BRIEF REPORT

Dissociative disorders and other psychopathological groups: exploring the differences through the Somatoform Dissociation Questionnaire (SDQ-20)

Perturbações dissociativas e outros grupos psicopatológicos: explorando as diferenças através do *Somatoform Dissociation Questionnaire (SDQ-20)*

Helena Maria Amaral do Espirito Santo,[1] José Luís Pio-Abreu[2,3]

Abstract

***Objective**: The Somatoform Dissociation Questionnaire is a self-report questionnaire that has proven to be a reliable and valid instrument. The objectives of this study were to validate the Portuguese version and to determine its capability to distinguish patients with dissociative disorders from others with psychopathological disorders. **Method**: 234 patients answered the translated version of Somatoform Dissociation Questionnaire. The Portuguese Dissociative Disorders Interview Schedule was used to validate clinical diagnosis. Patients with dissociative disorder (n = 113) were compared to a control group of 121 patients with various anxiety and depression disorders. **Results**: Reliability measured by Cronbach's α was 0.88. The best performance of the Portuguese form was at a cut-off point of 35, which distinguishes between dissociative disorder and neurotic disorders with a good diagnostic efficacy (sensitivity = 0.73). The somatoform dissociation was significantly more frequent in dissociative disorder patients, conversion disorder patients and post-traumatic stress disorder patients. **Conclusions**: These findings suggest that dissociative disorders can be differentiated from other psychiatric disorders through somatoform dissociation. The Portuguese version of the Somatoform Dissociation Questionnaire has fine psychometric features that sustain its cross-cultural validity.*

***Descriptors**: Somatoform disorders; Dissociative disorders; Psychiatric disorders; Hysteria; Validation studies*

Resumo

***Objetivo**: O objetivo deste estudo foi adaptar, validar e determinar a confiabilidade da versão portuguesa do* Somatoform Dissociation Questionnaire *e determinar a sua capacidade de discriminar doentes que dissociam de outros doentes. **Método**: O* Somatoform Dissociation Questionnaire *foi traduzido para o português e retrovertido para o inglês de forma a garantir a sua base conceitual. Os sujeitos responderam também à versão portuguesa do* Dissociative Disorders Interview Schedule *de forma a validar o seu diagnóstico clínico. O estudo incluiu 234 sujeitos divididos entre 113 doentes com patologias dissociativas e 121 doentes com outras patologias do foro ansioso e depressivo. **Resultados**: O* Somatoform Dissociation Questionnaire *versão portuguesa mostrou o seu melhor desempenho no ponto de corte 35, apresentando uma sensibilidade de 0,73. O alfa de Cronbach revelou uma consistência interna de 0,88. A dissociação somatoforme foi significativamente mais freqüente nos doentes com patologias dissociativas, patologias conversivas e distúrbio de stress pós-traumático. **Conclusões**: A versão portuguesa do* Somatoform Dissociation Questionnaire *mostrou-se um instrumento útil para discriminar doentes com patologia de foro dissociativo de outros doentes.*

***Descritores**: Transtornos somatoformes; Transtornos dissociativos; Transtornos psiquiátricos; Histeria; Estudos de validação*

[1] Neurosciences & Adult Psychopathology, Instituto Superior Miguel Torga, Coimbra, Portugal
[2] Hospital da Universidade de Coimbra, Universidade de Coimbra, Portugal
[3] Faculdade de Medicina, Universidade de Coimbra, Portugal

Correspondence
Helena Espirito Santo
Instituto Superior Miguel Torga, Department of Psychology
Rua Augusta, 46
3000-061 Coimbra, Portugal
Tel: (+351) 239 483 055 / 239 482 659
Fax: (+351) 239 825 327
E-mail: espirito-santo@ismt.pt

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Introduction

Hysteria has always been associated with the mind-body dualism. In ancient times, the wandering uterus was considered responsible for the disorder; in medieval times, the cause was believed to be the devil's possession. The notion that the mind affects the body appeared in the last two centuries.[1] In 19th century, Pierre Janet conceptualized hysteria as a relative inability to integrate sensory data in traumatized patients.[2] Sigmund Freud also believed hysteria was trauma generated,[3] but later he viewed hysteria as generated by a neurotic defense mechanism and referred to its symptoms as conversion ones. Somatoform dissociation was the hallmark of this and other latter ideas.[1,4] Nijenhuis et al.[5] introduced the term *Somatoform dissociation* to designate dissociative symptoms that involve the body and cannot be explained by organic disturbances.[4] In the last decade, there has been increasing recognition of somatoform dissociation.[1,6-7] Actually, somatoform dissociation is conceptualized as a failure in the sensorial and motor integration, and it's considered to be linked to psychological trauma particularly related to life threatening episodes caused by other people.[1,4,8-9]

