

## Somatoform Symptoms in Depressive and Panic Syndromes

Winfried Rief, Wolfgang Hiller, and Manfred M. Fichter

Somatoform symptoms are common features of psychological and psychosomatic disorders. This study addresses the question of whether somatoform symptoms differ in patients with panic syndromes, with depressive syndromes, or with somatization syndromes without depression or panic syndromes. We therefore investigated 135 inpatients of a psychosomatic clinic and identified 64 patients for the depression group, 31 for the panic subgroup, and 18 for the somatization syndrome group. Neither the number of somatization symptoms nor the pattern of somatoform symptoms differed substantially among the 3 groups, except for higher frequencies of palpitations in the panic group and *more abdominal pain symptoms in the depressive group*. The 3 groups showed nearly identical frequency distributions of the individual somatoform symptoms. All 3 groups showed elevated hypochondriasis scores. In personality dimensions, depressive patients showed the lowest scores for extraversion. The improvements during inpatient treatment on the somatization variables, as well as general psychopathology, were also comparable. We favor the interpretation that the somatization syndrome is a fairly uniform syndrome whether or not it occurs alone or in combination with depressive syndromes or panic syndromes.

**Key words:** somatoform disorders, somatization disorder, panic disorder, affective disorder, abridged somatization disorder, hypochondriasis

The section on somatoform disorders in *Diagnostic and Statistical Manual of Mental Disorders* (3rd ed., Rev. [DSM-III-R]; American Psychiatric Association, 1987) summarizes the somatization disorder, undifferentiated somatoform disorder, conversion disorder, hypochondriasis, and somatoform pain disorder. Compared to the other sections of mental disorders, we have very

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little information about the overlap of the subgroups of somatoform disorders, their overlap with other disorders, the processes of symptom etiology, and other aspects. The defining criteria for the categories of somatoform disorders vary from being highly elaborated (e.g., the somatization disorder) to being nearly unspecific (e.g., undifferentiated somatoform disorder). Concerning other subgroups of somatoform disorders, very few empirical data have been published until now (e.g., body dysmorphic disorder).

For the diagnosis of somatization disorder according to *DSM-III-R*, the patient must suffer a minimum of 13 from a list of 35 somatoform symptoms, the disorder must have begun before the age of 30 years, and the symptoms may not exclusively be correlates of panic attacks. The symptoms may not be due to an organic or pathophysiologic mechanism and must be a cause of either visits to doctors, use of medication, or alterations in life style. If a patient has fewer than 13 severely disabling somatoform symptoms, the criteria of undifferentiated somatoform disorder, somatoform pain disorder, or conversion disorder may be fulfilled. For these diagnoses, only one somatoform symptom may be sufficient.

The 4th revision of *DSM* (*DSM-IV*; American Psychological Association [APA], 1994; Fauman, 1994) continues to make a distinction between somatization disorder, undifferentiated somatoform disorder, pain disorder, hypochondriasis, and body dysmorphic disorder. Most criteria remain the same as in *DSM-III-R*, except for some revisions in the list of symptoms and organs that are relevant for somatization disorder. Somatization now requires a minimum of eight symptoms, but these symptoms must be of four types (a minimum of four pain symptoms, two gastrointestinal symptoms, one sexual symptom, one pseudoneurological symptom). The International Classification of Diseases (ICD-10; World Health Organization, 1993) also introduced the term *somatoform disorder*, but dissociative and conversion disorders are a separate group. Whereas *DSM-III* pointed to the fact that somatoform symptoms are usually multiple and are concerned with many organs, ICD-10 differentiated the somatization disorder and the somatoform autonomic dysfunction for which the latter class should be used when symptoms of the autonomic nervous system are the primary complaints.

