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# The feeling of emptiness questionnaire (CSV). elaboration and validation

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## ABSTRACT

**Introduction:** Chronic feeling of emptiness (CFE) is considered a diagnostic criteria in current psychiatric classifications. However, no rating scale is still available for this phenomenological concept, which affects diagnostic reliability and the homogeneous use of the concept among clinicians. The aim of this study is to investigate the dimensional components of CFE and elaborate a specific questionnaire.

**Methodology:** Following a qualitative analysis of the descriptions of feeling of emptiness from 42 patients with BPD, an initial questionnaire of 44 items was proposed. Internal consistency was analyzed with the matrix correlation between different items and with the Alpha coefficient. Kaiser-Meyer-Olkin (KMO) and Bartlett tests were used to evaluate construct validity of the questionnaire, and Pearson correlation coefficient to analyze convergent validity.

**Results:** Through the validation process a final 32 items Questionnaire in Spanish language (Cuestionario de Sentimiento de Vacío, CSV) was obtained with a Cronbach alpha coefficient of 0,971 and a construct validity supported by KMO index of 0.933, with five major factors identified within the construct.

**Conclusions:** The CSV ("Cuestionario de Sentimiento Crónico de Vacío") could be useful for measurement of chronic feeling of emptiness in BPD and also for evaluation of its predictive value over the clinical evolution of personality disorders.

**Keywords:** feeling of emptiness, borderline personality disorder, validation, questionnaire, suicide.

## RESUMEN

**Introducción:** El sentimiento crónico de vacío (SCV) aparece en los criterios diagnósticos de las clasificaciones psiquiátricas actuales, pero no existe ningún instrumento de evaluación del mismo, lo que reduce la fiabilidad diagnóstica y el uso homogéneo del término entre los clínicos. En ello se justifica el intento de este estudio de investigar los componentes dimensionales del SCV y elaborar un cuestionario específico.

**Metodología:** A partir de un análisis cualitativo basado en las descripciones de 42 pacientes con TLP sobre el sentimiento de vacío se elaboró un cuestionario inicial de 44 ítems. La fiabilidad de consistencia interna se analizó a través de la matriz de correlaciones entre los diferentes ítems y del coeficiente de alpha de Cronbach. Para realizar la validez de constructo se utilizó la prueba de Kaiser-Meyer-Olkin (KMO) y la prueba de esfericidad de Bartlett. Se realizó la validez convergente del cuestionario mediante el cálculo del coeficiente de correlación de Pearson.

**Resultados:** En el proceso de validación se obtuvo un cuestionario final de 33 ítems con un coeficiente alpha de Cronbach 0,971 y una puntuación en la KMO de 0,933 con cinco factores o dimensiones principales y con significación estadística en la prueba de esfericidad.

**Conclusiones:** El CSV puede ser un instrumento de utilidad para la cuantificación del sentimiento de vacío crónico en el trastorno límite de la personalidad y para la evaluación de su valor predictivo en la evolución de los trastornos de la personalidad en general.

**Palabras clave:** Sentimiento de vacío, Trastorno límite de la personalidad, Validación, Suicidio.

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## INTRODUCTION

Borderline personality disorder (BPD) is a persistent clinical profile affected by emotional instability, impulsive behaviors and feeling of emptiness, which affects self-image, interpersonal relationships and behavior<sup>1</sup>.

The feeling of emptiness is a common experience in patients with BPD but there is no conformity in its meaning, and this term can be attributed by patients to both hopelessness, anhedonia, loneliness or boredom, and even abulia and lack of interest in the external world in schizoid patients<sup>2</sup>. For its part, the DSM-IV-TR associates the chronic feeling of emptiness with boredom and with the need for an avid search for sensations<sup>3</sup>. According to some authors, the feeling of chronic emptiness would be present in approximately 70% of patients with BPD, compared to 25–35% of patients with other psychiatric disorders<sup>4,5</sup>. Palomares found that 100% of the patients in their sample had felt empty at least once in their lives, compared to 73% of the controls<sup>3</sup>.

