

The Predictors of Somatization: A Review*

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ABSTRACT:

THE PREDICTORS OF SOMATIZATION : A REVIEW

Somatization has been described as the experience and communication of psychological distress in the form of physical symptoms. Various studies have delineated factors that might predict or may be associated with somatization. Alexithymia, which is primarily the inability to identify and communicate feelings is one of these factors. Somatosensory amplification is rather a new concept which denotes the tendency to experience somatic and visceral sensation as usually intense, noxious and disturbing. It involves bodily hypervigilance, the predisposition to focus on certain weak and infrequent bodily sensations, and a tendency to appraise them as pathological and symptomatic of disease, rather than normalizing them. Hypochondriacal concerns as well as anxiety and depression are thought to foster somatization. Depressed individuals' negative and pessimistic cognitive schemas foster the recall of illness-related memories, a negative view of their health and their future prognosis, and a heightened awareness of their unpleasant experiences. Anxiety usually manifests itself with somatic symptoms and medical care utilization is documented to be high in this group. If the bodily symptoms are the somatic manifestations of anxiety, this can induce self-observation and selective perception motivated by fear, resulting in more anxiety which in turn stimulates arousal with somatic symptoms. In this article we aimed to discuss the factors which might contribute to somatization by reviewing recent literature. We also focused on the pros and cons of the instruments developed to measure these constructs.

Key words: somatization, alexithymia, somatosensory amplification, hypochondriasis

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ÖZET:

SOMATİZASYONUN BELİRLEYİCİLERİ: BİR DERLEME

Somatizasyon psikolojik sıkıntının bedensel bulgular biçiminde yaşanması ve iletilmesi olarak tanımlanmıştır. Somatizasyonla ilişkili olan ya da onu belirleyen etkenlerle ilgili çeşitli çalışmalar yapılmıştır. Temel olarak duyguları tanıma ve onları iletme zorluğunu gösteren bir yapı olan aleksitimi bu etkenlerden birisidir. Beden duyularını abartılı algılama da nisbeten yeni olarak gündeme gelen bir başka etkidir. Abartılı algılama bedensel duyulara aşırı dikkat kesilme, bedensel ve viseral duyularını yoğun ve rahatsız edici olarak algılama ile kendini gösterir. Kişi zayıf ve nadir beden duyularına odaklanarak onların bir hastalık habercisi olduğunu düşünür. Hipokondriak ilgi, depresyon ve anksiyetenin de somatizasyonu beslediği düşünülmektedir. Depresif bireylerin olumsuz ve kötümser bilişsel şemaları, hastalıkla ilgili anıları canlandırır, kişileri sağlıklarını ve gelecekteki prognozlarını olumsuz değerlendirmeye ve hoşlanmadıkları yaşantılarını daha fazla fark etmeye sevk eder. Anksiyete de kendisini sıklıkla bedensel bulgularla gösterir ve bu grupta tıbbi bakım kullanım oranı yüksektir. Eğer bedensel bulgular anksiyetenin somatik görünümü ise bu durum, kişinin kendisini gözlemesine ve korkuyla güdülenen seçici algılamaya yol açabilir, bu daha çok anksiyeteye sonuçlanıp somatik belirtilerde uyarılmaya yol açabilir. Bu yazıda yakın dönemdeki somatizasyon çalışmaları gözden geçirilerek somatizasyonun belirleyicilerinin tartışılması amaçlanmıştır. Ayrıca sözü geçen yapıları ölçmek için geliştirilmiş olan araçların üstünlük ve eksiklikleri üzerinde durulmuştur.