The spectrum of the variety of somatoform symptoms is rather badly represented in these diagnostic subgroups because the most common case is characterized by multiple somatoform symptoms without fulfilling the criteria of somatization disorder. Therefore this syndrome is one topic of interest of this article. There has been a proposal to include a new diagnostic group of patients with multiple somatoform symptoms who do not reach the strict criteria of somatization disorder (Escobar, Rubio-Stipec, Canino, & Karno, 1989; Katon et al., 1991). Escobar et al. (1989) proposed as a criterion a minimum of four somatoform symptoms for men and a minimum of six somatoform symptoms for women of the possible symptoms of somatization disorder. This subgroup has been called *abridged somatization disorder* or *Somatic Symptom Index-4/6* (SSI-4/6).

Whereas hypochondriasis as one subgroup of somatoform disorders shows high lifetime comorbidity with anxiety disorders (85.7% in the study of Barsky, Wyshak, & Klerman, 1992), SSI-4/6 and somatization disorder show high comorbidity with affective disorder (about 80% in the studies of Katon et al., 1991; Rief, Schaefer, Hiller, & Fichter, 1992; all of these studies used standardized interviews for the psychiatric diagnosis). However, somatization disorder also shows high lifetime comorbidity rates with panic disorders, as well as other similarities to panic attacks (20% in the study of Katon et al., 1991; see also King, Margraf, Ehlers, & Maddock, 1986; Rief, Schaefer, Hiller et al., 1992). Despite some recently published studies about the interrelations of depression, anxiety, and somatization on the level of diagnoses (Kellner, Hernandez, & Pathak, 1992), there is still the need for further investigations concerning the categorical and dimensional relations of these disorders.

Clinical experiences as well as classification systems (APA, 1994, p. 448) suggest that somatoform syndromes associated with depressive syndromes differ from those associated with panic attacks. During and after panic states, patients usually report cardiovascular symptoms as well as sweating and dizziness, whereas during depressive states, patients often report gastrointestinal symptoms (e.g., appetite loss). Our study addresses the question of whether patients with panic syndromes and those with depressive syndromes can be discriminated on the level of single somatoform symptoms. The presence of different syndromes may be easier to discriminate than the diagnostic classes with respect to the difficulties of discriminating patients with panic disorder and depressive disorder with self-report instruments (Feldman, 1993). We expected that the total number of somatoform symptoms would be higher in panic syndromes than in depressive syndromes. Finally, a subgroup exists of patients with multiple somatoform symptoms who do not have elevated anxiety or depressive scores. The distribution of somatoform symptoms in this subgroup was also of high interest.

## METHOD

### Subjects and Procedure

One hundred thirty five consecutively admitted inpatients of a psychosomatic hospital were screened with different self-rating scales for anxiety, depression, and somatoform symptoms, as well as for personality traits and further clinical features. Additionally, all subjects underwent a physical examination. All positively answered somatic symptoms in the Screening for Somatoform Symptoms (SOMS<sup>1</sup>; Rief, Hiller, Geissner, & Fichter, in press;

<sup>1</sup>The English version of Screening for Somatoform Symptoms (SOMS-2) is available from Winfried Rief, Klinik Roseneck-Center for Behavioral Medicine, Am Roseneck 6, D-83209 Prien am Chiemsee, Germany.

Rief, Schaefer, & Fichter, 1992) were listed. Each somatic symptom of a patient was rated by a physician as "surely psychogenic," "probably psychogenic," "probably somatic," or "surely somatic." This rating was based on the physician's knowledge of previous medical investigations and further anamnestic data, as well as routine examinations at admission (electrocardiogram, blood analyses, etc.). A symptom was rated as somatoform only when it was not judged as probably or surely organic.

Our special concerns were the actual presenting syndromes. These syndromes were assessed by self-rating scales for somatoform symptoms, depressive symptoms, and panic symptoms. For these variables, critical cutoff values were used, which had been derived from earlier studies to define the syndromes (see Table 1).

