Alexithymia in Panic Disorder and Social Phobia

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Two recent studies have found that small samples of panic disorder patients appear to have elevated levels of alexithymia and raised the possibility that panic patients may constrict emotional experience. An alternate hypothesis is that there is conceptual and measurement overlap between alexithymia and cognitive aspects of panic disorder, and panic patients may in fact score high on only one dimension of alexithymia. One hundred panic disorder patients and 46 social phobics completed the revised 20-item Toronto Alexithymia Scale (TAS) and several anxiety-related measures. Thirty-four percent of panic patients and 28.3% of social phobics were classified as alexithymics, a nonsignificant difference. However, the alexithymia dimension related to difficulties in identifying and differentiating emotions and physical sensations was significantly elevated as compared with the alexithymia dimension related to external-oriented thinking. The former dimension was also significantly correlated with anxiety measures. The apparent finding that a sizeable proportion of panic patients are alexithymic may be an artifact of conceptual and psychometric overlap with cognitive aspects of panic disorder, specifically the interoceptive focus and sensitivity often associated with panic attacks.
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A LEXITHYMIA is a personality construct defined as a difficulty in identifying and describing emotions, a paucity of fantasy life, and external-oriented thinking.[1,2] Much of the research on alexithymia has focused on patients with somatoform pain disorders or substance abuse, although Nemiah[1] has suggested that alexithymia may also be prevalent in patients with panic disorder as compared with other anxiety disorders. To date, only two studies have directly tested this hypothesis.

Zeitlin and McNally[3] investigated the alexithymia construct in 27 panic disorder patients and 31 obsessive-compulsive disorder patients using the Toronto Alexithymia Scale (TAS).[4] Sixty-seven percent of the panic patients were classified as alexithymic, and panic patients scored significantly higher on the TAS as compared with obsessional patients. The TAS was also found to correlate significantly ($r = .57$) with a measure of fear of anxiety symptoms, the Anxiety Sensitivity Index (ASI),[5] in the panic sample. The investigators concluded that panic disorder patients may "constrict emotional experience, thereby reducing the likelihood of their experiencing physiological sensations that accompany affect" (p. 658). A similar study[6] found that the prevalence of alexithymia in 30 panic disorder patients was 46.7%, as compared with only 12.5% in 32 simple phobia patients, based on TAS cutoff scores. This study recommended that alexithymia should be part of the assessment of every panic patient.

A third study,[7] although not a direct investigation of alexithymia prevalence in anxiety disorders, found conflicting results in 13 panic disor-

der patients and 13 alexithymic individuals. None of the panic patients had significant alexithymia and significantly differed from alexithymics in the use of self-solacing strategies. This finding casts doubt on the potential overlap between alexithymia and panic.

Preliminary prevalence studies of alexithymia in relatively small samples of panic patients suggest that alexithymia is common in these individuals, as determined by the TAS. The TAS has since been revised into a psychometrically improved, 20-item version (TAS-20)[8,9] and should be cross-validated in panic patients. However, a more important conceptual and measurement issue needs to be investigated. An alternate hypothesis to the co-occurrence of alexithymia and panic concerns the cognitive aspects of panic disorder and the conceptual overlap with some dimensions of alexithymia. Clark[10] has hypothesized that panic is the result of catastrophic misinterpretation of strange or unusual physical sensations. Similarly, anxiety sensitivity has been defined as a fear of anxiety symptoms based on the belief that these symptoms have harmful consequences,[11] and may be an important personality predisposition in the development of panic. There appears to be some conceptual overlap between these psycho-

logic models of panic and some aspects of alexithymia, specifically the difficulty in identifying and differentiating emotions from bodily sensations. There is also a possible confounder: the item similarity between the TAS and panic-related measures such as the ASI. For example, TAS items such as "I have physical sensations that even doctors don't understand" appear similar to ASI items such as "unusual body sensations scare me." Panic patients may be prone to endorsing both types of statements.

