Differentiating Dissociative Disorders from Other Diagnostic Groups Through Somatoform Dissociation in Turkey

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ABSTRACT. This study aimed to assess the reliability, validity, and psychometric characteristics of the Turkish version of the Somatoform Dissociation Questionnaire (SDQ-20). In this context, it investigated whether somatoform dissociation differentiates dissociative disorders from other diagnostic groups and non-clinical individuals. The Turkish Version of the SDQ-20 was administered to 50 patients with a dissociative disorder, 94 patients with psychiatric disorders other than dissociative disorder, and 175 non-clinical participants. To confirm the clinical diagnosis, all patients in the dissociative disorder group had been evaluated using the Structured Clinical Interview for DSM-IV Dissociative

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Disorders. The internal consistency and the test-retest correlation of the SDQ-20 were excellent. The scale had strong correlations with the DES and the DIS-Q. There was a statistically significant difference between dissociative patients and other diagnostic groups on the SDQ-20 total score. The discriminative power of the SDQ-20 was as robust as that of the DES. There was no significant difference between the mean SDQ-20 total scores of Turkish and Dutch patients, but Turkish dissociative patients reported pseudoseizures more frequently than Dutch patients. The specificity of the short version of the scale (SDQ-5) was weak among Turkish patients. Dissociative disorders can be differentiated from other diagnostic groups through somatoform dissociation. The good psychometric characteristics of the SDQ-20 among Turkish participants support its cross-cultural validity. *[Article copies available for a fee from The Haworth Document Delivery Service: 1-800-342-9678. E-mail address: <getinfo@haworthpressinc.com> Website: <http://www.HaworthPress.com> © 2000 by The Haworth Press, Inc. All rights reserved.]*

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Somatoform symptoms are a prominent feature of a group of disorders that involve physical complaints or symptoms that cannot be explained by any underlying organic etiology. Somatization disorder, hypochondriasis, and conversion disorder belong to this group (American Psychiatric Association, 1994). Somatoform symptoms can also be part of various psychiatric disorders such as dissociative disorders, depression, schizophrenic disorder, and anxiety disorders.

In DSM-II (American Psychiatric Association, 1968), following traditional conceptualization, the conversion and dissociative types of hysterical neurosis were classified as variants of a single disorder. In the DSM-III (American Psychiatric Association, 1980), and its subsequent versions, dissociative disorders have been considered a separate group. The latest version of the International Classification of Diseases, the ICD-10 (World Health Organization, 1992), however, includes all manifestations of hysterical neurosis under the rubric of dissociative disorders in accordance with the findings of modern studies that have resurrected evidence for the relationship between somatoform symptoms and dissociation (e.g., Saxe et al., 1994).

Pierre Janet described somatoform symptoms as aspects of hysteria (dissociative disorders) in his traumatized patients (Nijenhuis & Van der Hart, 1999). In the beginning of his career, his contemporary Sigmund Freud (1895/1974) also considered hysteria as a trauma-based disorder. However, Freud later conceptualized the somatoform symptoms of hysteria as the result of a neurotic defense mechanism and referred to them as conversion symp-

toms. In his lifelong career aimed at establishing a scientific medical psychology based both on biological and psychological factors, Ernst Kretschmer (1944, 1975) pointed out the biological aspects of hysteria and noted the similarity between somatoform reaction types seen among humans and animals. He mentioned the ''movement storm'' (Bewegungssturm), and ''playing dead reflex'' (Totstellreflex), which are seen among animals when threatened with death. He saw the symptoms of hysteria as phenomena that any person could develop under certain circumstances.

After the 1950s, while developing a strictly medical model of psychiatric disorders, the earlier work by Briquet was reintroduced (Guze, 1975), and hysteria was redefined as a chronic disorder with multiple somatic complaints. Hysteria was mainly conceptualized as today's somatization disorder. This view strongly influenced the revisions of classifications of mental disorders in North American psychiatry in the 1980s. The connections of this concept of hysteria to antisocial personality disorder and alcoholism have been investigated to unravel, among other things, possible genetic links between these conditions (Bohman, Cloninger, Von Knorring, & Sigvardsson, 1984).