The SOMS is a self-rating scale with 53 items. Items 1 to 35 represent the 35 possible symptoms of somatization disorder, according to *DSM-III-R*. Items 36 to 42 refer to somatic symptoms that may occur during panic attacks, as well as those somatoform symptoms that may be present in states of depression or undifferentiated somatoform disorders. The remaining items concern inclusion and exclusion criteria for the different subgroups of somatoform disorders. The items of the SOMS are added to the *somatization index* (positive answers of items 1 to 35 that are not due to organic origin), and a separate complaints total (positive answers of items 1 to 42) is also obtained. An earlier study showed that the SOMS has good internal consistency (Cronbach's  $\alpha = 0.87$ ). Of patients with a SOMS diagnosis of somatoform disorders, 73% also met the criteria of somatoform disorders in the Structured Clinical Interview for *DSM-III-R* (SCID; Rief, Schaefer, & Fichter, 1992; Spitzer, Williams, Gibbon, & First, 1990; Wittchen et al., 1990), whereas only 1 of 27 patients with normal SOMS values obtained a diagnosis of somatoform disorder with the SCID ( $\kappa = 0.65$ ).

The Center for Epidemiological Studies Depression Scale (CES-D; Radloff, 1977; German version by Hautzinger & Bailer, 1992) was used to measure depression. In the validation studies of Hautzinger and Bailer (1992), a cutoff score of 24 points or more in the CES-D was a good indicator for depressive disorders. We also used this criterion to define the depressive subgroup.

TABLE 1  
Inclusion and Exclusion Criteria for the Syndromes

Syndrome Group	Depression Scores of CES-D	Somatoform	Criteria of SSI-4/6 (SOMS and Physician Rating)	Minimum Duration of Symptoms 6 Months
		Symptoms Exclusively During Panic Attacks (Item 46 of SOMS)		
Depressive	$\geq 24$	No	Optional	Optional
Panic	Optional	Yes	Optional	Optional
Pure SSI-4/6	$< 24$	No	Yes	Yes

TABLE 2  
Sociodemographic Variables

	<i>Depression</i>	<i>Panic</i>	<i>SSI-4/6</i>
<i>N</i>	64	31	18
Mean age	41.8 ( <i>SD</i> = 11)	43.7 ( <i>SD</i> = 11)	41.7 ( <i>SD</i> = 9)
Sex (% women)	69	65	39
Education (% college/equivalent)	57.8	12.9	55.6
Working disability last year (in weeks)	11.9	15.5	12.1

The psychometric assessment of panic syndromes is not as clear as that for the other syndromes. Important features of panic syndromes are the presence of panic attacks combined with multiple somatic symptoms. Subjects were defined as meeting the criteria for panic syndrome when they indicated the presence of somatic symptoms only during panic attacks. As further validation criteria, we used additional measures of anxiety, namely, the two dimensions of the Symptom Check List (SCL-90-R; Derogatis, 1977; CIPS, 1986) *anxiety* and *phobic anxiety*. These dimensions have been found to discriminate between panic disorder and dysthymia in an earlier study (Rief & Fichter, 1992; Rief, Schaefer, Hiller et al., 1992).

Finally, a subgroup of patients with abridged somatization disorder (SSI-4/6) was defined. Male patients of this subgroup had to report at least four somatoform symptoms, and female patients had to report at least six somatoform symptoms. Additionally, a depressive syndrome (i.e., CES-D score of 24 or greater) was ruled out. The patients also had to indicate that their somatoform symptoms did not appear only during panic attacks. The somatoform symptoms had to persist for at least 6 months. The three groups did not overlap, and every patient belonged to only one group. For further information, patients also filled out a measure of hypochondriasis (the Whiteley Index; Pilowsky, 1967; Rief, Hiller, Geissner, & Fichter, 1994) and a German personality questionnaire measuring neuroticism and extraversion (the Freiburg Personality Questionnaire; Fahrenberg, Hampel, & Selg, 1989).