This alternate alexithymia hypothesis can be directly tested. Alexithymia is a unidimensional construct that has several components, and the TAS-20 measures these components separately, supported by factor-analytic findings.[8,9] It was hypothesized that panic patients would only score high on factors related to differentiating emotions and physical sensations as compared with the external-oriented–thinking component. Similarly, it was hypothesized that only the former alexithymia components would be significantly correlated with anxiety measures. A large sample of panic disorder patients and an anxiety disorder control group of social phobia patients were used for these analyses. Social phobia patients were chosen for two reasons: (1) they are similar to panic disorder patients in that both groups experience significant anxiety in a wide variety of situations (whereas simple phobics do not), and (2) both groups experience severe anxiety, but panic disorder patients have more "endogenous" anxiety (spontaneous panic attacks) and social phobics have more "exogenous" anxiety in response to feared situations.

METHOD

Subjects

The first sample consisted of 100 panic disorder patients (33 males, 67 females) with a mean age of 34.28 years (SD, 9.82). The second sample consisted of 46 social phobia patients (23 males, 23 females) with a mean age of 32.46 years (SD, 8.01). All patients were diagnosed by a psychiatrist or clinical psychology doctoral student in an anxiety disorders clinic, and diagnoses were based on DSM-III-R criteria after a 1- to 2-hour clinical interview. All interviewers had training and extensive experience with the Structured Clinical Interview for DSM-III-R. The breakdown of the level of diagnosed agoraphobia in the panic disorder sample was as follows: 14% had no agoraphobia, 34% had mild agoraphobia, 41% had moderate agoraphobia, and

11% had severe agoraphobia. None of the social phobia patients had a concomitant diagnosis of panic disorder.

Materials and Procedure

All patients were consecutively referred to an anxiety disorders clinic and completed the following measures as part of the assessment (along with a consent form): the TAS-20,[8,9] ASI,[5] Panic Attack Questionnaire,[12] Beck Anxiety Inventory,[13] and Symptom Checklist 90–somatization subscale.[14] The TAS-20 is a revised and psychometrically improved version of the TAS,[4] and corresponding alexithymia cutoff scores have also been developed.[15] The TAS contains three subscales: difficulty identifying emotions, difficulty describing emotions, and external-oriented thinking. Subscale scores were calculated by summing the total for each subscale and dividing it by the number of items that comprise each subscale.

RESULTS

Table 1 lists mean scores on the TAS-20 for both panic disorder and social phobia patients. There were no significant differences between the groups on any TAS-20 components. Using TAS-20 cutoff scores,[15] 34.0% of panic disorder patients and 28.3% of social phobics were classified as alexithymic, a difference that was not statistically significant. However, as listed in Table 1, the identifying emotions component of the TAS-20 is elevated as compared with other TAS dimensions (TAS-20 subscales contain different numbers of items, so each subscale score was divided by the number of items to make the scores comparable).

Within the panic disorder group, the identifying emotions score was significantly higher than both the describing emotions score [t (99) = 8.99, $P < .001$] and external-oriented thinking score [t (99) = 10.56, $P < .001$]. The describing emotions score was also significantly higher than the external-oriented thinking score

Table 1. Comparisons Between Panic Disorder Patients and Social Phobics on Alexithymia Components

Mean Score on TAS-20 Components	Panic Disorder Patients (n = 100)	Social Phobics (n = 46)
Identifying emotions	3.63 ± 1.19	3.53 ± 1.05
Describing emotions	2.75 ± 0.97	2.89 ± 0.96
External-oriented thinking	2.37 ± 0.61	2.30 ± 0.45
TAS-20 total score	54.51 ± 13.52	54.07 ± 11.55

NOTE. There were no significant differences between the diagnostic groups on any of the variables ($t < 1.0$ in all cases). Within each diagnostic group, all mean TAS-20 component scores were significantly different from each other ($P < .001$ in all cases).