Reintroducing a broader concept covering both somatoform and psychological aspects of hysteria, Braun (1988) came up with the BASK model of dissociation and pointed out the disconnection between behavior (B), affect (A), sensation (S), and knowledge (K) that results from dissociation. Underlining the equal importance of dissociation's disintegrating effect on both psychological and somatic processes, Nijenhuis and colleagues (Nijenhuis, Spinhoven, Van Dyck, Van der Hart, & Vanderlinden, 1996) introduced the term somatoform dissociation. These authors developed the Somatoform Dissociation Questionnaire (SDQ-20), a standardized instrument designed to evaluate somatoform aspects of dissociation. The development of this scale filled the gap after the development of such instruments as the Dissociative Experiences Scale (Bernstein & Putnam, 1986) and the Dissociation Questionnaire (Vanderlinden, Van Dyck, Vandereycken, Vertommen, & Verkes, 1993), which have been successfully applied to measure psychological dissociation. Nijenhuis and colleagues (Nijenhuis, Spinhoven, Van Dyck, Van der Hart, & Vanderlinden, 1998a) demonstrated that somatoform dissociation is correlated with childhood sexual and physical abuse. They reawakened interest in and empirically investigated the relationship between animal defensive reactions and dissociative phenomena (Nijenhuis, Spinhoven, Vanderlinden, Van Dyck, & Van der Hart, 1998; see also Nijenhuis, Vanderlinden, & Spinhoven, 1998), pointing out the similarities between freezing, concomitant development of analgesia and anesthesia, and acute pain in threatened animals and severely traumatized humans.

The aim of this study was to assess the psychometric characteristics of the

Turkish Version of the SDQ-20 and to evaluate whether dissociative disorders can be differentiated from other diagnostic groups through somatoform dissociation among Turkish patients. As somatization has been considered a culture-sensitive phenomenon (Tseng, 1975; Ulusahin, Basoglu, & Paykel, 1993), we also compared our findings with those reported by Nijenhuis and colleagues (1996) and examined similarities and differences between the two study groups.

METHODS

Participants

The patients in the dissociative disorders group (N = 50) were cases of dissociative identity disorder (DID; N = 25) or dissociative disorder not otherwise specified (DDNOS; N = 25) who had been admitted to the Dissociative Disorders Program of the Psychiatric Department in the Istanbul Medical Faculty Hospital. The clinical diagnosis of dissociative disorder was confirmed using the Structured Clinical Interview for DSM-IV Dissociative Disorders (Steinberg, 1994) for all patients in this group.

Participants with schizophrenic disorder (N = 23), anxiety disorder (N = 26), major depressive episode (N = 23), or bipolar mood disorder in remission (N = 22) came from various programs of the same department. All patients were diagnosed according to the DSM-IV criteria. Additionally, a non-clinical group of 175 participants were recruited from college students (N = 50), workers in the textile industry (N = 53), homemakers (N = 42), and bank employers (N = 30). Informed consent was obtained after the study was fully explained to all participants.

Assessment Measures

1. *Somatoform Dissociation Questionnaire*: The SDQ-20 is a 20-item self-report instrument that evaluates the severity of somatoform dissociation. The SDQ-20 was developed by Nijenhuis and colleagues (1996). It has excellent internal consistency (Cronbach's alpha = 0.95). Mokken scale analysis showed that the 20 items were strongly scalable (Nijenhuis et al., 1996; Nijenhuis, Spinhoven, Van Dyck, Van der Hart, & Vanderlinden, 1998b). The SDQ-20 total score was strongly correlated with DIS-Q (r = 0.76) and DES (r = 0.85) (Nijenhuis et al., 1996, 1999) and with reported trauma (Nijenhuis et al., 1998a). The short form of the scale, which includes five items of the 20-item version, is a screening instrument for DSM-IV dissociative disorders (Nijenhuis, Spinhoven, Van Dyck, Van der Hart, & Vanderlinden, 1997). The SDQ-20 was translated into Turkish by the first author.