Following these criteria, we classified 113 of the total sample of 135 patients. The depression subgroup consisted of 64 (20 men, 44 women); the panic subgroup consisted of 31 (11 men, 20 women); and the patients with somatization syndrome (SSI-4/6) consisted of 18 patients (11 men, 7 women). Table 2 shows some basic variables of the three subgroups. There was no significant difference in age and working disabilities (number of weeks within the last 12 months). The somatization group tended toward having more men than the other groups,  $\chi^2(2) = 5.4, p < .07$ . The panic subgroup had fewer patients with higher education,  $\chi^2(2) = 17.9; p < .001$ . Because of possible age and sex differences in the occurrence of somatoform symptoms, we computed a chi-square test for each of the somatization symptoms on sex and age (age was dichotomized at a cutoff of

40 years). Sex differences were found for 3 of 31 symptoms that may occur in both sexes (amnesia, burning sensations in sexual organs or rectum, impotence). Age differences were found for two symptoms: vomiting and fainting. All these symptoms have a low occurrence rate and contribute only little to the somatization index. The somatization index itself does not correlate significantly with age in our sample,  $r = -.06$ ; the somatization index also is not significantly different between men and women,  $t = 0$ ; ns. Therefore the following analyses were conducted without special concerns to age and sex.

### Inpatient Treatment of Patients With Psychiatric and Psychosomatic Disorders

To specify the patient-selection process, it is necessary to point out the fact that inpatient treatment of psychiatric and psychosomatic problems in Germany is not unusual; it is quite common. Thus the inpatient setting is not likely to represent a source of selection bias related to social or occupational status. The most frequent reasons for inpatient treatment are the impressions of the family practitioner that the patient needs intensive psychosomatic treatment or that there is a regional lack of outpatient psychotherapists. The integrative behavioral medicine approach consisted of medical care, individual psychotherapy, assertiveness training, problem-solving training, progressive muscle relaxation, and other cognitive-behavioral, emotional, and movement therapies. Because the main emphasis of our study is descriptive and not a controlled intervention trial, details of the treatment program are omitted here.

## RESULTS

### Somatization Index

For the sum of somatization symptoms, the groups did not differ significantly. For the 2 years preceding our assessment, the depressive subgroup reached the mean value of 9.1 symptoms ( $SD = 5.5$ ), the panic subgroup reached a mean value of 8.3 symptoms ( $SD = 4.1$ ) and the SSI-4/6 subgroup reached a mean value of 9.7 symptoms ( $SD = 5.4$ ). The  $F$  ratio was not significant at the 5% level,  $F(2, 111) = 0.5$ . Results are similar for symptoms within the last 7 days (mean values, 6.3, 5.9, and 5.1 for depression, panic, and somatoform subgroups, respectively) as well as for the total number of all somatoform symptoms (items 1 to 42). There were no differences between the depressive and panic patients on the number of somatoform symptoms.

We also investigated possible differences in the distributions of the variable somatization index. As demonstrated in Figure 1, the distributions for the depression subgroup and for the panic subgroup were nearly identical.

