# Independency of Alexithymia and Somatization

## *A Factor Analytic Study*

MICHAEL BACH, M.D.
DORIS BACH, PH.D.
MARTINA DE ZWAAN, M.D.

*In discussions on the several methodological limitations in the assessment of alexithymia, uncertainty still remains about whether alexithymia and somatization are distinct constructs or whether they share overlapping symptomatology and constructs, as suggested by previous studies. In this study, 379 normal adults completed the newly developed 20-item Toronto Alexithymia Scale (TAS-20) and a screening list for DSM-III-R somatization disorder. Items from both the TAS-20 and the somatization checklist were subjected to factor analysis, resulting in separate factor loadings according to these two scales. These results were replicated and cross-validated in a sample of 125 psychosomatic inpatients, supporting the view of an independency between alexithymia and somatization.* (Psychosomatics 1996; 37:451–458)

Somatization refers to the process of experiencing and expressing somatic symptoms without demonstrable organic disease.[1,2] Various psychosocial concepts have been introduced for understanding of the development of medically unexplained somatic symptoms, emphasizing the potential role of genetic, psychological, and sociocultural variables. Among these, the concept of alexithymia has been formulated to describe persons who display a certain cognitive-emotional disturbance that affects the way they communicate their feelings.[3–5] Because of an inability to identify their own feelings and to elaborate on them, alexithymic persons are considered to focus on the somatic manifestations of emotional arousal while minimizing the affective components of emotions, resulting in somatosensory amplification and misinterpretation of somatic sensations as signs of physical illness.[6–8]

The awareness of affects as potential signals of inner events as well as the identification of somatic sensations as bodily concomitants of emotions relies, to a large degree, on the way information is processed in the brain. Based on earlier psychoanalytic contributions on affect development, several psychological theorists have conceptualized a fundamental ontogenetic sequence of affect development, involving a progressive desomatization, differentiation, and different levels of verbalization of emotions as cognitive representations.[9–12] According to these concepts, the person's development ranges from earlier stages of simple awareness of undifferentiated bodily sensations to an

Received February 7, 1995; revised April 12, 1995; accepted May 27, 1995. From the Department of Psychiatry, University of Vienna, Austria; Neue Poliklinik, Vienna, Austria; and the Klinik Bad Bramstedt—Center for Behavioral Medicine, Bad Bramstedt, Germany. Address reprint requests to Dr. Bach, Department of Psychiatry, University of Vienna, Waehringer Guertel 18–20, A–1090 Vienna/Austria.

appropriate awareness of complex feelings and the capacity to appreciate the emotional experience of others. In this context, the alexithymia concept refers to a deficit in the cognitive processing of emotions that may result in an impaired desomatization.[5,13] This cognitive-emotional deficit might be caused by variations in brain organization[14,15] or disturbances of emotional development during early childhood.[10] Furthermore, this deficit can also be thought of as a kind of partial resomatization along the cognitive-developmental sequence following severe psychic trauma, which might be one reason for the observation of high levels of alexithymia in patients with posttraumatic stress disorder.[5,13]

While several previous studies have found evidence for an association between alexithymia and the presence of functional somatic symptoms,[16–23] the generalizability of these results remains doubtful, since most of these studies have used instruments for the assessment of alexithymia that have later been shown to lack reliability and validity.[24] Addressing these limitations, the 26-item Toronto Alexithymia Scale (TAS)[25] has been developed with attention to psychometric theory. Applying the TAS, several studies have shown considerable correlations between alexithymia and various measures of functional somatic symptoms, supporting the assumption of a strong association between alexithymia and somatization.[26–30]

Despite this progress, uncertainty remains on whether alexithymia and somatization reflect independent, yet conceptually related psychological constructs, or whether they are overlapping. In most studies, conclusions drawing a close relationship between alexithymia and somatization have only come from correlation analyses of psychometric measures. However, given that most psychiatric patients as well as healthy subjects report functional somatic symptoms when answering psychometric tests,[7,31] the significance of reported somatic symptoms without clinical validation remains questionable. Therefore, while such a measurement-based approach may prove useful for the assessment of alexithymia,[24] the assessment of functional somatic symptoms should follow operationalized clinical criteria, as provided in DSM-III-R–defined somatoform disorders. As demonstrated in a recent study on 45 psychiatric inpatients, TAS alexithymia scores were unrelated to DSM-III-R somatoform disorders (as determined by SCID interviews), which may suggest the independency of alexithymia and somatization.[32]

However, some methodological problems with the compositional structure of the TAS became apparent,[33–35] thus questioning again the validity and generalizability of these results. More recently, a revised 20-item version of the TAS has been introduced: the TAS-20.[36–38] Preliminary investigations of the TAS-20 in student samples and behavioral medicine outpatients have demonstrated internal consistency, good test-retest reliability, and a 3-factor structure reflecting theoretically distinct and essential dimensions of alexithymia (difficulty identifying feelings and distinguishing them from bodily sensations of emotion, difficulty describing feelings, externally oriented thinking). However, while the psychometric properties of this revised scale showed substantial improvement over the original 26-item version, additional research on the scale's validity is warranted. In particular, it remains to be evaluated whether the constructs of alexithymia, as measured by the new TAS-20, and somatization can be measured independently.

The purpose of our study was to evaluate the relationship between alexithymia, as measured by the TAS-20, and somatization, as measured by a screening list for DSM-III-R somatization disorder, using factor analysis. The factor analytic approach has been chosen in line with earlier studies of the validation of the original TAS.[39] With regard to psychometric theory,[40] we expected that, whenever alexithymia and somatization refer to distinct constructs, factor analysis of a correlation matrix including items from both alexithymia and somatization will result in separate factor loadings corresponding to these two constructs. In this study, conducted in 1993–1994, separate factor analyses were performed for a sample of normal adults and a sample of psychosomatic inpatients.