2. *Structured Clinical Interview for DSM-IV Dissociative Disorders*: The SCID-D is a semi-structured interview developed by Steinberg (1994). It is a diagnostic instrument. The Turkish Version of the SCID-D has excellent interrater reliability and validity (Kundakci, Sar, Kiziltan, Yargic, & Tutkun, 1998).

3. *Dissociative Experiences Scale*: The DES (Bernstein & Putnam 1986; Carlson & Putnam, 1993) is a 28-item self-report instrument. It has been demonstrated that the scale differentiates patients with a chronic dissociative disorder from those with other psychiatric disorders (Carlson et al., 1993). The Turkish version of the scale has a reliability and validity (Yargic, Tutkun, & Sar, 1995; Sar et al., 1997) equal to its original form.

4. *Dissociation Questionnaire*: The DIS-Q is a 63 item self-report instrument (Vanderlinden et al., 1993). It evaluates the severity of psychological dissociation with possible scores ranging from 1 to 5. According to a study among Turkish patient groups, the DIS-Q differentiates patients with a chronic dissociative disorder from those with other psychiatric disorders (Sar et al., 1998). The reliability and validity of the Turkish version of the scale are equal to the psychometric characteristics of the original form (Sar et al., 1998).

5. *Childhood Abuse and Neglect Questionnaire*: The CANQ is a short self-report questionnaire that gathers information on details of childhood abuse and neglect. It was developed by Yargic, Tutkun, and Sar (1994) according to the definitions of childhood abuse and neglect by Walker, Bonner, and Kaufmann (1988).

RESULTS

Characteristics of the Participants

The demographic data concerning the participants are contained in Table 1. The mean age of the outpatients with dissociative disorder was 24.5 (SD = 4.8) with a range of 18 to 37. Their mean education was 8.3 (SD = 3.8) years. Dissociative patients were younger than the patients with bipolar mood disorder, schizophrenic disorder, and the non-clinical group, F (5, 313) = 6.23, $p <$ 0.001, on analysis of variance with post hoc Scheffé test. They also had received less education than the non-clinical group and patients with bipolar mood disorder, F (5, 313) = 6.51, $p < 0.001$.

In the dissociative disorders group, 45 (90%) patients reported at least one type of childhood abuse and/or neglect, 23 (46%) reported childhood sexual abuse, 33 patients (66%) reported physical abuse, and 33 (66%) emotional abuse in childhood. Thirty-seven (74%) patients mentioned neglect.

TABLE 1. Sociodemographic Characteristics of the Participants

		Age			Education (years)		Gender (female)		Marital status (married)		Income level (middle)	
	N	Range	Mean	SD	Mean	SD	N	%	N	%	N	%
Dissociative disorder	50	18-37	24.5	4.8	8.3	3.8	40	80.0	12	24.0	33	66.0
DID	25	19-37	25.4	5.1	8.2	3.8	20	80.0	8	32.0	16	64.0
DDNOS	25	18-33	23.6	4.4	8.4	3.9	20	80.0	4	16.0	17	68.0
Schizophrenic disorder	23	18-48	31.8	8.4	11.4	3.6	6	26.1	5	21.7	8	34.8
Anxiety disorder	26	18-58	34.1	11.5	10.0	4.5	17	65.4	15	57.7	19	73.1
Major depressive episode	23	18-56	29.4	9.8	10.9	3.4	18	78.3	11	47.8	20	87.0
Bipolar mood disorder (in remission)	22	18-63	34.9	10.9	12.3	3.0	9	40.9	11	50.0	17	77.3
Non-clinical probands	175	18-64	30.3	9.4	11.6	4.0	109	62.3	88	50.3	125	71.4
Total	319	18-64	30.1	9.5	10.9	4.0	199	62.4	142	44.5	222	69.6

Reliability Measures

The first step was to determine if SDQ-20 scores could be accounted for by variables other than group membership as assessed among participants in a non-clinical population. There was a weak but significant correlation between SDQ-20 and age ($r = 0.20$, $N = 175$, $p < 0.05$). There was no significant difference between the scores of male ($M = 27.0$, $SD = 8.7$) and female ($M = 27.6$, $SD = 7.9$) participants, (t (173) $= 0.45$, $p > 0.05$). However, there were negative correlations (Pearson) between SDQ-20 total score and economic status ($r = -0.24$, $N = 175$, $p < 0.005$), and education ($r = -0.35$, $N = 175$, $p < 0.001$).