Anahtar sözcükler: somatizasyon, aleksitimi, abartılı algılama, hipokondriasis

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GİRİŞ

Somatization has been described as the experience and communication of psychological distress in the form of physical symptoms (1). It has also been suggested that somatization is a defense against the awareness or expression of psychological distress (2). Medical help-seeking in many cultures is organized around the presentation of bodily complaints rather

than explicit mention of emotional disturbance or family conflict (3). It has long been accepted that whereas the depressed European or American patient is likely to present with complaints of psychological problems, the depressed Asian patient is more likely to present with somatic complaints (4). This idea has been challenged with recent research, indicating that, though its prevalence and specific features vary considerably across cultures, the process of focusing

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on, amplifying, and clinically presenting somatic distress are universal and somatic symptoms are the most common clinical expression of emotional distress worldwide (5). The data from clinical studies in which structured interviews were used reveals that reporting of somatic symptoms by depressed patients is widespread (6). In a WHO study conducted in 14 countries, depression was found to be a commonly somatized disorder. The risk of having a current depressive illness for patients with the Somatic Symptom Index construct of somatization was significantly elevated in 14 of the centers (7). This is particularly important because psychiatric disorders may be underdetected in primary care, due to patients' tendency to make somatized clinical presentations (8). Kleinman (9) has described somatic symptoms as an alternative 'idiom of distress' that is prevalent in cultures where psychiatric disorders carry a great stigma. Somatic symptoms might be emphasized by patients to ensure that they get appropriate attention and also be regarded as legitimate reasons for consulting a clinician compared with the depressive feelings (5). This is in accordance with the finding that although the majority of primary care patients with major depression present to their physician with exclusively somatic symptoms, less than 10% deny any relationship between their symptoms and their emotions (10). A study by Bridges et al (11) revealed that somatizers were found to be less depressed, had lower trait anxiety, and were less likely to discuss emotional problems with a doctor or consult a physician for depressive symptoms when compared to psychologizers. Mumford et al (12) examined the prevalence of 'functional' somatic symptoms in general practice using Bradford somatic inventory. The symptom score on the Bradford Somatic Inventory was significantly related to five factors; current anxious mood, current depressed mood, sex, chronic physical illness in a parent, and a history of depressive illness. All five factors were found to be independent predictors of symptom scores on the Bradford Somatic Inventory when multiple linear regression analysis was used. It reminded us that the majority of patients (70-80%) in primary care with major depressive disorder or anxiety disorders presented exclusively with somatic complaints. Kirmayer and Groleau (13) concluded that somatization might have been a misleading term for this kind of manifestation. Somatic symptoms and emotional distress generally co-occur in the same patients and

are highly intercorrelated. Somatic clinical presentations of affective disorders may be viewed as somatization, though it has been operationalized in two more ways, namely as medically unexplained somatic symptoms and as hypochondriacal worry or somatic preoccupation (14).

The personality construct of alexithymia and perceptual styles such as somatosensory amplification have been suggested to foster somatization (15). The TAS is a self-report scale which is demonstrated to be a sound measure of alexithymia (16). The subjects are asked to respond on a 5-point Likert scale the extent to which they agreed or disagreed with each statement. The results are expressed as TAS-20 global scores as well as three factors denoting difficulty in identifying feelings and distinguishing them from bodily sensations of emotion (Factor 1), difficulty expressing feelings (Factor 2) and externally oriented thinking (Factor 3). The SSAS (Somatosensory Amplification Scale) has been demonstrated to measure in a valid and reliable manner an individual's sensitivity to normal bodily sensations that do not denote serious disease. It is a ten-item self-report scale asking the respondent the degree to which 10 statements are 'characteristic of you in general', on an ordinal scale from 1 to 5 (17). Higher levels on the SSAS were found in hypochondriacal patients as well as in patients making frequent use of medical care (18). The Whiteley Index (WI) was specifically designed to assess hypochondriasis as a binary self-report questionnaire (19). Factor analysis of the items yielded three separate factors of disease fear, disease conviction and bodily preoccupation. WI has been widely used in studies of hypochondriasis and provides a useful screening measure (20). However, the internal validity or homogeneity of WI in its original 14 item version was not confirmed in a study by Fink et al (21). The authors developed a shorter seven-item scale of WI which demonstrated sound psychometric properties. WI was thought to measure 'illness worry' rather than hypochondriasis and has been criticized to reflect patient characteristics rather than disease burden (8). Alexithymia is a personality construct characterized by difficulty in identifying and communicating feelings, and externally oriented thinking. Associated with a number of psychosomatic illnesses (22), it is believed that individuals with alexithymia misinterpret their emotional arousal as symptoms of physical illness (23). Unable to use affects as signals of inner psychic