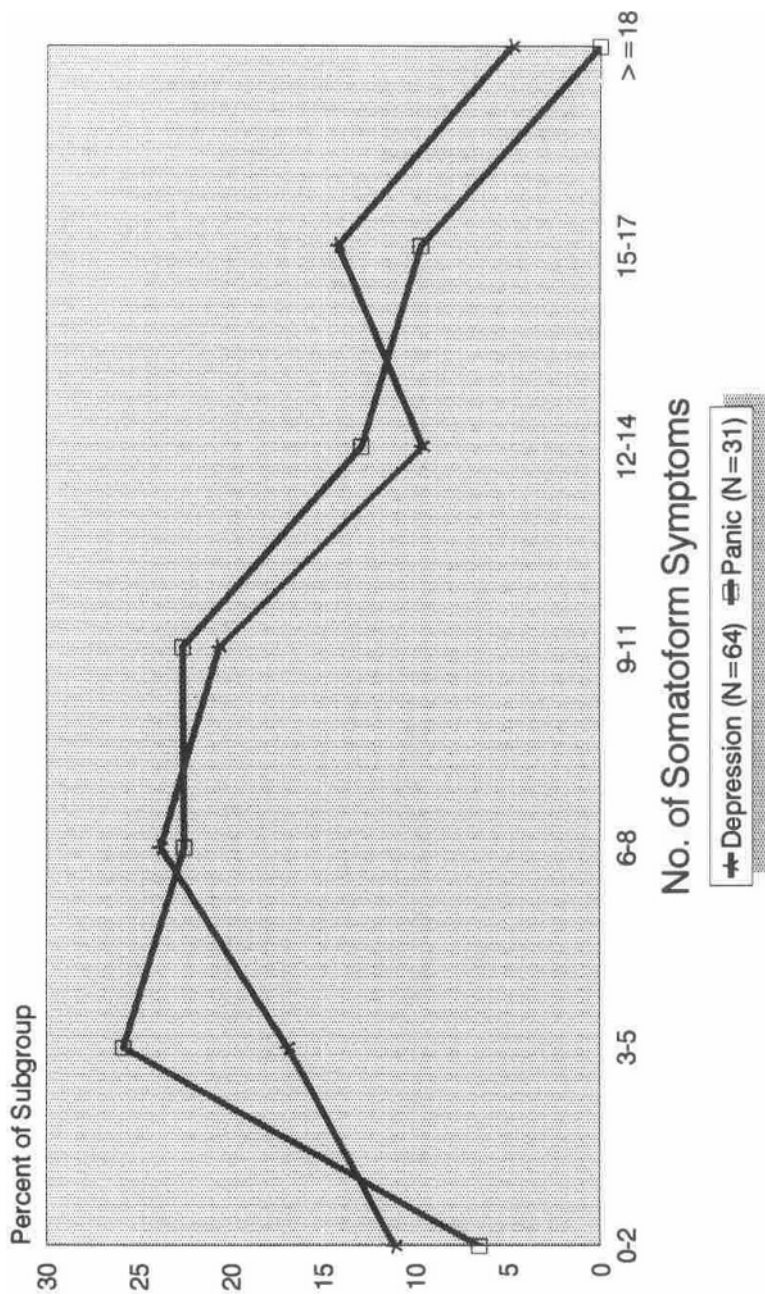


FIGURE 1 Frequency distribution of the number of somatization symptoms in patients with depressive syndromes and in patients with panic syndromes.

**TABLE 3**  
**Somatoform Symptoms in Panic Syndromes, Depression Syndromes, and**  
**Somatoform Syndromes (Assessed With the SOMS)**

<i>Complaint</i>	<i>Depression<sup>a</sup></i>	<i>Panic<sup>b</sup></i>	<i>SSI-4/6<sup>c</sup></i>
1. Vomiting	23	13	0
2. Abdominal pain	54	27	44
3. Nausea	54	45	41
4. Bloating	68	52	69
5. Diarrhea	38	36	44
6. Intolerance of several foods	47	28	41
7. Pain in extremities	52	48	57
8. Back pain	71	68	83
9. Joint pain	39	44	44
10. Pain during urination	14	7	13
11. Other pain	45	24	39
12. Shortness of breath	41	53	53
13. Palpitations	60	81	67
14. Chest pain	51	32	44
15. Dizziness	64	71	83
16. Amnesia	30	24	39
17. Difficulty swallowing	31	19	22
18. Loss of voice	13	10	17
19. Deafness	10	14	6
20. Double vision	10	10	11
21. Blurred vision	44	50	38
22. Blindness	0	0	0
23. Fainting	6	3	11
24. Seizure	10	17	11
25. Trouble walking	30	30	20
26. Paralysis	11	11	11
27. Urinary retention	9	7	18
28. Burning sensations	16	10	22
29. Sexual indifference	47	36	39
30. Pain during intercourse	20	11	24
31. Impotence	6	12	11
36. Chronic fatigue	73	76	83
37. Loss of appetite	41	32	22
38. Constipation	36	26	35
39. Trembling	38	57	53
40. Sweating	63	63	61
41. Crawling	53	40	56
42. Hot/cold flashes	51	48	44

<sup>a</sup>*n* = 61. <sup>b</sup>*n* = 31. <sup>c</sup>*n* = 18. All sample sizes indicated are percentages of the subgroups. Gynecological symptoms are cancelled because of small sample size.

