org/10.1016/j.ejpsy.2017.08.004

Please cite this article in press as: Kuru E, et al. Cognitive distortions in patients with social anxiety disorder: Comparison of a clinical group and healthy controls. Eur. J. Psychiat. 2017. http://dx.doi.org/10.1016/j.ejpsy.2017.08.004

overgeneralization and personalization' in social situations, and there was no specific cognitive distortion without depression. Cognitive distortions in these patients were more related to depression and trait anxiety levels than the severity of social anxiety.

Introduction

Social anxiety disorder (SAD) is a psychological condition of marked fear or anxiety about one or more social situations in which the individual is exposed to possible assessment by others.[1]

In SAD, a condition characterized by physical, cognitive, and behavioral indications, individuals have an unrealistic level of anxiety about being evaluated by others in most or some social situations such as public speaking, public eating, and using public restrooms. A significant level of impairment of functionality occurs in social, academic and psychological areas. Social anxiety starts at early stages of life and quickly becomes chronic. It may create significant issues for the individual unless treatment is not provided.[2,3] In explaining social anxiety, the cognitive behavioral model is one of the most widely accepted models.[4–7]

Cognitive models of anxiety disorders act in reference to central characteristics such as cognitive schema or beliefs that bring individuals closer to processing information with prejudice, direct all attention toward threats, and approach ambiguous stimuli with catastrophic misinterpretation.[8,9] In changing environments, different clinical pictures may arise as a result of dysfunctional beliefs and cognitive distortions.[8,9] Based on the cognitive model of SAD, the core of social anxiety appears to be a strong desire to convey a particular favorable impression of oneself to others and marked insecurity about one's ability to do so.[4] Individuals who have high social anxiety have some dysfunctional thoughts and beliefs regarding their own behaviors and others' ways of judging those behaviors.[10] This way of interpretation causes cognitive mistakes by systematically interpreting the individual's experiences and distorting the interpretations.[10] Distorted automatic thoughts (I'm blushing, they think badly of me, they don't like me, I look foolish), underlying non-adaptive assumptions (if my speaking is not perfect and fluent, they will think badly about me), and maladaptive core beliefs (I am inferior, I am uninteresting, I am boring, I am a weak person, I am a failure) are stages from the more superficial to deeper levels, upon which the cognitive model focuses.[4,5]

Cognitive distortions as defined by Beck et al. are cognitive constructs that arise when information processing is ineffective or wrong, led by important beliefs or schemas of the individual.[11,12] Prominent cognitive distortions are: mind reading, catastrophizing, all-or-nothing thinking, emotional reasoning, labeling, mental filter, overgeneralization, personalization, 'should' statements, minimizing or disqualifying the positive, and arbitrary inference.[13]

Initial studies on cognitive distortions mostly focused on depression and reported that cognitive distortions were seen more in individuals with depression than healthy individuals.[14,15] Beck stated that 7 cognitive distortions were distinctive in individuals with depression, and Burns extended those into 10 in later studies.[12,13] Findings of studies made in connection to anxiety disorders are limited. For example, whereas one study found that mind reading and underestimation of the coping ability were predictive for anxiety,[16] this finding was not reproduced in later studies. In another study in young patients with anxiety, catastrophizing, overgeneralization and mental filter cognitive distortions were found higher than both clinical (individuals with an externalizing disorder) and control groups.[17] Another study found that overgeneralization was the strongest independent predictor of anxiety.[18] Additionally, it was reported that individuals with anxiety disorders made more cognitive distortions than healthy individuals.[8] However, information as to which cognitive distortions are specific in anxiety disorders is limited in the literature. Many relevant studies have examined the relationship between social anxiety and closely-related constructs, including automatic thoughts and beliefs/schemas.[19–22] Maladaptive beliefs have been shown to have significant positive associations with measures of social anxiety symptoms.[21,22] However, there are a limited number of studies in the literature on cognitive distortions in SAD. A study on nonclinical undergraduate students found that cognitive distortions were significantly associated with social anxiety scores.[23] However, some studies found that patients with social anxiety were more likely to catastrophize for negative events than other patients with anxiety.[24] In another study on children, more cognitive distortion was reported in the social anxiety group in comparison with the control group.[25] Alden et al. also emphasized that social anxiety was related to negative interpretation likelihood.[26]

In the treatment of SAD, cognitive behavior therapy (CBT) is based generally on determining the connections among emotion, behavior, and thoughts, and replacing dysfunctional ways of interpretation with more realistic and functional ones.[27] One of the fundamental components of CBT is about noticing and changing cognitive distortions.[28] The aim of CBT in SAD is to change cognitive distortions and dysfunctional behavior.[29] In the cognitive area, which is the most important point for interference in the treatment process of patients with SAD, determining the frequently seen dysfunctional cognitive distortions would contribute to the treatment process. Understanding SAD in terms of cognitive distortions and determining cognitive areas that may be important areas of interference in these patients may help to make the treatment process easier.

In this context, the aims of our study were to examine the differences in cognitive distortions between patients with SAD and a healthy control group, examine the relationship between cognitive distortions in patients with SAD and

Please cite this article in press as: Kuru E, et al. Cognitive distortions in patients with social anxiety disorder: Comparison of a clinical group and healthy controls. Eur. J. Psychiat. 2017. http://dx.doi.org/10.1016/j.ejpsy.2017.08.004