Most of the written literature on the feeling of emptiness comes from psychoanalysis field, where this experience is generally considered to be related to defense mechanisms<sup>6,7,8,9</sup>. Klonsky defined the feeling of emptiness as a concept related to boredom and hopelessness and proposed that it was closer to depression and suicide than to anxiety<sup>10</sup>. For Leichsenring, patients with BPD showed an experience of emptiness qualitatively different from the depressive feeling related to anger, anxiety and fear<sup>11</sup>.

The close relationship between the feeling of emptiness and the risk of suicide is repeatedly mentioned in the literature<sup>10,12</sup>. Among psychiatric disorders, suicide attempts are especially prevalent in patients with borderline personality disorder<sup>13</sup>, and the rate of completed suicides is 400 times greater than the general population<sup>14</sup>.

The feeling of chronic emptiness has also been linked to more limited psychosocial functioning in patients<sup>15</sup>. It has also been associated with the presence of impulsive self-destructive behaviors, and in particular with risky sexual behaviors<sup>16</sup>.

Despite the inconcretion and the lack of psychopathological clarity of the term feeling of emptiness, while it is openly used in the clinical description and diagnosis of patients, little attention has been paid to the study and conceptual validation of the phenomenon.

Regarding the evaluation of instruments for evaluating the feeling of emptiness, there has only been one attempt to prepare a questionnaire that did not have a significant impact<sup>10</sup>.

From the findings in the literature on the feeling of emptiness, it is obtained, therefore, that what is called as such includes aspects of the emotional sphere such as depression and anhedonia<sup>10</sup>, of the sensory-motor sphere such as apathy and restless boredom<sup>17</sup>, and the cognitive field such as nihilism and depersonalization<sup>8</sup>.

Given these questions and considering the importance that the feeling of emptiness can have in the correct diagnosis, prediction, and treatment of patients with BPD, the aim of this study is to prepare and validate a questionnaire to measure this construct. The validity of the construct is not given by default, since no study or instrument has been able to establish it as such. Therefore, this validity will be tried to establish in the first part of the study, which contemplates a qualitative analysis of the responses of the population studied around the dimensions mentioned in the literature, specifically sadness, apathy, anhedonia, lack of feelings, anguish, boredom, depersonalization and nihilism.

## METODOLOGY

### A. Development of the initial questionnaire

An initial questionnaire was developed using a mixed methodology of qualitative analysis and expert opinion. An expert was defined as a professional whose field of work covered borderline personality disorder and who had at least 5 impact publications on this disorder. Firstly, a total of 42 patients with BPD were asked to briefly explain what the vacuum meant to them and where in the body they placed it. Two experts (one in BPD and the other in qualitative analysis) extracted common themes in these definitions, obtaining a total of 167 themes. These subjects were submitted to an inter-evaluation agreement (obtaining 72 items through a complete process of elimination of repeated items, rewriting of new items and discussion of the adequacy of the drafts of the items). Then an agreement was made of inter-evaluation by a third expert, who reevaluated the items one by one, making some editorial changes and adding 6 items based on other topics extracted. Subsequently, a content validation process was carried out through the judgment of experts, frequent in the elaboration of this type of questionnaires<sup>18</sup>, through a survey tool. Each expert had to answer "Yes" or "No", depending on whether or not the item seemed appropriate to measure the feeling of emptiness in the personality disorder.

In addition, a blank box was left for the evaluator to reformulate the item if they so wished. For this, a total of 17 experts in borderline personality disorder were selected nationwide. Finally, 6 experts voluntarily responded to the survey, getting a total of 468 responses. After this process,

the questionnaire consisted of 42 items to evaluate the feeling of emptiness. Finally, after a subsequent evaluation by another expert (other than the previous ones) in personality disorders, two items were added to the final questionnaire, which consisted of 44 items with responses ranging from 0 (never) to 5 (always).

## B. Validation Survey

The initially prepared questionnaire was administered to a sample of 151 patients with borderline personality disorder as the primary diagnosis, according to the DSM-IV criteria<sup>1</sup>, who had to present a moderate-severe severity index (Global Clinical Scale; CGI > 4) and moderate dysfunctionality (Global Performance Assessment Scale; EEAG <65) to participate in the study. Patients were recruited from the Personality Disorders Day Hospital of Hospital Clínico San Carlos in Madrid and from the Llària Clinical Therapeutic Community of Barcelona. Voluntary patients between 19 and 55 years of age were included in the study. The collection of clinical variables was carried out by experienced psychiatrists and psychologists at the beginning of the study. All patients were interviewed with the Structural Interview for Personality Disorders (SCID-II)<sup>19</sup>.