For all participants ($N = 319$), the Pearson correlations were calculated between each item and item-corrected SDQ-20 scores to establish partial construct validity of the scale. These coefficients ranged between $r = 0.46$ and $r = 0.80$. All correlations reached a significance level of $p < 0.001$ or better.

Test-retest reliability was calculated using Pearson correlations from the scale scores of 35 persons (including 9 dissociative cases) who completed the scale on two occasions separated by an average interval of 33.2 days ($SD =$ 14.0, range 21-76). The overall test-retest correlation was $r = 0.95$ for the total score ($N = 35$, $p < 0.001$). The test-retest correlations of 19 individual variables varied between 0.63-0.93 with a significance of at least $p < 0.001$, one item (No. 9: ''I dislike smells that I usually like'') had a correlation of $r =$ 0.37 ($p < 0.05$). Thus, the SDQ-20 score is stable over an interval of approximately one month.

Cronbach's alpha coefficients were calculated for the sample as a whole

(N = 319, alpha = 0.94) and for each of the subsamples: dissociative disorders (alpha = 0.92); schizophrenic disorder (alpha = 0.89); anxiety disorder (alpha = 0.82); major depressive episode (alpha = 0.85); bipolar mood disorder (alpha = 0.77); non-clinical participants (alpha = 0.87). A second measure of internal consistency, split-half reliability (Gutmann's split-half), was calculated for the sample as a whole (r = 0.92, N = 319) and for each subgroup: dissociative disorders (r = 0.91); schizophrenic disorder (r = 0.80); anxiety disorder (r = 0.79); major depressive episode (r = 0.83); bipolar mood disorder (r = 0.82); and non-clinical volunteers (r = 0.82). These values indicate that the SDQ-20 is an internally consistent measure across all test samples.

Comparison of the Groups and Diagnostic Accuracy

There were high correlations between the SDQ-20, the DIS-Q (r = 0.80, N = 236, $p < 0.001$), and the DES (r = 0.76, N = 173, $p < 0.001$). The correlations between the SDQ-20 and the four DIS-Q factor scores (identity fragmentation factor r = 0.79, loss of control r = 0.76, amnesia r = 0.78, and absorption r = 0.58) were also strong. These data support the convergent validity of the SDQ-20.

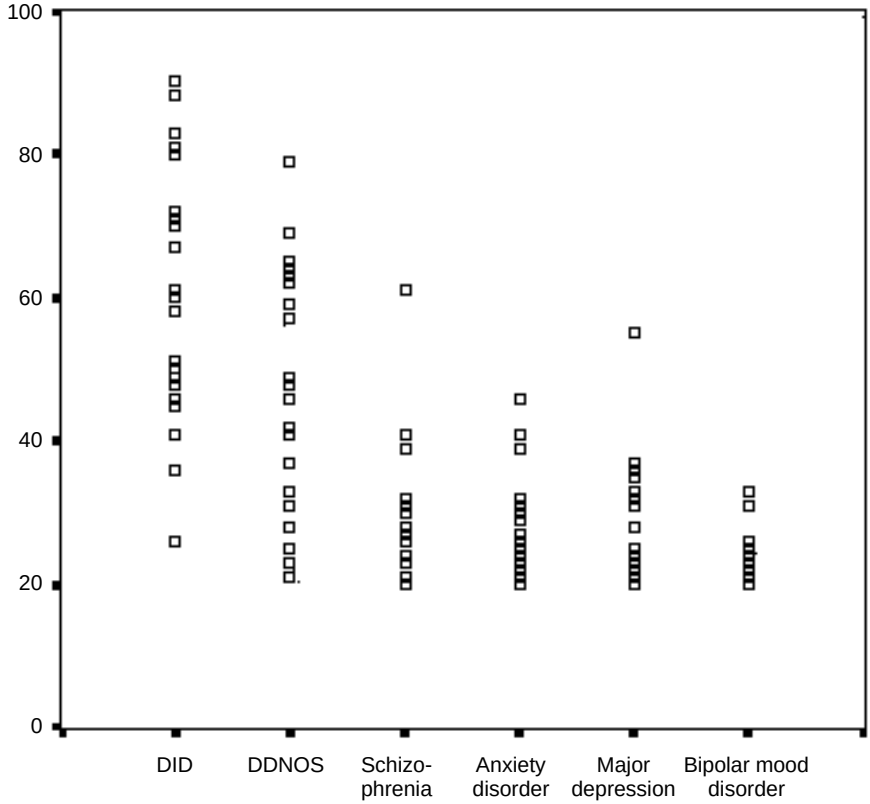
Patients with dissociative identity disorder had the highest score on the SDQ-20 (M = 58.7, SD = 17.88, range 26-90). The mean SDQ-20 scores in the remaining groups were between 22.7 and 27.4. A variance analysis was performed to compare SDQ-20 scores across these groups. They differed significantly F (5, 313) = 53.81, $p < 0.001$). Pairwise comparisons were then performed with a Scheffè test demonstrating significant differences between the dissociative disorder group and all other groups (Table 2). As seen in Figure 1, a cut-off point of 35 seems to be suitable in screening for cases of DSM-IV dissociative disorders.