events, many alexithymic individuals are thought to focus on, and to amplify the somatic sensations of emotional arousal, which are then experienced as overwhelming somatic distress and/or misinterpreted as signs of disease (24). In a study by Wise and Mann (25) the actual experience of somatic symptoms was strongly correlated with alexithymia which supports the relationship between alexithymia and somatization. On the contrary, Lundh and Simonsson-Sarnecki (26) found that alexithymia was not a predictor of somatization when depression and anxiety were controlled for. It has also been found that somatization and alexithymia are separate and independent constructs (27). Somatosensory amplification refers to a tendency to experience somatic and visceral sensation as usually intense, noxious and disturbing. It involves bodily hypervigilance, the predisposition to focus on certain weak and infrequent bodily sensations, and a tendency to appraise them as pathological and symptomatic of disease, rather than normalizing them (17). Though found prominently in hypochondriacal patients (17,28), there are studies indicating that amplification of benign bodily sensations may be related to the more general process of somatization rather than being restricted to hypochondriasis (18). Barsky (18) draws attention to the mechanisms through which depression might foster somatic amplification. Depressed individuals' negative and pessimistic cognitive schemas foster the recall of illness-related memories, a negative view of their health and their future prognosis, and a heightened awareness of their unpleasant experiences. Therefore depression directs one's attention inward, and this increased bodily preoccupation makes trivial and mild comforts more disturbing. Some authors expressed the view that hypochondriasis is predominantly a manifestation of a depression or a masked depression (29). The misinterpretation of the meaning of functional symptoms (30) has been proposed as one of the causes of the frequent coexistence of depression and hypochondriasis. In a study by Kellner et al (31) high scores on the somatization scale were found as a predictor in three out of the four groups for the hypochondriacal beliefs scale. People with a fear of disease or with a belief that they have a serious disease may attend to their minor sensations and ailments easily.

To our notice, research aimed at exploring the predictors of somatization in depressed patients is relatively rare. Most studies recruit primary care

patients to study different aspects of somatization process. Primary care patients constitute a different patient population than depressed outpatients where help seeking behavior and doctor-patient interaction may be more prominent in shaping the symptomatology. Turkish depressed patients have been shown to score higher compared to British and German patients on somatization measures (32,33). The WHO study found that the patients from Ankara, Turkey meeting the criteria of a depressive disorder reported only somatic symptoms as the reason for visiting the physician in of 95% of cases (6). There are also reports claiming that anxiety and depressive disorders may assume a somatized guise more often in women than in men (34). The diagnostic categories in the DSM are presumed to be largely based on tertiary care psychiatric populations and may not correspond well to the types of patients seen in specialty medicine or primary care (10). Gender may also be a confounding variable with somatization both in primary care and tertiary care units. A study by Kroenke and Spitzer (35) revealed that increased symptom reporting in women is not restricted to certain types of symptoms, and that medically unexplained symptoms are more common in women and the effect of gender on symptom reporting is independent of psychiatric morbidity. Bearing in mind that depressive disorders may be associated with increased reporting of physical symptoms in women, an adjustment is mandatory to figure out the independent effect of gender on symptom reporting. The severity of depression did not correlate with the somatic presentation of symptoms in primary care attenders at least in two studies. Kirmayer et al (36) found that primary care patients with somatic complaints scored lower than those who presented with psychosocial problems on the measure of depression. Bridges et al (11) also showed that somatizers were anxious whilst psychologizers were significantly more depressed. A study by Mumford et al (12) revealed that the symptom score on Bradford Somatic Inventory was related to current depressed mood aside with current anxious mood and a number of other factors. In a study comparing Asian and Caucasian patients on the grounds of somatization, somatic symptoms correlated both with anxiety and also with depression scores, the former one being the strongest (21). Anxiety usually manifests itself with somatic symptoms and medical care utilization is documented to be high in this group (37). If the