### Differences in the Pattern of Somatoform Symptoms Between Patients With Depressive and Panic Syndromes

Percentages of positive answers to questions about the single somatoform symptoms in the three subgroups are given in Table 3. To test for differences between panic and depressive syndromes, the 95% confidence bounds were computed (the results of the confidence bounds are comparable to the results of the chi-square test but reflect the distribution characteristics more). These bounds did not overlap for depressive and panic syndromes for the following symptoms: abdominal pain (higher values for depressive patients) and palpitations (higher values for panic states). This result concords with clinical impressions, but only two significant differences in 42 tests may be expected by chance alone.

In Table 3, we have three columns with the symptom frequencies for the three patient groups. To test for similarities, we correlated the frequency values of the three columns. The depressive subgroup frequency distribution correlates highly with the column of the somatoform subgroup, Pearson  $r = 0.92$ ,  $p < .001$ ; nearly the same correlation coefficient is found for the intercorrelation of the panic column and the somatoform column,  $r = .91$ ;  $p < .001$ . The intercorrelation between the depressive and the panic group column is  $.89$ ,  $p < .001$ . In summary, the three groups have highly similar frequency distributions.

### Is Hypochondriasis Different in Panic-Depressive and Somatoform Syndromes?

Hypochondriasis, as assessed with the Whiteley index, does not discriminate the three subgroups. All three groups have elevated scores, as can be seen in Table 4. The  $F$  ratio of the one-way analysis of variance is 0.11 ( $df = 2, 111$ ; ns).

### Differences in Personality Dimensions

In the Freiburg Personality Inventory (FPI), which measures neuroticism and extraversion, we found significant differences for *extraversion*,  $F(2, 111) = 5.0$ ,  $p < .01$ . Depressed patients were the most introverted ( $M = 3.3$ ,  $SD = 1.8$ ), whereas patients with panic attacks nearly reached the normal range ( $4.4$ ,  $SD = 2.0$ ). The somatoform subgroup was similar to the panic subgroup ( $M = 4.3$ ,  $SD = 1.4$ ). The *neuroticism* score did not discriminate the two groups.

### Other Psychometric Variables

Table 4 also shows mean values and results of statistical tests for other variables. As could be expected, the groups differed substantially in the

TABLE 4  
Psychological Variables (Means and Standard Deviations) for Patients of the Three Subgroups

Variable	Instrument	Depression		Panic		SSI-4/6		F(2, 111)	Pairwise <sup>a</sup>
		M	SD	M	SD	M	SD		
Depression	CES-D	35.4	6.8	27.2	14	18.0	3.8	28.0***	D-P, P-S, D-S
	SCL-4	2.0	0.7	1.5	0.9	1.1	0.7	11.5***	D-P, D-S
Anxiety	SCL-5	1.6	0.9	1.7	1.0	1.2	0.8	1.8	
Phobic anxiety	SCL-7	1.1	0.8	1.2	1.0	0.6	0.5	3.4*	P-S, D-S
Hypochondriasis	Whiteley	6.8	3.3	7.1	3.2	7.1	2.4	0.1	
Extraversion	FPI	3.3	1.8	4.4	2.0	4.3	1.4	5.0**	D-P, D-S
Neuroticism	FPI	7.8	1.3	7.5	1.6	7.3	1.4	1.1	
Somatization									
Admission	SCL-1	7.4	0.8	1.3	0.8	1.1	0.7	0.7	
Discharge	SCL-1	0.8	0.8	0.7	0.7	0.8	0.8	0.2	
Obsessive/compulsive	SCL-3	1.6	0.9	1.3	1.0	0.9	0.7	4.6*	D-S
General symptomatomatic index									
Admission	SCL-10	1.5	0.6	1.3	0.7	1.0	0.7	4.7*	D-S
Discharge	SCL-10	0.9	0.7	0.7	0.7	0.7	0.4	1.2	
Number of organic symptoms	SOMS <sup>b</sup>	2.6	2.7	1.8	1.7	2.4	2.3	1.1	
Complaints index total	SOMS <sup>c</sup>	11.6	6.0	10.1	4.6	12.1	6.1	1.0	