Dissociation is a characteristic psychological process related to several disorders, from dissociative disorders (fugue, amnesia, and dissociative identity disorders[10]), to somatoform disorders (somatization and conversion disorders[11]), and post-traumatic stress disorder (PTSD).[12-18] There are few studies on dissociative symptoms in conversion disorders.[11,19-24]

The objective of the present study was to assess somatoform dissociation in dissociative disorders (dissociative disorder, conversion disorder, and PTSD) and compare them with other control disorders (anxiety and depression disorders). In order to do that, a screening tool for the somatoform dissociation was necessary and it did not exist in Portugal.

Method

1. Subjects

Subjects were consecutively selected from a psychiatric clinic (85), three psychotherapeutic centers (85), and a university (56 students). The questionnaires of eight patients were invalidated due to misplacing of answers on the scale. The dissociative patients were screened with a Portuguese Dissociative Disorders Interview Schedule (DDIS-P) for corroboration of the clinical diagnosis. A "gold standard" to scrutinize the validity of the other psychopathological diagnoses was still needed, so the longitudinal evaluation performed by experts (trained psychiatrists and psychologists with mean time of professional experience of 22 years), using all data available (LEAD procedure) was considered as a standard for validating the clinical diagnoses.[25]

The dissociative group consisted of three subgroups: 36 dissociative patients, 25 conversion patients and 49 PTSD patients. The distribution of these subjects in psychopathological subcategories is shown in table 1. Of these patients, 30% were male and 70% female; mean age was 30.9 ± 12.3 years. The patients in the control group suffered from depressive disorders (9.8%), panic disorder (7.3%), obsessive-compulsive disorder (10.3%), social phobia disorder (30%), and specific phobias (27%). Their mean age was 31.4 ± 11.6, 31% of the individuals of the control group were males, and 69% females. None of these patients met criteria for dissociative, conversion or post-traumatic stress disorders. There were no significant differences between the mean ages of the two groups ($t = 0.28$, $df = 224$), and gender ($X^2 = 0.03$, $df = 1$, n.s.). The risks and advantages of the study were elucidated orally and in writing to all the patients, and written informed consent was obtained from all, according to the Code of Medical Ethics of the World Medical Association Declaration of Helsinki.

2. Instruments

The Somatoform Dissociation Questionnaire is a 20-item self-report instrument that measures the intensity of somatoform dissociation, and was developed by Nijenhuis et al.[26]

The Dissociative Disorders Interview Schedule Portuguese adaptation (DDIS-P) is a structured interview developed by Ross et al.[27] Our adaptation allows the identification of all dissociative disorders, somatization disorder, and conversion disorder accordingly to DSM-IV diagnoses. The Portuguese version of the DDIS-P was investigated in a study with 41 patients and 29 normal control subjects and showed a good sensitivity rate (84%) and a specificity rate of 100%.[28]

3. Procedures

The original SDQ-20 was translated into Portuguese by the two authors, and then back translated to English by an independent bilingual English specialist.[29] The provisional translation of the questionnaire was administered to seven patients so that they could report any problems regarding the understanding of the items. The final step was the comparison of the original and back-translated versions. There were no revisions needed. All participants gave informed consent and answered the questionnaires from 2004 through 2006.

The data analyses were carried out with the Statistical Package for the Social Sciences (SPSS 11.0.3, for Mac OS X). Sensitivity and specificity were studied in order to verify accuracy of the SDQ-20. Reliability analysis with Cronbach's alpha was computed for all the subjects and the psychopathological groups. Mean and standard deviation for SDQ-20 were calculated for all groups of patients, and the average scores of the four groups were compared using one-way analysis of variance (ANOVA).

Results

1. Diagnostic accuracy

The best sensitivity-specificity relation of the SDQ-20 was established at a cut-off point of 35. The sensitivity rate was 0.73, the specificity rate was 0.66, positive predictive value was 0.54, and negative predictive value was 0.21. Fourteen patients with dissociative disorders, eleven patients with conversion disorder, and twenty-two patients with PTSD scored under the cut-off point of 35. Ninety-three control patients were below the cut-off.