Severity was measured with the Global Clinical Scale for Personality Disorders (CGI-BPD)<sup>20</sup> and chronicity was assessed with the Global Assessment of Functioning Scale (GAF)<sup>21</sup>. The subjects filled out the feeling of emptiness questionnaire (CSV) initially prepared.

Patients who presented the following criteria were excluded from the study: 1) suffering from a neurological or medical disease that could affect brain functions; 2) IQ < 85; 3) having a diagnosis of schizophrenia, schizophreniform disorder or bipolar; 4) suffering a major depressive episode or a substance use disorder at the time of the study.

To assess the convergent validity of the CSV, participants filled out the Reasons for Live Inventory (RFL)<sup>22</sup>, which assesses the reasons why an individual rejects the decision to commit suicide; the Levenson Psychopathy Scale (LSRPS)<sup>23</sup>, which subjectively evaluates factors 1 (F1) and 2 (F2) of psychopathy; the items of the "Kindness" factor of the Revised NEO Personality Inventory (NEO-PI-R)<sup>24</sup> and the Beck Depression Inventory (BDI)<sup>25</sup>, which subjectively evaluates the presence of depressive symptoms and their severity.

All patients received detailed information about the study and signed written informed consent prior to their participation in the research. The clinical research study was approved by the Clinical Research Ethics Committee of the Hospital Clínico San Carlos and the Centre Psicoteràpia Barcelona- Serveis Salut Mental (CPB-SSM).

## C. Statistical analyses

Statistical analyses were carried out using the statistical package IBM SPSS Statistics (IBM Corporation, Armonk, New York, USA) version 23.0. The quantitative variables were expressed with the mean and standard deviation (SD), or median for the continuous variables that showed asymmetry. The qualitative variables were described with absolute and relative frequencies (percentages). The internal consistency reliability was analyzed through the correlation matrix between the different items and the Cronbach's alpha coefficient<sup>26</sup>. The Kaiser-Meyer-Olkin (KMO) test and the Bartlett sphericity test were used to perform construct validity. The convergent validity of the questionnaire was performed by calculating the Pearson's correlation coefficient. In every contrast performed the null hypothesis was rejected with a type I error or  $\alpha$  error lower than 0.05.

## RESULTS

Table 1 shows the sociodemographic variables and functionality of the patients.

Table 1		Sociodemographic variables and functionality of BPD patients
		BPD (n=151)
Age (mean $\pm$ SD)		33,05 $\pm$ 9,293
Gender (percentage)	Masculine	21,2 %
	Femenine	78,8 %
Civil status	Single/Separated(%)	80,4 %
	Married/In a couple (%)	19,6 %
Current activity	Unemployed (%)	46,2 %
	Working (%)	19,3 %
Education level	Secondary studies/ Profesional studies	61,5 %
	Higher studies	26,5 %
	Duration of illness (years)	17,67
Pharmacological treatment (percentage)	Antidepressant	67,4 %
	Antipsychotic	34,8 %
	Anti-epileptic	34,8 %
	Benzodiazepines	69,6 %
CGI (mean $\pm$ SD)		5,29 $\pm$ 0,913
GAF (mean $\pm$ SD)		58,94 $\pm$ 6,589

Table 2 shows the mean score and standard deviation, as well as the floor effect (percentage of patients with a minimum score) and the ceiling effect (percentage of patients with a maximum score) for each item. The results did not show a floor or ceiling effect for any of the items in the questionnaire.