<sup>a</sup>Pairwise comparisons were computed for significant main effects. D = depressive syndrome, P = panic syndrome, S = pure SSI-4/6 syndrome. Only significant differences are mentioned. <sup>b</sup>All somatic symptoms with probable organic origin (according to physicians' ratings). <sup>c</sup>All somatoform symptoms of items 1 to 42 with probable psychological origin (according to physicians' ratings). Alpha probabilities: • = 5%, \*\* = 1%, \*\*\* = 0.1%.

*depression* scores. We also found differences for *obsessive/compulsiveness*, with the highest means for patients who were depressed. The anxiety dimensions of the SCL were, as expected, the highest for the panic subgroup and only slightly lower for the depression subgroup.

### Improvements During Inpatient Treatment

We also examined the hypothesis that patients with somatization symptoms show different improvements during the inpatient stay, which depend on the existence of additional panic attacks or depression. Therefore, the scores at admission to the hospital as well as at discharge were compared for the three groups on the variables *somatization* and *general symptomatic index* of the SCL-90-R (see Table 4). Apart from a highly significant effect for assessment point for the variable *somatization*,  $F(1, 107) = 33, p < .001$ , we found no significant interaction between assessment point and diagnostic group,  $F(2, 107) = 1.1, ns$ . The changes between admission and discharge did not differ substantially between the three groups. The same is the case for the highly significant improvements in the general psychopathology, main effect for assessment point,  $F(1, 107) = 46, p < .001$ : there was no substantial difference between the three groups (interaction of Diagnostic Group  $\times$  Assessment Point,  $F(2, 107) = 1.4; ns$ ). Corresponding to the definition criteria for the three groups, we found a main effect for diagnostic group in general psychopathology,  $F(2, 107) = 3.6, p < .05$ , which signifies a lower degree of additional psychopathology for the group without depression and panic attacks.

### Regression Analysis

Finally, we examined the question concerning which variables could predict the number of somatoform symptoms. Following the concept of *somatized depression*, depression may be a potent predictor for the somatization index. Anxiety and hypochondriasis, however, are also often considered as important conditions for the development of somatization symptoms. These and other variables are intercorrelated; therefore, the impact of one of these variables on the somatization index is badly represented by the correlation coefficient. All the previously mentioned variables were included in a regression analysis with the dependent variable *somatization index*. We used stepwise multiple regression with a criterion for input of 0.05. In the regression equation, the following variables were included: *somatization* (SCL-90-R) and *neuroticism* (similar to FPI). This resulted in a multiple  $R = .65$  and  $R^2 = .42$ . Other variables of the SCL, *extraversion* (FPI) or *hypochondriasis* (Whiteley) did not reach the criteria for input in the regression equation.

Because of the close relation of the dimension *somatization* in the SCL with *somatization index*, we excluded the variable *somatization* of the SCL-

90 and conducted a new regression analysis. This led to a new regression equation that included more variables than in the earlier analysis: *general symptomatic index* (SCL-90), *stress index of complaints* (SCL-90), *extraversion* (FPI), *anxiety* (SCL-90), and *paranoid ideation* (SCL-90). Again, depression scores or hypochondriasis scores did not reach the inclusion criteria. The variance explained by this solution was the same as in the first solution, multiple  $R = 0.65$ ,  $R^2 = 0.42$ .