2. Reliability analysis: internal consistency

For all 226 subjects results showed high corrected item-total correlations, ranging between $r = 0.31$ and $r = 0.63$. Internal consistency, measured by Cronbach's α was 0.94. Cronbach's α coefficients for each subsample were as follows: dissociative disorders $\alpha = 0.85$, conversion disorders $\alpha = 0.91$, PTSD $\alpha = 0.88$, panic disorder $\alpha = 0.74$, depression disorder $\alpha = 0.79$, obsessive-compulsive disorder $\alpha = 0.74$, social phobia disorder $\alpha = 0.79$, and specific phobias $\alpha = 0.81$. These values show that the SDQ-20 has internal consistency in all the samples.

3. Statistical description

For the dissociative patients the mean ± SD SDQ-20 score was 39.3 ± 11.9; for the conversion patients, it was 39.8 ±

Table 1 - SDQ-20 mean scores of patients with dissociative symptoms (n = 36), patients with conversion disorders (n = 25), patients with PTSD (n = 50), and patients with diverse anxiety and depression disorders (n = 121)

Psychopathology groups		n	Mean	SD	Range
Dissociative disorders		36	39.3	12.0	20-66
	Depersonalization	10	41.6	11.4	21-55
	Amnesia	11	36.6	15.3	20-66
	Fugue	7	40.0	9.8	29-51
	DDOS	8	39.4	10.2	25-51
Conversion disorders		25	39.8	14.1	20-76
	Motor	10	43.1	16.8	20-76
	Sensorial	12	32.3	5.2	25-38
	Combination	3	58.7	7.2	54-67
Post-traumatic stress disorders		49	38.7	11.7	20-61
Anxiety and depression disorders		116	29.2	6.7	20-47
	Panic	17	30.6	6.1	20-41
	Depression	23	27.0	6.9	20-47
	OCD	21	33.2	7.5	20-46
	Social phobia	29	27.9	5.9	20-40
	Specific phobias	26	28.7	6.1	20-43

14.2; and for PTSD patients, it was 38.7 ± 11.7. For control subjects, the mean ranged between 27.0 ± 6.9 (depression) and 33.2 ± 7.5 (obsessive-compulsive). The mean scores of these four groups differed significantly (ANOVA: $F = 9.06$, $p < 0.0001$). Bonferroni post-hoc multiple comparisons revealed that the significantly differences were between the dissociative disorders and the control disorders; it also showed that there weren't significantly differences within the dissociative disorders. These results are shown in detail in Table 1.

Discussion

As far as our knowledge goes, this is the first study to evaluate somatoform dissociation among Portuguese patients, and to compare dissociative patients with other diagnosis groups. The mean SDQ-20 score was higher in patients with a dissociative disorder than in those with control pathologies. The most important finding of this study is that somatoform dissociation is common in dissociative disorders, PTSD and conversion disorders, and it reinforces the idea of a connection between these disorders or their symptoms. Our anecdotic cases from clinical practice also support that idea. And we agree with Spitzer et al. and Nemiah regarding the assertion that conversion disorders should be re-categorized with the dissociative disorders.[11,19]

Another important finding is that dissociation is very common in PTSD, which supports the idea of including a dissociative dimension in PTSD diagnostic criteria.[12,30] Considering recent evidence about two subtypes of PTSD – a dissociative and a "hyperaroused" PTSD –,[31-32] our finding provides a relevant empirical contribution.

The SDQ-20 Portuguese version seems a useful instrument for the diagnosis of somatoform dissociation, and for discriminating between dissociative disorder patients and other psychiatric patients. Global scale reliability analyses reveal a good internal consistency, leading to the assumption that the questions converge to the same construct.

We should also mention some limitations of our study. There were few subjects in psychopathological subcategories to enable further analysis and the study of other associations. And there were more female than male subjects, as it usually happens in many psychopathological studies. In addition, this study, as pointed out by Steinberg,[33] is also limited by the vague construct of dissociation, which needs a more consistent conceptual foundation and screening tools with a more comprehensive assessment of this complex concept. Another limitation to the generalization of our results is the assessment of 165 patients who depended only upon LEAD procedure, which has been questioned in some studies.[34]

Conclusions

The Portuguese SDQ-20 was able to discriminate between patients with a dissociative disorder and patients with other pathologies in a Portuguese population, and it has good psychometric parameters that sustain its validity in another culture.