TABLE 2. SDQ-20 Total Score in Various Diagnostic Groups

	N	Mean	SD	Range	Median	Items endorsed (median)
Dissociative disorder	50	52.5	18.0	21-90	49	15
DID	25	58.7	17.9	26-90	58	17
DDNOS	25	46.3	16.2	21-79	46	13
Schizophrenic disorder	23	27.1	9.5	20-61	24	4
Anxiety disorder	26	26.8	6.4	20-46	25	5
Major depressive episode	23	28.7	8.3	20-55	28	4
Bipolar mood disorder	22	22.7	3.5	20-33	22	2
Non-clinical probands	175	27.4	8.2	20-73	25	4

F (5, 313) = 53.81, $p < 0.001$

FIGURE 1. SDQ-20 Scores in Various Diagnostic Groups



Specificity, sensitivity, and predictive values of the SDQ-20 are seen in Table 3. A cut-off point of 35 yielded a sensitivity of 0.84, and a specificity of 0.87 for dissociative disorder diagnosis. Seven patients with DDNOS and one with DID remained below the cut-off point. In order to compare the discriminative power of somatoform dissociation with that of psychological dissociation, we analyzed the DES scores of 49 dissociative patients with those of the 71 patients with other psychiatric diagnoses. At a cut-off point of 25 and above, the sensitivity of the DES was 0.84 and the specificity 0.89, revealing similar discriminating powers for both somatoform and psychological dissociation.

Cross-Cultural Comparison

As the patient groups in both studies have similar proportions of dissociative identity disorder and dissociative disorder not otherwise specified, these

TABLE 3. Sensitivity and Specificity of the SDQ-20 at Various Cutoff Scores Discriminating Between 50 DSM-IV Dissociative Disorder Patients and 94 Psychiatric Patients with Other Disorders

Cutoff score	Sensitivity	Specificity	Positive predictive value	Negative predictive value	Predictive value estimated at prevalence 10%		Likelihood rate	
					Positive	Negative	Positive	Negative
40	0.74	0.94	0.88	0.87	0.58	0.97	12.3	0.28
35	0.84	0.87	0.78	0.91	0.45	0.98	6.5	0.18
30	0.90	0.75	0.66	0.93	0.29	0.99	3.6	0.13

similarities and differences cannot be considered artifacts. There were no significant differences in SDQ-20 items between Turkish and Dutch (Nijenhuis et al., 1996) dissociative patients including the total score of the scale (Table 4). Turkish patients had higher scores on items considering tastes, smells, and pseudoseizures, whereas Dutch patients more frequently reported difficulty in swallowing.