## DISCUSSION

Surprisingly and contrary to our clinical impressions, we found that patients with depressive states, panic attacks, or somatoform disorders could not be discriminated on measures of somatization or hypochondriasis. Some methodological shortcomings that may have influenced the results must be discussed. Defining criteria for panic syndromes were not very strict, and therefore, our panic syndrome patients may actually be patients with affective disorders. On the other hand, the depression scores, either of the SCL or of the CES-D, are significantly lower for our patients with panic attacks than for those with depressive syndromes. Therefore, in our group of panic patients, there may also be comorbidity with depression, but the intensity of depression is significantly lower than in the depression group. Additionally, the mean value of *anxiety* in the SCL for our patients with panic attacks was 1.7, whereas in earlier studies, we found mean values for patients with anxiety disorders of 1.5 (Rief & Fichter, 1992). The panic patients in this study are therefore comparable on the *anxiety scale* (SCL-90) to anxiety patients in earlier studies.

For the purpose of this study, we tried to examine patients with actual syndromes but without diagnosing patients according to a classification system. Both approaches may bring interesting but different results. Although syndromes may represent more descriptive aspects of the actual psychopathology, diagnoses according to classification systems point to more longitudinal aspects. Many therapeutic decisions are based on the syndrome level, and syndrome-oriented research may be important for the continuing revision of classification systems. Some authors propose to examine "pure groups" to find better discriminations, but the selection of pure groups is a rather arbitrary subgroup of the specific class, because in many cases we find lifetime comorbidity with other psychiatric disorders. In summary, we need more information about the descriptive level of the syndromes, about results on classification levels, and about the linkage between the two approaches.

Besides some methodological shortcomings, another explanation may be that somatoform symptoms are only a general indicator for psychiatric disorders but not a specific discriminable syndrome. This opinion is contradicted by earlier results (Rief, Schaefer, Hiller et al., 1992; Wittchen,

Essau, Rief, & Fichter, 1993), in which we found marked differences for the time of onset of somatoform disorders, affective disorders, and other psychiatric disorders.

Hiller, Zaudig, & von Bose (1989) demonstrated that for depressive and anxiety disorders, discrimination may depend on the level of psychopathological description. Overlap between depression and anxiety was highest on the level of symptoms, medium on the level of syndromes, and lowest for diagnoses. This implies that patient groups that can be discriminated by diagnosis may nevertheless show similarities on symptom levels. And last, but not least, even at the level of diagnosis, many studies found marked overlaps (comorbidity) for depressive and anxiety disorders (e.g., Angst & Dobler-Mikola, 1985; Wittchen & Essau, 1989). Hypochondriasis as measured with the Whiteley Index also shows no difference between the three groups. This may not be surprising because the three groups do not differ in the number of somatoform symptoms. However, in a regression analysis, hypochondriasis does not predict the number of somatoform symptoms. This result is in accordance with results of Barsky et al. (1992) or Kirmayer and Robbins (1991), who found that hypochondriasis and multiple somatoform disorders are distinguishable subgroups.

The only variables that predicted the number of somatoform symptoms in the regression analysis were *neuroticism* (FPI) and, obviously, the somatization subscale of the SCL. Even in a second analysis without the somatization subscale of the SCL-90-R, neither the hypochondriasis scores nor the depression scores reached the criterion for the inclusion in the regression equation. Both regression analyses revealed the importance of personality factors. When the somatization of the SCL-90-R is excluded, some other variables are included in the regression equation that may compose the part of the variance formerly represented by the somatization scale (general symptomatic index, stress index of complaints, anxiety).

Our results appear to be best explained by the theory that multiple somatoform symptoms constitute a syndrome consisting of somatoform symptoms with varying probabilities to form part of the syndrome. Common somatoform symptoms are bloating, back pain, palpitation, dizziness, *chronic fatigue, and sweating*. *Uncommon symptoms are deafness, double vision, blindness, seizures, and urinary retention*. This syndrome of multiple somatoform symptoms seems to be stable either alone or in combination with panic attacks or depression. Comorbidity with panic or depression does not substantially change the pattern of the somatization syndrome. Because of the stability of the syndrome, we agree to the proposition that a new diagnostic subgroup of abridged somatization disorder or multiple somatoform symptoms should be included in the diagnostic catalogue of ICD-10 or DSM-IV. This subgroup should be defined according to the number of somatoform symptoms with a cutoff value significantly lower than 13 (Hiller, Rief, & Fichter, in press).

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