**B. Reliability of internal consistency**

The internal consistency of the questionnaire was performed through the correlation matrix between the different items and the Cronbach's alpha coefficient<sup>26</sup>. The results showed an average correlation of 0,426, with a minimum correlation of -0,216 and a maximum correlation of 0,886. The items that showed a negative correlation were 1 and 42. In the correlation analysis, a high correlation ( $\geq 80$ ) was also observed between items 6 and 7 ( $r = 0,89$ ), between 19 and 28 ( $r = 0,81$ ), between 19 and 29 ( $r = 0,80$ ), between 28 and 29 ( $r = 0,86$ ), between 33 and 34 ( $r = 0,82$ ) and between 35 and 34 ( $r = 0,83$ ). A high correlation could indicate that the items are evaluating the same content. Next, the Cronbach's alpha coefficient was carried out, obtaining an overall score of 0,971, showing good internal consistency. Table 3 presents the initial and final values after the elimination of those items that affected reliability due to low correlations with respect to the total score, as indicated by Peterson<sup>27</sup>. The results show an increase in the alpha coefficient of Cronbach after deletion of items 1, 18 and 42.

Based on the analysis of internal consistency, it was decided to eliminate item 1 because it presented a negative correlation with item 18, 42 and 44 and because, after its elimination, the Cronbach's alpha coefficient increases. Item 18 is also excluded because Cronbach's alpha coefficient increases after removal. In addition, it was decided to discard item 42 because it presented a negative correlation with items 1, 2, 4, 6, 7, 10, 19, 20, 21, 22, 23, 26, 28, 29, 30, 32, 34, 35, 37, 38, 39 and 40 and because the global score of Cronbach's alpha rises after its elimination.

Finally, after performing an inter-judge evaluation on the content of the items that have a high correlation ( $\geq 80$ ) with each other, it was decided to eliminate items 19, 29 and 34.

**C. Construct validity**

For the study of construct validity, an exploratory factor analysis was performed (principal component method with Varimax rotation). The Kaiser-Meyer-Olkin (KMO) test and the Bartlett sphericity test were first used. A high score was achieved in the KMO ( $KMO = 0.935$ ) and statistical significance was obtained in the sphericity test ( $p < 0.001$ ).

Table 2		Mean score, standard deviation, floor effect and ceiling effect of each item in the questionnaire	
Ítem	Mean $\pm$ SD	Floor effect (%)	Ceiling effect (%)
1	2,17 $\pm$ 1,04	5,3	11,26
2	2,01 $\pm$ 1,14	15,89	7,95
3	2,85 $\pm$ 0,94	1,32	27,15
4	2,79 $\pm$ 1,18	5,3	37,09
5	2,34 $\pm$ 1,14	8,61	18,54
6	1,91 $\pm$ 1,24	17,88	13,25
7	1,64 $\pm$ 1,21	21,85	10,6
8	2,12 $\pm$ 1,18	11,92	13,25
9	2,83 $\pm$ 1,10	4,64	32,45
10	2,40 $\pm$ 1,38	14,57	28,48
11	2,68 $\pm$ 0,95	22,52	1,32
12	2,39 $\pm$ 0,97	13,25	4,64
13	1,96 $\pm$ 1,25	15,23	13,25
14	2,30 $\pm$ 1,19	9,93	17,22
15	2,99 $\pm$ 1,09	4,64	39,74
16	2,44 $\pm$ 1,12	19,21	5,96
17	2,28 $\pm$ 1,19	17,22	10,6
18	1,94 $\pm$ 0,99	8,61	5,96
19	2,14 $\pm$ 1,28	14,57	17,88
20	2,15 $\pm$ 1,20	10,6	17,88
21	2,77 $\pm$ 1,10	3,31	31,79
22	2,38 $\pm$ 1,35	12,58	27,81
23	2,47 $\pm$ 1,20	7,95	7,95
24	2,02 $\pm$ 1,31	18,54	14,57
25	2,32 $\pm$ 1,26	10,6	20,53
26	2,74 $\pm$ 1,18	7,28	31,79
27	2,28 $\pm$ 1,26	21,19	9,93
28	2,54 $\pm$ 1,28	8,61	31,13
29	2,42 $\pm$ 1,34	11,26	29,14
30	2,41 $\pm$ 1,30	11,92	25,83
31	1,84 $\pm$ 1,07	5,3	12,58
32	2,35 $\pm$ 1,48	17,22	33,77
33	1,76 $\pm$ 1,30	23,84	11,92
34	1,97 $\pm$ 1,36	19,21	17,22
35	2,17 $\pm$ 1,28	15,23	18,54
36	2,52 $\pm$ 1,24	7,28	27,15
37	2,19 $\pm$ 1,45	19,87	24,5
38	2,36 $\pm$ 1,32	12,58	25,17
39	2,48 $\pm$ 1,25	9,27	25,17
40	2,80 $\pm$ 1,23	7,95	37,09
41	3,18 $\pm$ 1,01	3,31	48,34
42	1,47 $\pm$ 1,08	6,62	18,54
43	2,85 $\pm$ 1,10	5,3	33,77
44	2,30 $\pm$ 1,35	13,91	25,83