A logistic regression analysis revealed that three items of the SDQ-20 predicted membership to dissociative disorders group among Turkish patients. These were, being paralyzed for a while, hearing sounds from nearby as if they come from far away, and difficulty swallowing. It is noteworthy that none of these items are included in the short version (SDQ-5) derived from Dutch dissociative patients with the same methodology (i.e., having pain while urinating, feeling that a part of the body has disappeared, being unable to speak, insensitivity to pain, and seeing things around differently than normal). With cutoff score of 8, the sensitivity and specificity of the SDQ-5 were 0.90 and 0.75, respectively (Table 5). The diagnostic accuracy of SDQ-5 is rather limited among Turkish patients compared to the high sensitivity (0.94) and specificity (0.98) rates obtained in Dutch patients (Nijenhuis et al., 1997).

DISCUSSION

The excellent internal consistency and high test-retest correlation suggest that the Turkish Version of the SDQ-20 is a reliable instrument. Gender does not affect SDQ-20 scores. However, Turkish volunteers who were older, less well educated and had less income had higher scores. Somatization has long been reported as more frequently observed in individuals from lower socioeconomic levels (Crandell & Dohrenwend, 1967). The negative correlation between the SDQ-20 scores and income and education seem to reflect this

TABLE 4. Somatoform Dissociative Symptoms of Patients with Dissociative Disorders in Turkey and in the Netherlands (Nijenhuis et al., 1996)

Items	Present study (N = 50) Mean	SD	Nijenhuis et al. (N = 50) Mean	SD	t (df = 98)	p
I hear sounds from nearby as if they come from far away.	3.1	1.7	2.7	1.3	1.33	n.s.
My body, or a part of it, feels numb.	3.1	1.4	3.1	1.2	0.00	n.s.
I cannot speak (or merely with great effort) or I can only whisper.	3.0	1.3	2.6	1.4	1.48	n.s.
I do not have a cold but yet am able to smell much better or worse than I usually do.	3.0	1.4	1.9	1.3	4.07	< 0.001
I cannot sleep for nights on end, but remain very active during daytime.	2.9	1.5	2.9	1.5	0.0	n.s.
My body, or a part of it, is insensitive to pain.	2.8	1.5	2.9	1.5	0.33	n.s.
I cannot hear for a while (as if I were deaf).	2.8	1.4	2.5	1.3	1.07	n.s.
I feel pain in my genitals (apart from sexual intercourse).	2.7	1.5	2.6	1.4	0.34	n.s.
I grow stiff for a while.	2.7	1.4	2.7	1.4	0.0	n.s.
I dislike smells that I usually like.	2.7	1.5	2.0	1.2	2.59	< 0.05
I dislike tastes that I usually like (women: apart from pregnancy or monthly periods).	2.7	1.4	2.1	1.2	2.31	< 0.05
I see things around me differently than usual (for example, as if looking through a tunnel, or seeing merely a part of an object).	2.6	1.4	2.8	1.4	0.71	n.s.
People and things look bigger than they actually are.	2.6	1.5	2.4	1.5	0.67	n.s.
I have an attack that resembles an epileptic fit.	2.6	1.6	1.5	1.1	4.07	< 0.001
I cannot swallow, or only with great effort.	2.5	1.4	3.1	1.5	2.07	< 0.05
It is as if my body, or a part of it, has disappeared.	2.5	1.2	2.5	1.5	0.00	n.s.
I am paralyzed for a while.	2.2	1.3	1.9	1.3	1.15	n.s.
I cannot see for a while (as if I were blind).	2.2	1.2	1.9	1.3	1.20	n.s.
I have trouble urinating.	2.1	1.2	1.9	1.2	0.83	n.s.
I have pain while urinating.	2.1	1.2	1.9	1.2	0.83	n.s.
Total score	52.5	18.0	48.1	15.2	1.32	n.s.

general trend. The positive correlation between somatoform dissociation and age, however, provides a contrast against psychological dissociation. Psychological dissociation was shown to be higher among younger participants in a large representative sample derived from Sivas-City in Turkey (Akyuz, Dogan, Sar, Yargic, & Tutkun, 1999).