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ANNEX
SDQ-20

Este questionário refere-se a vários sintomas físicos ou a sensações corporais que pode ter tido durante pouco tempo ou por períodos longos de tempo.
Indique, por favor, o grau em que essas experiências se aplicam a si **no último ano**.

Para cada frase faça um círculo em redor do número da primeira coluna que melhor se aplica a SI.
As possibilidades são:

1= Não se aplica NADA 2= Aplica-se POUCO 3= Aplica-se MODERADAMENTE
4= Aplica-se MUITO 5= Aplica-se BASTANTE

Se um sintoma ou sensação se aplicar a si, indique se um **médico** o relacionou com uma **doença física**. Aponte esta situação na segunda coluna "A causa física é conhecida?" fazendo um círculo à volta da palavra SIM ou NÃO.
Se assinalou o SIM, escreva a causa física na linha, caso a conheça. Um exemplo:

Às vezes acontece que:	Grau em que o sintoma se aplica a si	A causa física é conhecida?
Os meus dentes abanam.	1 2 3 4 5	Não Sim, e é _____
Tenho cãibras nas pernas.	1 2 3 4 5	Não Sim, e é _____

Se pôs um círculo no 1 da primeira coluna (Não se aplica NADA), NÃO tem de responder à pergunta sobre se conhece a causa física.
Mas se pôs um círculo no 2, 3, 4 ou 5, DEVE pôr um círculo no NÃO ou no SIM na coluna de "A causa física é conhecida?"

SFF Não salte nenhuma das 20 perguntas. Muito obrigado pela sua colaboração.

1= NÃO se aplica 2= Aplica-se POUCO 3= Aplica-se MODERADAMENTE
4= Aplica-se MUITO 5= Aplica-se BASTANTE

Às vezes acontece que:	Grau em que o sintoma se aplica a si	A causa física é conhecida?
1. É como se o meu corpo, ou parte dele, desaparecesse.	1 2 3 4 5	Não Sim, e é _____
2. Fico paralisado(a) durante um bocado.	1 2 3 4 5	Não Sim, e é _____
3. Não consigo falar (ou falo somente com um grande esforço) ou só consigo sussurrar.	1 2 3 4 5	Não Sim, e é _____
4. O meu corpo, ou parte dele, fica insensível à dor.	1 2 3 4 5	Não Sim, e é _____
5. Tenho dores a urinar.	1 2 3 4 5	Não Sim, e é _____
6. Não consigo ver por momentos [como se ficasse cego(a)].	1 2 3 4 5	Não Sim, e é _____
7. Tenho dificuldades em urinar.	1 2 3 4 5	Não Sim, e é _____
8. Não consigo ouvir por momentos [como se ficasse surdo(a)].	1 2 3 4 5	Não Sim, e é _____
9. Ouço os sons próximos como se eles viessem de longe.	1 2 3 4 5	Não Sim, e é _____
10. Fico rígido(a) por momentos.	1 2 3 4 5	Não Sim, e é _____
11. Não tenho gripe, no entanto consigo cheirar muito melhor ou muito pior do que habitualmente.	1 2 3 4 5	Não Sim, e é _____
12. Sinto dores nos genitais (independentemente de relações sexuais).	1 2 3 4 5	Não Sim, e é _____
13. Tenho um ataque semelhante a uma convulsão epiléptica.	1 2 3 4 5	Não Sim, e é _____
14. Repugnam-me cheiros de que gosto habitualmente .	1 2 3 4 5	Não Sim, e é _____
15. Não suporto sabores de que gosto habitualmente (exceto mulheres na gravidez ou em período menstrual).	1 2 3 4 5	Não Sim, e é _____
16. Vejo as coisas à minha volta de forma diferente do habitual (p. ex.: como se olhasse através de um túnel ou visse somente parte do objeto)	1 2 3 4 5	Não Sim, e é _____
17. Não consigo dormir noites seguidas mas mantenho-me muito ativo(a) durante o dia.	1 2 3 4 5	Não Sim, e é _____
18. Não consigo engolir ou só engulo com grande esforço.	1 2 3 4 5	Não Sim, e é _____
19. As pessoas e as coisas parecem maiores do que são na realidade.	1 2 3 4 5	Não Sim, e é _____
20. Sinto o meu corpo ou parte dele dormente.	1 2 3 4 5	Não Sim, e é _____