Ítem	Element-Total Correlation	Corrected element-total correlation	Cronbach's alpha coefficient if element is removed
1	0,184	0,156	0,971
2	0,533	0,509	0,970
3	0,715	0,702	0,970
4	0,524	0,500	0,970
5	0,604	0,583	0,970
6	0,798	0,785	0,969
7	0,757	0,742	0,969
8	0,573	0,550	0,970
9	0,789	0,777	0,969
10	0,691	0,670	0,970
11	0,643	0,627	0,970
12	0,655	0,639	0,970
13	0,528	0,501	0,970
14	0,677	0,658	0,970
15	0,634	0,615	0,970
16	0,555	0,533	0,970
17	0,701	0,683	0,970
18	0,424	0,401	0,971
19	0,815	0,803	0,969
20	0,540	0,515	0,970
21	0,688	0,671	0,970
22	0,739	0,721	0,970
23	0,833	0,822	0,969
24	0,697	0,678	0,970
25	0,767	0,752	0,969
26	0,821	0,810	0,969
27	0,607	0,584	0,970
28	0,863	0,854	0,969
29	0,853	0,842	0,969
30	0,586	0,561	0,970
31	0,481	0,458	0,970
32	0,724	0,704	0,970
33	0,692	0,672	0,970
34	0,800	0,786	0,969
35	0,786	0,772	0,969
36	0,613	0,590	0,970
37	0,827	0,814	0,969
38	0,813	0,800	0,969
39	0,701	0,682	0,970
40	0,771	0,756	0,969
41	0,707	0,693	0,970
42	-0,016	-0,046	0,972
43	0,601	0,580	0,970
44	0,825	0,812	0,969

Next, a first exploratory factor analysis (AFE) was carried out through Principal Component Analysis (ACP). The ACP results grouped the questionnaire items into 5 components or dimensions with a variance of 64,12%. Based on the matrix of rotated components, it was decided to eliminate items 9, 26 and 40 because they did not show a specific weight in one of the components, but were distributed between two or more components and because they presented a high correlation ( $\geq 80$ ) each. Item 15 is also discarded because it did not show a specific weight in one of the components, dividing it between two dimensions. Finally, item 23 is also eliminated because it did not have a specific weight in one of the components, but was divided between two of the dimensions and because it showed a high correlation ( $\geq 80$ ) with item 25, 26, 28 and 29. Items 22 and 27 did not show a specific weight in one of the components either, but, after performing an inter-judge evaluation on their content, it was decided not to discard them. After the elimination of these items, a new exploratory factor analysis (AFE) was carried out. A high score was achieved in the KMO (KMO = 0,933) and statistical significance was obtained in the sphericity test ( $p = 0,000$ ).

The results of this new ACP grouped the items of the questionnaire into 5 components or dimensions with a variance of 64,12%. Table 4 shows the breakdown of the components through the matrix of rotated components. All the items showed a specific weight for one of the components except items 22 and 27.

#### D. Convergent validity

The convergent validity of the questionnaire was performed by calculating the Pearson correlation coefficient between the total CSV score and the total score of the Beck Depression Inventory (BDI), the total score of the Reasons for Live (RFL) inventory, the total score of the "Kindness" items, factor of the Revised NEO Personality Inventory (NEO-PI-R) and the total score and scores of the primary (F1) and secondary (F2) psychopathy components of the Levenson Psychopathy Scale (LSRPS) (Table 5). Results showed significant positive correlations between the total CSV score and the BDI score ( $p = 0,000$ ) and negative correlations with the RFL score ( $p = 0,000$ ). A significant positive correlation is also observed between the CSV and the total LSRPS score ( $p = 0,008$ ), as well as with the primary psychopathy component (F1) ( $p = 0,02$ ).