Convergent validity was shown by the high correlations between the SDQ-20, the DES, and the DIS-Q. The SDQ-20 scores differentiated the

TABLE 5. Sensitivity and Specificity of the SDQ-5 at Various Cutoff Scores Discriminating Between 50 DSM-IV Dissociative Disorder Patients and 94 Psychiatric Patients with Other Disorders

Cutoff score > =	Sensitivity	Specificity	Positive predictive value	Negative predictive value	Predictive value estimated at prevalence 10%		Likelihood rate	
					Positive	Negative	Positive	Negative
9	0.80	0.84	0.71	0.89	0.33	0.97	5.0	0.24
8	0.90	0.75	0.66	0.93	0.29	0.99	3.6	0.13
7	0.92	0.61	0.55	0.93	0.21	0.99	2.4	0.13

dissociative disorders group from other diagnostic groups in the current study, as has been previously demonstrated for Dutch patients (Nijenhuis et al., 1996, 1998b, 1999). The sensitivity (0.84) and specificity (0.87) of the SDQ-20 for dissociative disorder was slightly lower among Turkish patients than those reported by Nijenhuis and colleagues (1996), 0.88 and 0.94, respectively. The discriminating power of the SDQ-20 was, however, not lower than that of the DES among Turkish patients in this study. Taken a score of 25 or above as cutoff point, the sensitivity and specificity of the DES were 0.84 and 0.89, respectively. A considerable proportion (28.0%) of the Turkish patients with DDNOS had low SDQ-20 scores, that is, scores below the cut-off point. This rate was 23.8% with SDQ-5 for DDNOS and only 4.3% for DID among Dutch patients (Nijenhuis et al., 1999).

The scores obtained in most items of the SDQ-20 in this study were very similar to those of the Dutch patients (Nijenhuis et al., 1996). Turkish dissociative patients had higher scores for some items, including pseudoseizures. This finding is not at odds with previous reports, as pseudoseizure is one of the most frequently seen somatoform symptoms in Turkey (Sar & Sar, 1990). It is usually a presentation form of a more complex psychiatric condition including chronic dissociative disorders (Bowman & Markand, 1996). There is also an association between pseudoseizures and sexual abuse (Bowman & Markand, 1996; Litwin & Cardeña, 2000, this issue). Nijenhuis and colleagues (1998a) reported that childhood sexual and physical abuse were correlated with somatoform dissociation. In the present study, 90% of the dissociative disorder group reported at least one type of childhood abuse and/or neglect.

The logistic regression analysis revealed three symptoms as the features that best distinguish the Turkish dissociative group from other psychiatric patients: i.e., being paralyzed for a while, hearing sounds from nearby as if they come from far away, and difficulty swallowing (‘‘globus hystericus’’). When combined, this pattern describes a crisis situation (‘‘fainting fit’’) close

to pseudoseizure. Surprisingly, none of the items from the Dutch SDQ-5 were among these symptoms. Having low specificity in Turkish study group, the cross-cultural validity of the short form of the scale is not supported by our data. Despite this discrepancy, both the SDQ-5 and the symptom pattern derived from Turkish patients resemble different types of the same freezing response (Nijenhuis et al., 1998). For Turkish patients, motor inhibition is the predominant characteristic, whereas the Dutch SDQ-5 consists of items concerning perception, including pain and analgesia. We believe that the differences in severity and quality of childhood trauma histories between the two study groups play a role in this discrepancy. Among Nijenhuis et al.'s (1998a) dissociative patients, 82% reported childhood sexual abuse whereas it was only 46% in this study. Childhood abuse histories reported by Turkish dissociative patients seldom have brutal components (Sar, Tutkun, Yargic, & Kundakci, 1999; see also Sar, Tutkun, Alyanak, Bakim, & Baral, 2000).

We conclude that somatoform dissociation is as powerful as psychological dissociation in discriminating patients with dissociative disorders from patients with other psychiatric disorders. The SDQ-20, developed using Dutch and Flemish patients, has excellent psychometric properties among Turkish participants. Further studies are needed to evaluate probable cultural differences in various symptoms of somatoform dissociation and in factors associated with them.

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