bodily symptoms are the somatic manifestations of anxiety, this can induce self-observation and selective perception motivated by fear, resulting in more anxiety which in turn stimulates arousal with somatic symptoms (31). The relationship between alexithymia and somatization is a controversial issue. There are studies supporting this relationship, and others which refute it. Due to their difficulty in experiencing and expressing emotions, alexithymic subjects are considered to focus on somatic manifestations of emotional arousal, resulting in somatosensory amplification and misinterpretation of somatic sensations as signs of physical illness (24). In a study by Wise and Mann (25), psychiatric outpatients with more alexithymic characteristics experienced more somatic symptoms and attributed these symptoms to psychological issues more than their less alexithymic counterparts. Deary et al (38) in a sample of 244 individuals drawn from a range of medical and non-medical situations, found the TAS successful in predicting medically unexplained symptoms (MUS) (38). The Difficulty Identifying Feelings subscale came out to be a better predictor of medically unexplained symptoms. In this study alexithymia overlapped greatly with negative affectivity and therefore the authors recommended a two parameter model for the MUS where negative affectivity acts as a threshold factor and alexithymia acts as an interference factor (38). There have been numerous reports linking alexithymia to negative affectivity, particularly depression (26,39,40). Deary et al (38) found that alexithymia made an independent contribution to the variance in MUS beyond that made by negative affectivity. On the other hand, in a study by Lundh and Simonsson-Sarnecki (26) alexithymia as measured by the TAS-20, showed weak correlations with measures of somatic complaints. The correlations were completely eliminated when negative affect was controlled. Authors conclude that either alexithymia was not essentially related to somatization or TAS did not possess sufficient validity as a measure of alexithymia to capture the hypothesized link between alexithymia and somatization. Studying the association of MUS and alexithymia in a nonpsychiatric clinical sample; Kooiman et al (41) found an association between the degree of alexithymia and the number of physical symptoms reported on a self-report questionnaire, however this association disappeared after controlling for the level of anxiety and depression. Wise and Mann (15) investigated the relationship between

somatosensory amplification and alexithymia in 101 psychiatric out-patients. SSAS (Somatosensory Amplification Scale) and TAS (Toronto Alexithymia Scale) significantly correlated when controlled for depression but only in female subjects. So far, research findings on the topic seem to diverge into two main pathways: (1) Alexithymia correlates highly with neuroticism, negative affectivity, depression or anxiety and it does not cause somatization independently, (2) Alexithymia may contribute independently to somatization where neuroticism and other factors may be mediating. In a study by Barsky et al (42) somatosensory amplification was found to be closely associated with the symptoms of depression, anxiety and hostility in 115 patients with upper respiratory tract infections. Amplification made its own contribution to the variance in patient discomfort even when dysphoria was taken into account. SSAS has demonstrated adequate internal consistency and test-retest reliability (28) but the validity of the scale has not been studied well enough. Aronson et al (43) questioned the validity of SSAS and examined the psychometric studies in two studies with university students. What they found was that SSAS correlated with cross-sectional measures of symptom reporting and with several indices of general distress such as anxious and depressive symptoms and negative emotionality. The authors concluded that SSAS was more likely an index of negative emotionality and general distress than a valid measure of somatic sensitivity (43). On the contrary a study where psychiatric outpatients were recruited showed that SSAS scores for somatosensory amplification were significantly associated with SCL-90 somatization scores independent of gender, presence of physical disorder, and level of anxiety and depression (44). The study by Wise and Mann (15) where SSAS and TAS correlated significantly only in the female subjects is in line with previous research where women reported significantly more somatic complaints than men (35). We need to quote Wise and Mann (25) to explain the complex association between alexithymia, somatosensory amplification and anxiety to predict somatization: "The somatizing patient might be conceptualized as an alexithymic individual with limited subjective awareness and cognitive processing of emotions, which results in a focus on and amplification and misinterpretation of visceral sensations that are paired with emotional arousal".

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