Table 4		Breakdown of the components through the matrix of rotated components				
		Components				
Ítem	1	2	3	4	5	
2	0,261	0,183	0,560	0,074	0,087	
3	0,307	0,341	0,323	0,597	0,096	
4	0,089	0,069	0,604	0,352	0,167	
5	0,161	0,153	0,211	0,725	0,249	
6	0,769	0,241	0,141	0,342	0,069	
7	0,728	0,240	0,201	0,296	-0,017	
8	0,243	0,170	0,087	0,829	0,018	
10	0,464	0,217	0,656	0,086	-0,048	
11	0,358	0,742	-0,035	0,305	0,060	
12	0,363	0,662	0,083	0,254	0,079	
13	0,091	0,183	0,167	0,221	0,810	
14	0,260	0,207	0,302	0,288	0,637	
16	0,314	0,520	0,190	-0,097	0,322	
17	0,643	0,381	0,085	0,091	0,187	
20	0,461	0,105	0,243	0,082	0,220	
21	0,544	0,109	0,338	0,258	0,181	
22	0,610	0,082	0,615	0,064	0,093	
24	0,349	0,240	0,265	0,614	0,119	
25	0,391	0,534	0,369	0,138	0,305	
27	0,515	0,218	0,033	0,013	0,548	
28	0,649	0,311	0,277	0,326	0,239	
30	0,132	0,362	0,600	0,092	0,208	
31	0,322	0,043	-0,028	0,452	0,330	
32	0,644	0,154	0,176	0,277	0,201	
33	0,703	0,199	0,182	0,160	0,036	
35	0,690	0,217	0,404	0,125	0,104	
36	0,506	0,113	0,283	0,111	0,258	
37	0,714	0,284	0,247	0,280	0,141	
38	0,669	0,262	0,208	0,239	0,330	
39	0,447	0,041	0,598	0,236	0,167	
41	0,169	0,637	0,391	0,359	0,126	
43	0,131	0,699	0,290	0,140	0,173	
44	0,597	0,406	0,278	0,307	0,148	

**CONCLUSIONS**

The work has resulted in a questionnaire that aims to qualitatively and quantitatively reflect what patients with borderline personality disorder report as feeling of emptiness, with the aim of differentiating this clinical phenomenon from other similar phenomena within the melancholic setting. In turn, the analysis of the construct has confirmed

Table 5		Convergent validity. Comparison of the total score of the CSV and the scores of the BDI, the RFL, the kindness factor of the NEO-PI and the total, primary and secondary psychopathy score of the LSRPS	
		CSV	
		Statistical Analysis	
r; p-valor		r= 0,499;	p= 0,000
BDI		r= 0,499;	p= 0,000
RFL		r= -0,365;	p= 0,000
NEO-PI-Kind		r= -0,068;	p= 0,486
LSRPS Psicopatía Total		r= 0,246;	p= 0,008
LSRPS Psicopatía Primaria		r= 0,284;	p= 0,002
LSRPS Psicopatía Secundaria		r= 0,131;	p= 0,158

NEO-PI-Kind= score of the kindness factor of the NEO Personality Inventory Revised (NEO-PI-R)

the perceptions collected in the previous review of the literature that led to the suspicion that the construct of the feeling of emptiness accommodates several subjective phenomena that are similar but, at the same time, different from each other; affecting the state of spirit, identity, interpersonal perception and empathic capacity.

Finally, after the analyzes of internal consistency and construct validity, the discordant elements of the preliminary questionnaire prepared by qualitative analysis and expert advice were eliminated, obtaining a 33-item questionnaire (Anex 1) that detects the feeling of emptiness degree manifested by patients with borderline personality disorder. This feeling of emptiness questionnaire (CSV) shows an adequate internal and construct consistency and sufficient convergent validity when confronted with questionnaires of related subjective experiences.

The questionnaire validation process demonstrates that the feeling of emptiness described by the patients is distributed in five main factor components, which probably reflect the existence of various psychic sub-phenotypes included in the global construct. The next step will be to study the relevance of the five main factors in the disorder through its widespread use in patients with BPD and its correlation with other scales of psychological measures. This will allow us to investigate the importance of the different factors of CSV in the clinical evolution of BPD and also its relationship with the different subtypes that are emerging in recent neurobiological research in borderline personality disorder.

Finally, in the next steps, CSV will be administered in patients with other diagnoses, such as depression, psychosis, and other emotional and behavioral disorders, which will allow investigating their relationships with other affective and cognitive phenomena evaluated and altered in these patients. The next studies will allow evaluating the added value of this questionnaire over other emotional questionnaires, both in the clinical expression of personality disorders as well as in the predictive capacity.

## DECLARATION OF INTERESTS

None of the authors have any financial interests or possible conflicts affecting the objectives or the results of the present manuscript.

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## ANNEX 1: QUESTIONNAIRE OF THE FEELING OF EMPTINESS (CSV)

Below are questions about you and how you have felt over the past two years. The answers will be kept confidential and will be used exclusively for clinical or research purposes. Please do not hesitate to ask the person who gave you this questionnaire if you have any questions. Their answers are invaluable and we thank them for their collaboration.

Please answer with a cross in the answer that you think is closest to yours (Always, Almost always, Sometimes, Almost never or Never). Do not leave any questions blank.

1. I feel a hole in the deepest part of my stomach	<input type="checkbox"/> Always	<input type="checkbox"/> Almost always	<input type="checkbox"/> Sometimes	<input type="checkbox"/> Almost never	<input type="checkbox"/> Never
2. I feel lonely	<input type="checkbox"/> Always	<input type="checkbox"/> Almost always	<input type="checkbox"/> Sometimes	<input type="checkbox"/> Almost never	<input type="checkbox"/> Never
3. I miss things in my life that I used to have and now I don't have	<input type="checkbox"/> Always	<input type="checkbox"/> Almost always	<input type="checkbox"/> Sometimes	<input type="checkbox"/> Almost never	<input type="checkbox"/> Never
4. I feel like I have no one to talk to	<input type="checkbox"/> Always	<input type="checkbox"/> Almost always	<input type="checkbox"/> Sometimes	<input type="checkbox"/> Almost never	<input type="checkbox"/> Never
5. I want to die	<input type="checkbox"/> Always	<input type="checkbox"/> Almost always	<input type="checkbox"/> Sometimes	<input type="checkbox"/> Almost never	<input type="checkbox"/> Never
6. I think about taking my life	<input type="checkbox"/> Always	<input type="checkbox"/> Almost always	<input type="checkbox"/> Sometimes	<input type="checkbox"/> Almost never	<input type="checkbox"/> Never
7. I lack affection from others	<input type="checkbox"/> Always	<input type="checkbox"/> Almost always	<input type="checkbox"/> Sometimes	<input type="checkbox"/> Almost never	<input type="checkbox"/> Never
8. I feel like I've lost my own identity	<input type="checkbox"/> Always	<input type="checkbox"/> Almost always	<input type="checkbox"/> Sometimes	<input type="checkbox"/> Almost never	<input type="checkbox"/> Never
9. I'm happy.	<input type="checkbox"/> Always	<input type="checkbox"/> Almost always	<input type="checkbox"/> Sometimes	<input type="checkbox"/> Almost never	<input type="checkbox"/> Never
10. I feel joy for things	<input type="checkbox"/> Always	<input type="checkbox"/> Almost always	<input type="checkbox"/> Sometimes	<input type="checkbox"/> Almost never	<input type="checkbox"/> Never
11. I have no goal in life	<input type="checkbox"/> Always	<input type="checkbox"/> Almost always	<input type="checkbox"/> Sometimes	<input type="checkbox"/> Almost never	<input type="checkbox"/> Never
12. Nothing fills me up	<input type="checkbox"/> Always	<input type="checkbox"/> Almost always	<input type="checkbox"/> Sometimes	<input type="checkbox"/> Almost never	<input type="checkbox"/> Never
13. I feel useful	<input type="checkbox"/> Always	<input type="checkbox"/> Almost always	<input type="checkbox"/> Sometimes	<input type="checkbox"/> Almost never	<input type="checkbox"/> Never
14. I feel able to have a normal life	<input type="checkbox"/> Always	<input type="checkbox"/> Almost always	<input type="checkbox"/> Sometimes	<input type="checkbox"/> Almost never	<input type="checkbox"/> Never
15. Time passes very slowly	<input type="checkbox"/> Always	<input type="checkbox"/> Almost always	<input type="checkbox"/> Sometimes	<input type="checkbox"/> Almost never	<input type="checkbox"/> Never
16. I feel vulnerable	<input type="checkbox"/> Always	<input type="checkbox"/> Almost always	<input type="checkbox"/> Sometimes	<input type="checkbox"/> Almost never	<input type="checkbox"/> Never
17. I feel like I don't know who I am	<input type="checkbox"/> Always	<input type="checkbox"/> Almost always	<input type="checkbox"/> Sometimes	<input type="checkbox"/> Almost never	<input type="checkbox"/> Never
18. I feel like nobody wants me	<input type="checkbox"/> Always	<input type="checkbox"/> Almost always	<input type="checkbox"/> Sometimes	<input type="checkbox"/> Almost never	<input type="checkbox"/> Never
19. I feel that I have nothing of value to offer other people	<input type="checkbox"/> Always	<input type="checkbox"/> Almost always	<input type="checkbox"/> Sometimes	<input type="checkbox"/> Almost never	<input type="checkbox"/> Never
20. I have goals for the future	<input type="checkbox"/> Always	<input type="checkbox"/> Almost always	<input type="checkbox"/> Sometimes	<input type="checkbox"/> Almost never	<input type="checkbox"/> Never
21. I feel that my life has no meaning	<input type="checkbox"/> Always	<input type="checkbox"/> Almost always	<input type="checkbox"/> Sometimes	<input type="checkbox"/> Almost never	<input type="checkbox"/> Never
22. I feel inferior to others	<input type="checkbox"/> Always	<input type="checkbox"/> Almost always	<input type="checkbox"/> Sometimes	<input type="checkbox"/> Almost never	<input type="checkbox"/> Never
23. The others accept me as I am	<input type="checkbox"/> Always	<input type="checkbox"/> Almost always	<input type="checkbox"/> Sometimes	<input type="checkbox"/> Almost never	<input type="checkbox"/> Never
24. I feel obliged to live	<input type="checkbox"/> Always	<input type="checkbox"/> Almost always	<input type="checkbox"/> Sometimes	<input type="checkbox"/> Almost never	<input type="checkbox"/> Never
25. I don't feel anything	<input type="checkbox"/> Always	<input type="checkbox"/> Almost always	<input type="checkbox"/> Sometimes	<input type="checkbox"/> Almost never	<input type="checkbox"/> Never
26. I feel hollow	<input type="checkbox"/> Always	<input type="checkbox"/> Almost always	<input type="checkbox"/> Sometimes	<input type="checkbox"/> Almost never	<input type="checkbox"/> Never
27. When they ask me about myself, I don't know what to say	<input type="checkbox"/> Always	<input type="checkbox"/> Almost always	<input type="checkbox"/> Sometimes	<input type="checkbox"/> Almost never	<input type="checkbox"/> Never
28. I feel dead inside	<input type="checkbox"/> Always	<input type="checkbox"/> Almost always	<input type="checkbox"/> Sometimes	<input type="checkbox"/> Almost never	<input type="checkbox"/> Never
29. I expect nothing from life	<input type="checkbox"/> Always	<input type="checkbox"/> Almost always	<input type="checkbox"/> Sometimes	<input type="checkbox"/> Almost never	<input type="checkbox"/> Never
30. I feel like I don't know what I look like	<input type="checkbox"/> Always	<input type="checkbox"/> Almost always	<input type="checkbox"/> Sometimes	<input type="checkbox"/> Almost never	<input type="checkbox"/> Never
31. The others enjoy life more than I do	<input type="checkbox"/> Always	<input type="checkbox"/> Almost always	<input type="checkbox"/> Sometimes	<input type="checkbox"/> Almost never	<input type="checkbox"/> Never
32. In my daily life I feel bored	<input type="checkbox"/> Always	<input type="checkbox"/> Almost always	<input type="checkbox"/> Sometimes	<input type="checkbox"/> Almost never	<input type="checkbox"/> Never
33. My life is like a nausea	<input type="checkbox"/> Always	<input type="checkbox"/> Almost always	<input type="checkbox"/> Sometimes	<input type="checkbox"/> Almost never	<input type="checkbox"/> Never